

Florida Basic Recruit Training Program:

HIGH LIABILITY

VOLUME 2

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Florida BRT Curriculum Volume 2

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CHAPTER 1

Law Enforcement Vehicle Operations

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Operating a motor vehicle in a law enforcement setting is a dynamic and challenging task. The ability to drive in emergency mode, communicate with dispatch, and remain aware of the actions of other drivers presents complexities not experienced in normal driving. This course is designed to help officers understand a vehicle's limits, as well as their personal limits. An officer's awareness of the effects of physiological and psychological stressors on their driving is critical. Officers should also understand how the public views them as drivers. This course will help you develop the skills required to operate a motor vehicle safely.

UNIT 1 | VEHICLE INSPECTION

LESSON 1 | Exterior, Under the Hood, and Interior Vehicle Inspection

OBJECTIVES

- VO901.1.** Check the operational readiness of the exterior of the vehicle.
- VO901.2.** Check the fluid levels, hoses, wires, and belts.
- VO901.4.** Inspect the rear seat compartment to locate all visible damage, weapons, and contraband.
- VO901.3.** Inspect the interior of the vehicle to make sure that items are functioning and secured properly.
- VO901.5.** Start the vehicle to check for operational readiness.

LESSON GOAL: At the end of this lesson, you will know guidelines for properly inspecting your assigned vehicle.

The Basics of Vehicle Inspection

There are guidelines for properly inspecting your assigned vehicle. During an inspection, you will check the proper fluid levels, hoses, electrical wiring, belts, and tires. You should also inspect the vehicle interior and exterior.

Most agencies have an inspection form that all officers are required to complete when they use an agency vehicle. The form helps officers remember what equipment must be inspected and allows them to report failing equipment. Each agency has its own policies or procedures for handling failing equipment. Some agencies may require officers to complete a report detailing the problem. Others may require officers to handle some problems themselves, such as changing a tire or a bulb or adding fluids, or to notify a particular shop that will repair the vehicle. The comments section on the inspection form is useful for all these purposes.

Exterior Vehicle Inspection

It is essential to inspect a vehicle before taking control of it and operating it on the road. You will drive your police vehicle in extreme conditions, unlike the conditions in which you would drive a personal vehicle. Therefore, before using the vehicle, you must locate any potential problems so they can be repaired.

For personal safety, perform inspections before and after every use of the vehicle. When you fail to inspect a vehicle properly, you may miss potential safety hazards. Failing to complete an inspection may violate agency policies. There is potential for liability if something happens because of a vehicle problem, especially if inspection and correction could have prevented that problem.

Before using a vehicle, inspect its body to identify any damage. Conduct a quick visual examination of the vehicle's body and undercarriage and look for the following:

- scratched paint that may be the result of contact with an object or intentional damage
- dents that are more obvious signs of contact with another object, perhaps a vehicle
- missing or broken light covers that can present a hazard to other drivers and may be a traffic violation

- damaged emergency equipment, such as a siren, light bar, or other emergency lights that could prevent operating the vehicle in emergency mode—watch for malfunctioning equipment so it can be repaired before use
- broken or cracked glass that could injure you and impair vision
- broken or cracked mirrors that could impair vision
- a dirty windshield that could impair observation ability
- foreign objects, such as tree limbs and road debris trapped under the vehicle, that could cause serious problems if they strike one of the vehicle's moving parts
- foreign objects on the undercarriage other than natural objects or road debris, which means a potentially harmful device, such as an explosive (If an explosive or other harmful device is detected, back away from the vehicle and contact the appropriate personnel as designated by your agency's policies and procedures.)
- fluid leaks visible on the ground under the vehicle

Tires and Rims

Inspection of the vehicle's exterior also includes its tires and rims. Tires should be checked for uneven wear that may result from improper balance or alignment, over inflation, or under inflation. These problems can make a vehicle difficult to handle. Tire inflation is measured by *PSI* (pounds per square inch). Proper PSI ensures tires are inflated at or above the manufacturer's recommended level. The recommended PSI can be found on the doorjamb. If wear bars are even with the tread surface, the tires will not dissipate fluids. Embedded foreign objects can deflate or blow out a tire. You should not pull out the object; instead, have the dealer or maintenance personnel handle the removal. The dealer or maintenance personnel should also look at any bulges on the sidewall. Cuts in a tire can also cause a blowout and should be observed and addressed. You should also inspect the rims on the vehicle for dents, cracks, or damage to the bead.

Tire Failure

If the front tire fails, the vehicle may lose traction. You may have difficulty steering, feel vibration in the steering wheel, and feel the vehicle pulling in the direction of the affected tire. If the rear tire fails, the vehicle may also lose traction and pull in an unpredictable direction.

Under the Hood

A good-looking exterior does not guarantee proper vehicle operation. Do not drive your vehicle without also checking under the hood. Make sure that all vehicle fluids are at the manufacturer's recommended levels before driving the vehicle.

The fluid levels you should check include the following:

- engine oil
- transmission fluid

SECTION VOCABULARY*PSI*

- brake fluid
- power steering fluid
- coolant reservoir
- windshield washer fluid

Hoses, wires, and belts are essential for the safe operation of the vehicle and should be inspected each day before operating the vehicle. Belts should be checked for fraying, cuts, cracks, and gouges. Check hoses for dry rot, cracks, holes, bulges, and leaks. Check wires for fraying, corrosion, cracked or missing insulation, and exposure.

The communications and emergency equipment installed in a police vehicle puts a tremendous strain on the battery. Check the battery for proper operation. The inspection should include terminal connections, water level (if applicable), and signs of damage to the battery's exterior.

Interior Vehicle Inspection

Before using a vehicle, you should also inspect its interior. This is essential to ensuring safe operation while driving. For example, loose items like briefcases, flashlights, and coffee cups travel at the same speed as the vehicle. If you must stop abruptly, unsecured items become severe hazards in the vehicle. So, your inspection of the interior should include making sure all equipment is stowed and properly secured.

Always check seats for tears or other damage. Before and after every shift and after every transport, check under the back seat for possible weapons or contraband a suspect may have left in the car. Check seat belts for fraying and binding and make sure the clasps lock properly. Test headlights, interior lights, turn signals, and hazard flashers to ensure that they operate normally. Also check the rearview mirror to see if it is securely attached or if it is cracked or broken.

Test communications equipment to make certain that radio transmissions can be made and received. Make sure that manual or electric windows and door locks operate properly. Observe gauges for visible damage and see if they react properly to input. The gas and battery gauges should move when the vehicle is turned on. Test emergency equipment (horn, siren, and light bar) to ensure it works properly.

After the initial inspection, start the vehicle's engine, and check windows and doors for proper operation. Be aware of unusual sounds, smells, or other indicators that may warrant further inspection of the vehicle. While the vehicle is running, look under it (standing to the side of the vehicle, not in front of it) to check for leaks that may not be apparent when the engine is not running. After completing this check, you can turn off the engine.

Trunk

Open the trunk and inspect its contents. Inside should be a spare tire, vehicle jack, tire tool, and assorted equipment for use on duty (usually issued by your agency). Ensure that all the trunk's contents are properly restrained; shifting equipment may damage the vehicle or change the way it handles. Long and protruding equipment (long guns, long-handled tools, and equipment) must be stored across the width of the trunk (side to side, not front to back). This will eliminate protrusion into the passenger compartments or the gas tank in a rear-end collision.

UNIT 2 | PROACTIVE DRIVING SKILLS

LESSON 1 | Hazard Detection and Observation Skills

LESSON GOAL: At the end of this lesson, you will understand and develop enhanced observation and driving skills to assist in operating the vehicle.

Enhanced observation and driving skills will help you when driving agency vehicles and carrying out your duties. While you cannot predict every driver's actions or what hazards you may encounter, you must be prepared to react. The Federal Motor Carrier Safety Administration handbook *Countermeasures That Work* lists the following tips you should follow to prevent accidents:

- Learn to recognize driving situations that can be hazardous.
- Assume other drivers will make errors.
- Adjust speed, position, direction, and attention to be able to maneuver safely if a hazard develops.
- Scan far enough ahead to be able to react safely to approaching situations.
- Scan frequently to the side and rear for passing or approaching vehicles.
- Scan thoroughly before changing speed or direction.

You must use all the senses to detect and verify a potential hazard or problem. If you determine that a safety hazard exists, pull the vehicle off the road to a safe location and notify dispatch (also known as the public safety telecommunicator). Always follow your agency policies and procedures for handling a vehicle problem.

Vision

Vision supplies about 90% to 95% of incoming data to a driver and helps with detecting and avoiding hazards. Several components of vision may affect the ability to operate and control a vehicle:

- **acuity**—sharpness of vision
- **depth perception**—ability to judge distance and perceive space to determine how far away an object is
- **peripheral vision**—ability to see above, below, and to the sides (a person who is in a stationary vehicle and who has good peripheral vision can see about 180° from side to side)

OBJECTIVES

VO909.2.A.1. Identify driving tips for preventing accidents.

VO909.2.A. Identify the importance of vision in identifying potential hazards.

VO909.1.B. Describe encountered hazards.

VO909.2. Detect potential hazards through the use of the senses.

VO909.3. Describe techniques that can enhance or impede awareness.

VO909.3.B.2. Identify temporary factors that may impact observation.

VO909.3.B.1. Identify medical conditions that may impact observation.

- **color vision**—ability to distinguish colors
- **night vision**—ability to see clearly in darkness

Environmental and physical conditions, alertness, and aging are factors that affect vision. You should get your eyesight checked regularly and correct any vision problems with lenses before operating any vehicle. Other factors, including vehicle speed and glare from the sun or other lighting sources, may also have an impact on your ability to see. Window tinting in police and other vehicles can reduce general visibility. Keep in mind that approaching a vehicle with heavily tinted windows is a safety hazard for law enforcement.

You may frequently encounter a variety of road hazards. Pedestrians crossing streets at unlikely points may require a driver's immediate action. Bicyclists and motorcyclists share traffic lanes with other vehicles and sometimes fall. Skateboarders and roller skaters often make unexpected, risky moves and fall as well. Striking large animals poses obvious risks to vehicles and drivers, as does suddenly stopping or swerving to avoid smaller animals, which may cause worse damage than hitting them. Animals most active at dusk or night, such as opossums, raccoons, and armadillos also present risks. Improperly parked vehicles that block the roadway and vehicles that suddenly pull into traffic or obstruct vision are other dangers. Roadway obstructions and surface flaws or damage, and debris or fluid, are safety threats.

Hearing

The sense of hearing helps you locate the source of sounds that may indicate a problem with a vehicle, a suspicious incident, or a crime. Several factors can make the source of a sound difficult to find, such as whether the driver's windows are open or closed or whether there are surrounding buildings. When you are unsure where a noise is coming from, visually scan the surroundings to help you locate the source and direction of the sound. Driving with the driver's side window down helps you hear and see hazardous situations, such as people who need help, crimes in progress, or suspicious activity. Driving with the window down also helps alert you to other emergency vehicles, such as fire trucks, rescue vehicles, and police vehicles responding to the same scene.

Smell

You can use your sense of smell to detect many problems. If you detect an unusual odor while operating a vehicle, determine whether the odor is coming from the patrol vehicle or from outside. Look for smoke or other indicators of the odor's source. If the odor is not as readily identifiable as smoke, gasoline, or propane, drive away from the area and call for additional resources to investigate. Unusual odors may indicate unusual hazards. You should be clear of those hazards before continuing to investigate.

Be aware that a fire can start if the vehicle is left running while parked over a grassy area for an extended period of time. This is usually caused by the extreme heat from a catalytic converter. The odor of bitter smoke is usually the first sign of a grass fire.

Touch

Touch can help you detect problems that affect vehicle operation and control. For example, if you feel the steering wheel vibrating excessively, the vehicle may have a steering or tire problem. If the steering wheel pulls in one direction, the vehicle may have an alignment problem. What you feel in your hands, feet, and other parts of the body provides feedback about the vehicle's handling. When you are driving and sense something unusual, you should determine whether it is a safety concern by applying the brake pedal to verify that the brakes work, checking the steering, and looking for smoke or signs of an engine fire.

Observation Skills

Several techniques can enhance your ability to be a keen observer aware of your surroundings. Driving at or below the posted speed limit is helpful for observing and responding appropriately to the environment. Making adjustments to your meal times and lifestyle will help you be more alert on the job. Some adjustments include eating smaller meals more frequently throughout the day and getting enough rest and sleep before a shift.

Some temporary factors can weaken a driver's observation skills. These include stress, emotions, fatigue, and frequent shift changes. Prescription and over-the-counter drugs and poor driving habits can also have an effect on observation skills and reaction times, resulting in inattention, loss of control, and even crashes. Medical conditions such as high blood pressure, diabetes, heart conditions, or epilepsy may also impair observation skills.

SECTION VOCABULARY

acuity

color vision

depth perception

night vision

peripheral vision

UNIT 2 | PROACTIVE DRIVING SKILLS

LESSON 2 | Road and Weather Conditions

OBJECTIVE

VO909.1. Identify corrective action to take upon encountering a road or weather hazard.

LESSON GOAL: At the end of this lesson, you will understand and be able to prepare for potential hazards that you are likely to encounter due to road and weather conditions.

Officers are likely to encounter potential hazards due to road and weather conditions that can affect a vehicle's operation. Observation skills and techniques can help officers spot and react to potential road hazards.

You will probably encounter road surface abnormalities that can be hazardous if you do not know how to handle or correct the hazard. Such hazards include construction areas, other vehicles, intersection debris, fluids, wet surfaces, or standing water. When you see fluid on the road, slow down and try to avoid driving over or through the hazard.

Potholes and sinkholes, curbs, and railroad tracks all can be hazardous, especially if you encounter them unexpectedly. When you cannot avoid striking or driving over an obstacle, try to strike it at a slight angle with free rolling tires. If two or more vehicle tires roll from a paved surface onto an unpaved surface, you should not attempt to return to the paved surface by abruptly turning the steering wheel. This can cause the vehicle to flip or cross several traffic lanes. Instead, decelerate and steer as straight as distance allows. After reducing speed, firmly grip the wheel and steer smoothly and steadily back onto the roadway.

Variable Road Surfaces

You should always watch the road, look ahead, and try to anticipate what kind of traction your tires will have on the surface they are approaching. While driving, you may encounter concrete (a nonporous supportive surface), asphalt (a porous distributive surface), clay, dirt, gravel, or brick roadways. Vehicles respond differently to each of these surfaces, and you need to practice driving on each of them to know how your vehicle drives under those conditions.

Weather

In Florida, you are likely to encounter rain, fog, wind, and extremely bright sunshine. As a law enforcement officer, you may have to be on the road when most other people would be able to avoid it, such as during heavy storms. Because you may have to respond to an emergency during bad weather, you need to learn how to drive safely in all types of weather. You also need to understand how weather can affect your vehicle's performance.

Rain and wind are the weather conditions that are most likely to affect your vehicle's performance in Florida. Brakes often become wet when driven through deep water or heavy rain. Rain can cause a vehicle to lose traction and skid out of control. Even a small amount of rain can cause a car to float off the road. Though they are designed to disperse water, tires sometimes hydroplane. They

pull to one side or the other or may not hold at all. Try to avoid driving through water if the tires will be immersed halfway or more, because at that point, the water reaches the area on the tire that may cause mechanical malfunctions. Extreme wind may also affect the performance and handling of the vehicle; you should keep in mind that heavy winds can blow other drivers off course or cause tree limbs or other debris to fall into your path.

UNIT 2 | PROACTIVE DRIVING SKILLS

LESSON 3 | Proactive Measures

OBJECTIVES

VO909.4.A.1. Identify types of frequently occurring crashes.

VO909.4. Demonstrate crash avoidance techniques.

VO909.4.C.4. Identify possible reactions to take to avoid injury or further vehicle damage.

VO909.3.A. Describe techniques and principles to enhance driver awareness, including the two- and four-second rules.

- collisions with fixed objects
- accidents caused by improper backing
- head-on collisions
- rear-end collisions

You can take several measures to avoid a crash. You might take your foot off the accelerator to decrease speed, use evasive maneuvers, or apply the brakes. Steering to a safe location in the direction you want to go is also a good tactic for avoiding a crash.

Avoiding Head-On Collisions

If a vehicle is moving toward you in the lane of travel, examine your surroundings for potential obstacles as you act to avoid a collision or attempt to reduce its effects. You can also reduce speed to increase the time to react. Driving to the right gives the other vehicle more space and puts you in position to drive off the road if necessary. Finally, you can drive off the road to avoid the collision.

If an oncoming vehicle forces you off the road, you can potentially reduce the chances of injury by attempting to select what to hit (items listed from least to most dangerous):

- soft objects (bushes, small trees, or fences)
- objects moving in the same direction (including another vehicle)

LESSON GOAL: At the end of this lesson, you will be able to identify types of crashes and know techniques for avoiding them.

Officers should be able to identify types of crashes and master techniques for avoiding them. Sometimes, another driver's actions or an officer's failure to recognize a hazard makes a crash unavoidable. An example is a vehicle that pulls out suddenly, forcing the officer to take evasive action to avoid a collision. Officers should be especially careful at intersections, as they represent the single greatest threat to safe vehicle operation. Some frequently occurring crashes include the following:

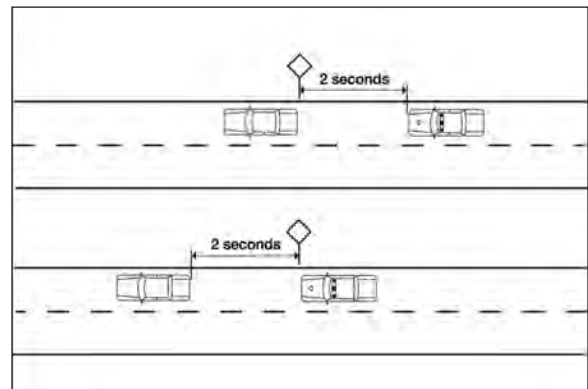
- sideswipes
- right-angle collisions at intersections

- a fixed object (tree, sign, or parked car)

If you cannot avoid hitting a fixed object or an oncoming vehicle, you should hit the object with the side of the vehicle rather than head on, glancing off the object or vehicle.

Two-Second Rule

The two-second rule establishes a minimum safe following distance for all vehicles and provides space and time for the driver to react to potential hazards. This rule applies at the posted speed limit when weather and road conditions are good. Use the two-second rule at any speed to determine if you are a safe distance from the car in front of you. To follow the principles of the two-second rule, watch the vehicle traveling in the same direction in front of you as it passes a fixed point, then count off the seconds it takes the patrol vehicle to reach the same fixed point. Count the seconds saying, “one thousand one, one thousand two.” If the patrol vehicle reaches or passes the fixed point before counting the two seconds, choose another fixed point and count again. You should make sure your vehicle passes the fixed point after counting two seconds. This means you are following at a safe distance.

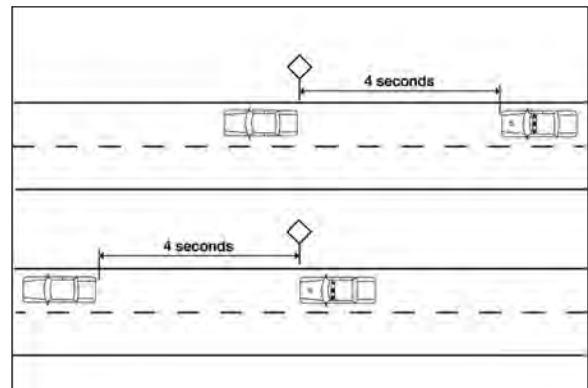


Two-second rule

Figure 1-1

Four-Second Rule

Under poor road conditions or in bad weather, use the four-second rule. Its principles are the same as those of the two-second rule, except that four seconds are counted after the vehicle ahead passes a fixed object. Events and situations that call for the four-second rule include traveling at higher than normal rates of speed, driving during emergency responses, or traveling with other responding units. Inclement weather, fog, and smoke also require the four-second rule. Also, oncoming headlights, streetlights, hazards and debris, and construction areas all make for situations that call for application of the four-second rule.



Four-second rule

Figure 1-2

UNIT 3 | PRINCIPLES OF DRIVING

LESSON 1 | Physical Laws and Handling Characteristics

OBJECTIVES

- VO903.8.** Demonstrate how to control the vehicle path while in motion.
- VO907.1.B.** Explain the importance of braking to a safe speed before entering a turn or corner.
- VO907.1.C.** Identify the importance of initiating the steering input before entering a turn or corner.
- VO907.1.E.** Identify an increasing radius.
- VO907.1.D.** Identify a decreasing radius.
- VO907.1.F.** Identify a constant radius.
- VO907.1.A.** Describe how to locate the apex.
 - VO907.1.A.1.** Demonstrate the apexing techniques.
- VO907.2.A.** Identify the proper steering input that will decrease the severity of centripetal and centrifugal force.
- VO903.7.D.** Identify steering as it relates to vehicle dynamics and traction in a turn.
 - VO903.7.A.2.** Identify principles of understeering.
 - VO903.7.A.1.** Identify principles of oversteering.
- VO903.8.B.1.** Identify principles of wheel tracking.
- VO903.8.B.** Identify how to control wheel tracking by properly steering around an object.

LESSON GOAL: At the end of this lesson, you will understand how physical force affects your ability to control and safely maneuver a police vehicle. You will also know how a police vehicle will react to the driver's input, road conditions, and natural forces.

This section explains how physical forces affect your ability to control and safely maneuver a police vehicle. Remember that vehicles react to driver input, road conditions, and natural forces. The tires of most law enforcement vehicles rest on four 6-inch squares (known as the tire contact patch). All the factors just listed affect those four small areas and what happens to the vehicle.

Physical Laws

If you understand the Laws of Motion from physics, you can better understand the forces acting on a stopped or moving vehicle. (*Note:* The Laws of Motion taught here are Newton's Physical Laws adapted and applied to vehicle operations.)

Every object continues in a state of rest or uniform motion in a straight line unless physical forces compel it to change that state. This means that once set in motion, a vehicle continues to move in a straight line unless an outside force compels it to do otherwise.

The acceleration of an object is directly proportional to the net force acting on that object and inversely proportional to the mass of the object. This simply means that a small car with more horsepower accelerates more rapidly than a large car with less horsepower.

Vehicular Motion

There are three types of vehicular motion: pitch, roll, and yaw. **Pitch** occurs during acceleration or braking and causes the transfer of a vehicle's weight from front to rear or rear to front. **Roll** occurs when turning. This shifts the vehicle's weight from side to side. **Yaw** is the transfer of a vehicle's weight causing an end-for-end motion resulting in the vehicle turning 180° on a horizontal plane.

Stability

Vehicular stability affects the degree of pitch, roll, and yaw that a vehicle experiences. A stable vehicle does not pitch and roll as easily as an unstable vehicle. The center of gravity on the most stable vehicle is low and centered, like a Formula One or Indy race car. The higher a vehicle's center of gravity, the lower its stability. For example, trucks and SUVs are less stable because of their high center of gravity. A vehicle with a wider tracking width, like a military Humvee, is more stable. As a vehicle's tracking width decreases, so does its stability. Trucks and SUVs are less stable because of their narrow tracking width.

Weight Transfer and Distribution

Equipment and passenger loads affect weight transfer and could change a police vehicle's stability. Be sure to load all equipment in such a way as to distribute weight evenly. Weight transfer and distribution occur when the vehicle's speed changes and influence the vehicle's handling ability. Weight is distributed only where the tires contact the surface. The more dramatically the brakes or accelerator are applied, the more dramatic the weight transfer and its effects.

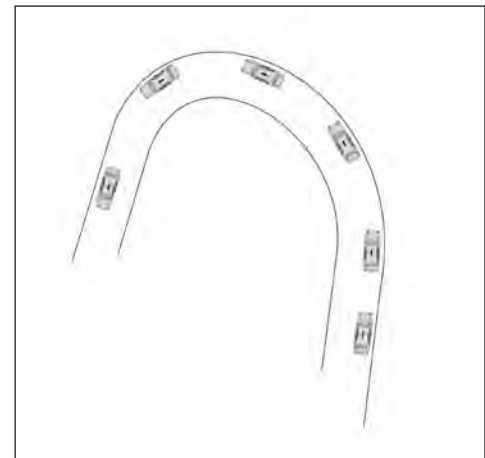
As a driver applies the brakes, weight transfers in the direction the vehicle is traveling—forward or backward. This transfer affects the distance it takes to stop the vehicle. When a vehicle accelerates, weight transfers to the rear tires, affecting acceleration and the handling of the vehicle. Weight transfer and distribution also occur when a vehicle changes direction. When a vehicle turns a corner, weight is transferred from one side to the other. The transfer is more noticeable in a less stable vehicle (a van, truck, or SUV) than in more stable vehicles (sedans). This transfer of weight can force the vehicle out of a driver's travel lane or off the road. In extreme situations, it can cause the vehicle to roll over.

When a vehicle turns a corner, weight transfers toward the tires on the outside of the turn. The front outside wheel carries the most weight, while the rear wheel on the outside of the turn carries less, followed by the front wheel on the inside of the turn, and, finally, the rear wheel on the inside of the turn. Because of this diminished steering capability, you should not attempt to brake and steer at the same time. Always brake before turning and then steer into the turn.

Turns

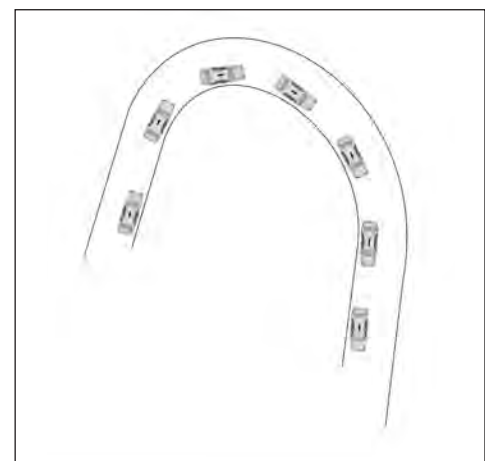
A *radius* is the distance from the center of a circle to the outside. A turn or curve is a portion of a circle. An *increasing radius* is a turn that gets wider during the turn much like a circle getting larger.

A *decreasing radius* is a turn that gets tighter during the turn much like a circle getting smaller.



Increasing radius turn

Figure 1-3



Decreasing radius turn

Figure 1-4

A **constant radius** is a turn that remains the same throughout, getting neither wider nor smaller. An example could be a 90° turn, such as a turn made at an intersection. Safely negotiating a tight turn requires less speed and more steering input.

Corner Negotiating Techniques

An **apex** is the center point of any curve. The apexing technique is how the vehicle is steered in relation to a curve's apex while maintaining your lane. The vehicle's position in relation to the curve defines the early, center, or late apexing techniques. The early apexing technique is when the vehicle is steered so it is closest to the inside of the curve before reaching the apex. This technique increases centrifugal force and can cause loss of control.

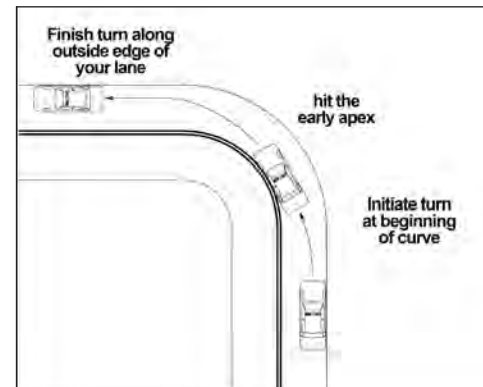
The center apexing technique is when the vehicle is steered closest to the middle of the curve.

The late apexing technique is when the vehicle is steered so it passes closest to the inside of the curve after reaching the apex. This technique decreases centrifugal force, reducing the potential for loss of control. The late apexing technique, in most cases, is the best cornering or turning method. It allows the most room for driver error.

The two general forces that act upon a vehicle as it turns a corner are centripetal force and centrifugal force. **Centripetal force** (tire traction) is the force that is necessary to keep a vehicle moving in a curved path and is directed inward toward the center of rotation. **Centrifugal force** is the force enacted on a vehicle moving in a curved path that acts outwardly from the center of rotation.

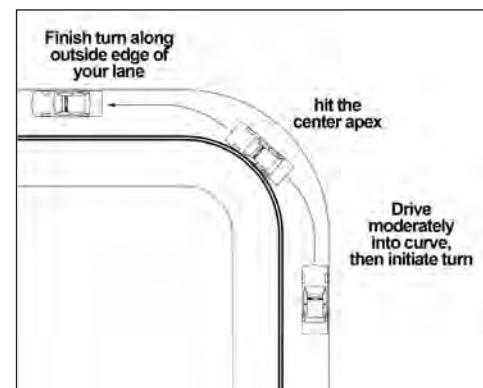
Steering has a direct relationship with vehicle dynamics, vehicle handling, and traction control. The speed of a vehicle and the forcefulness of steering influence these forces. Speed and steering also greatly affect the weight transfer of the vehicle, which in turn affects the driver's control of the vehicle. Understeer and oversteer describe certain vehicle movements resulting in a loss of traction by the front or rear tires. You should not confuse the word steering in these terms with the actual movement of the vehicle's steering wheel. However, recovery from these events may require steering input.

Understeer is the tendency of a vehicle to turn less sharply than the driver intends. The cause of understeer may be a combination of excessive speed, lack of traction on the steering tires, and improper braking in a turn or curve. A combination of two or more of these errors can cause you to lose control. The correction for understeer is to remove the foot from the accelerator, maintain steering input but not apply brakes, and, if necessary, steer the car to a safe place and stop.



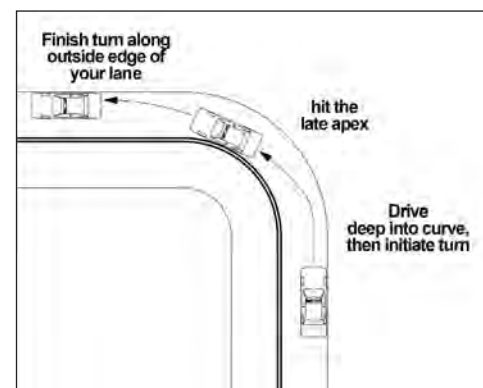
Early apex turn

Figure 1-5



Center apex turn

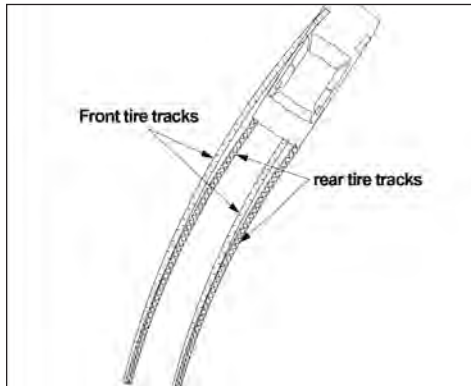
Figure 1-6



Late apex turn

Figure 1-7

Oversteer is the tendency of a vehicle to steer into a sharper turn than the driver intends, sometimes with a loss of traction of the rear to the outside. Oversteer generally occurs at higher speeds when the rear tires lose traction and excessive braking occurs in a turn or curve. The correction for oversteer is to remove the foot from the accelerator and/or brake, steer the car where desired (when the front tires have not lost traction), refrain from applying the brakes, and, if necessary, steer the car to a safe place and stop.



Wheel tracking

Figure 1-8

Wheel tracking causes the rear wheels to follow a tighter path than the path the front wheels traveled in a turn. When trying to avoid a fixed object, you must steer the front of the vehicle wide off the object to prevent the rear wheels from striking it. Applying the correct inputs makes you a more capable driver in both normal and extreme conditions.

SECTION VOCABULARY

apex

centrifugal force

centripetal force

constant radius

decreasing radius

increasing radius

oversteer

pitch

radius

roll

understeer

wheel tracking

yaw

UNIT 3 | PRINCIPLES OF DRIVING

LESSON 2 | Steering the Vehicle

OBJECTIVES

- VO903.1.** Identify how to make the necessary adjustments to the vehicle while seated.
- VO903.8.C.1.** Identify the caster effect.
- VO903.3.** Identify how to initiate the steering input for directing the vehicle.

LESSON GOAL: At the end of this lesson, you will know proper hand position and steering techniques.

Steering is one of the most important aspects of driving a vehicle. How you sit in a vehicle is also important because it enables you to correctly steer, accelerate, use mirrors, use proper seat position, and brake.

Seat Belt Usage

Whether it is a standard lap and chest belt or a tactical harness, you should always wear your seat belt. The Florida Safety Belt Law (s. 316.614, F.S.) requires that the driver and anyone 18 or older who is a passenger in the front seat must be restrained by a safety belt. Anyone younger than 18 must be restrained by a safety belt or by a child restraint device anywhere in the motor vehicle. There are exceptions to this law, but almost all passengers are required to be strapped in during transport. Your agency policies will mirror this law.

Steering Wheel Grip

Hold the steering wheel with a firm yet relaxed grip. The thumbs should rest on the rim of the steering wheel and never hold the wheel too tightly; holding the wheel tightly will cause you to tire more quickly. You must use proper hand position and grip each time you take control of a vehicle.

Hand Position

Facing the steering wheel, the top center of the wheel is in the 12 o'clock position. The bottom center of the wheel represents 6 o'clock. It is recommended that you place your right hand in the 4 o'clock position and your left hand in the 8 o'clock position. This hand position provides quicker response, reduces fatigue, and reduces injury if the air bag deploys. The design of some steering wheels may require a slightly different hand position.

Shuffle Steering

After properly adjusting the equipment, place your hands in the required position, and grip the steering wheel correctly. Perform the shuffle steering technique to make a right turn and a left turn. Driving in reverse does not involve shuffle steering.

To turn right, move the right hand into the 12 o'clock position at the top of the steering wheel and pull the steering wheel down in a smooth motion into a right turn:

1. Simultaneously maintain contact with the steering wheel with the left hand, and slide the left hand into the 6 o'clock position.
2. Continue to turn as the hands meet at the 6 o'clock position by gripping with the left hand and loosening the right hand while maintaining contact with the steering wheel with the right hand. Shuffle the wheel from hand to hand, rotating the left hand up toward the 12 o'clock position.
3. Simultaneously maintain contact with the steering wheel with the right hand, and slide the right hand into the 12 o'clock position.
4. Make sure that neither hand crosses the steering wheel's top (12 o'clock position) or bottom (6 o'clock position). The right hand stays on the right side of the wheel; the left hand stays on the left side of the wheel.

SECTION VOCABULARY

caster effect

eye-targeting

To turn left, move the left hand into the 12 o'clock position at the top of the steering wheel and pull the steering wheel down in a smooth motion into a left turn:

1. Simultaneously maintain contact with the steering wheel with the right hand, and slide the right hand into the 6 o'clock position.
2. Continue to turn as the hands meet at the 6 o'clock position by gripping with the right hand and loosening the left hand while maintaining contact with the steering wheel with the left hand. Shuffle the wheel from hand to hand, rotating the right hand up toward the 12 o'clock position.
3. Simultaneously maintain contact with the steering wheel with the left hand, and slide the left hand to the 12 o'clock position.
4. Make sure neither hand crosses the steering wheel's top (12 o'clock position) or bottom (6 o'clock position). The left hand stays on the left side of the wheel; the right hand stays on the right side of the wheel.

It is imperative to use this steering technique, because it helps maintain control of the steering wheel, especially when the caster effect occurs. The *caster effect* is the tendency for a vehicle traveling forward to straighten from a turn when the driver releases the steering wheel. Using the shuffle steering technique allows the caster effect to work for you rather than against you. The caster effect does not apply when driving in reverse.

Optical Driving and Hand-Eye Coordination

Optical driving is looking in the desired direction of travel to avoid an obstacle and to avoid steering in the direction of the obstacle. This is also referred to as *eye-targeting*.

UNIT 3 | PRINCIPLES OF DRIVING

LESSON 3 | Braking Techniques

OBJECTIVES

VO905.2.A.2. Explain principles of proper braking.

VO904.3.B. Describe how to avoid applying brakes to maintain rolling friction.

VO905.2.A.3. Identify incipient skid and its effect on vehicle traction.

VO905.2.A. Demonstrate how to maintain pressure on the brake pedal to avoid wheel lockup.

VO904.3.A.1. Identify incipient spin and its effect on vehicle traction.

VO904.3. Demonstrate how to decrease the rate of acceleration to control loss of traction.

LESSON GOAL: At the end of this lesson, you will know proper braking and acceleration techniques.

To complete the driving exercise successfully, you must learn and demonstrate the proper acceleration and braking techniques. With proper braking technique, the driver presses the brake pedal with increasing pressure to slow or stop as quickly as possible.

When practicing and demonstrating proper braking, do the following:

1. Rotate the right foot from the accelerator to the brake while leaving the heel on the floor.
2. Place the ball of the right foot on the center of the brake pedal.
3. Apply increasing pressure to the brake pedal.
4. Increase pressure on the brake pedal to stop the vehicle in the shortest distance.

An *incipient skid* happens just before the tires lose traction during braking. The tires lock, causing loss of steering control and a skid.

Anti-Lock Braking System (ABS)

Enhancement to the conventional braking system called *anti-lock braking system (ABS)* is now standard equipment on vehicles. This type of motor vehicle braking system electronically prevents the wheels from locking by rapidly applying and releasing the brake while allowing the driver to remain in control of the steering. ABS and non-ABS work alike under normal (gradual) braking pressure. When an emergency (hard or sudden) stop is required, the two systems operate differently.

When a driver applies a steady downward pressure to the brake pedal, the computerized ABS automatically slows and stops the vehicle. To stop a vehicle equipped with ABS quickly, apply the brakes hard to engage the ABS. You will feel the brake pedal pulsing, which is a normal condition indicating that the vehicle is in ABS mode.

Proper Acceleration

An *incipient spin* occurs just before the drive tires lose traction during acceleration. (The drive tires are the front tires on a front-wheel drive vehicle or rear tires on a rear-wheel drive vehicle.)

The following steps explain the proper technique for accelerating a vehicle while avoiding loss of traction and controlling weight transfer:

1. Position the foot properly; rest the right heel at the base of the accelerator.
2. Rest the ball of the right foot squarely on the accelerator pedal.
3. With the ball of the right foot, apply pressure to the accelerator, pressing it down.
4. Apply smooth consistent pressure to the accelerator until the desired acceleration rate has been reached.
5. Apply proper pressure without losing traction and passing the point of incipient spin.
6. Release the pressure on the pedal as needed to control loss of traction or decrease the acceleration rate.

Remember that proper acceleration is best done in a smooth, straight line using steady pressure. If the tires begin to spin, immediately release the accelerator; this stops the tires from spinning. You can then smoothly reapply the accelerator and move the vehicle forward.

SECTION VOCABULARY

anti-lock braking system (ABS)

incipient skid

incipient spin

UNIT 3 | PRINCIPLES OF DRIVING

LESSON 4 | Vehicle Slide Control

OBJECTIVES

- VO904.3.B.1.** Describe rolling friction and its effect on vehicle traction.
- VO906.1.** Identify the importance of not accelerating.
- VO906.1.B.** Identify the importance of not braking.
- VO906.2.A.** Define counter steering.
- VO906.2.** Identify the importance of counter steering to avoid a secondary slide.

SECTION VOCABULARY

counter steering
rolling friction
skid
slide

LESSON GOAL: At the end of this lesson, you will know how to regain control of a vehicle that is sliding.

Control of a vehicle depends on traction. Traction is the result of the friction a vehicle's tires create on the road surface. The best traction is **rolling friction**, which is when the tires constantly rotate on the road surface without losing contact. Loss of traction is, therefore, the result of loss of rolling friction, which causes loss of vehicle control as the tires skid or slide on the road surface. Loss of traction equals loss of control.

A **skid** results when the wheels lock and do not turn while the vehicle is moving. Both rolling friction and traction are lost. If a driver follows a vehicle too closely, does not pay attention, and then slams on the brakes to avoid a collision, the result is a common skid in which both rolling friction and traction are lost. Weight transfer and centrifugal force can also influence a skid. If a driver enters a turn too quickly and brakes improperly to slow down, he or she will lose control and begin to skid.

A **slide** also results from loss of both rolling friction and traction. In a slide, the wheels still rotate, but they do not control the vehicle's movement. A power slide happens when a driver overaccelerates, and the tires spin; the wheels are not locked, but the vehicle has lost traction. That is why the vehicle is not accelerating forward. A slide can cause loss of control. Accelerating too much on a turn or a slick surface causes a power slide.

Generally, you will not have to drive on icy roadways in Florida. However, rainstorms cause similar hazards. Oil and tar are of particular concern on Florida roadways. When moistened by rainfall, they increase the possibility of skidding. When a vehicle rides on top of water on the roadway, it may hydroplane, slide, or skid.

Recovering From a Slide

If the vehicle skids or slides, follow these basic steps to recover and to avoid a secondary skid or slide:

1. Remove the foot from the gas pedal to stop accelerating.
2. Do not apply the brakes. This may lock the wheels and make the skid or slide worse. The only way to recover is to regain traction.
3. Use **counter steering**; turn the vehicle's front tires in the direction you want to go to retain traction.

If you follow these steps correctly, you may avoid a secondary slide.

UNIT 3 | PRINCIPLES OF DRIVING

LESSON 5 | Vehicle Cornering

LESSON GOAL: At the end of this lesson, you will know how to enter an intersection safely and properly at normal driving speeds and make a 90° turn to the right or left.

Cornering requires entering an intersection safely and properly at normal driving speeds and making a 90° turn to the right or left. Proper braking is an important element of negotiating a turn. Officers should also recognize the apex of the turn and properly adjust the vehicle's location to fully use the available space. Steering input with inappropriate speed keeps a vehicle from going in a straight line.

You must demonstrate effective cornering by making right and left turns following these steps:

- Drive straight forward when approaching the turn.
- Reach and maintain a speed of 35 mph.
- Be sure to operate turn signals before the turn.
- Brake to a safe speed before entering the turn. Complete braking while driving straight forward.
- Align the vehicle in the appropriate traffic lane outside the turn or corner.
- Determine the apex or path of travel through the turn.
- To ensure steady weight transfer, maintain a constant speed while entering the turn.
- Provide steering input; shuffle steer through the curve.
- Look through the turn to observe and react to obstacles, hazards, and road conditions.
- Begin accelerating while exiting the curve.

OBJECTIVES

VO907.1. Position the vehicle for entry into a turn or corner.

VO907.2. Maintain control of the vehicle through the turn.

VO903.7. Demonstrate how to control the amount of steering input.

UNIT 3 | PRINCIPLES OF DRIVING

LESSON 6 | Vehicle Backing

OBJECTIVES

VO908.1. Identify how to demonstrate the pivot position by turning the upper body to the right, placing the right arm on the top portion of the passenger seat, and looking through the rear window to navigate.

VO908.1.B. Discuss proper adjustment and use of mirrors to maximize visibility.

VO908.2. Identify how to steer in reverse with your left hand while slowly accelerating and maintaining control of the steering wheel.

LESSON GOAL: At the end of this lesson, you will know how to safely and effectively back up your vehicle.

Many crashes occur when drivers are backing up. The ability to back a vehicle safely out of a particular location or situation is an officer safety skill. If you fail to back the vehicle properly, you might hit a person or an object. The majority of law enforcement vehicle crashes are a result of backing into a fixed object. Some vehicles have limited visibility to the rear. Use side mirrors or installed backup cameras as necessary.

All dynamics apply to the vehicle in any direction of travel. In reverse, the vehicle should be driven slowly to compensate for an increase in weight transfer and a decrease in the driver's field of vision. The rear brakes, which handle a great amount of weight transfer while driving in reverse, are not as efficient as the front brakes. Therefore, the ability to stop when backing is significantly lowered.

Driving in reverse requires less steering input to produce a larger change in direction. You will find this especially evident when driving the Reverse Serpentine course.

Large or quick steering movements may cause uncontrolled oscillation. You will find this evident when driving the Tactical Backing course.

You must demonstrate effective backing of a law enforcement vehicle. When backing, perform the following steps:

- Press the brake with the right foot while shifting the transmission into reverse.
- Turn the upper body to the right, placing the right arm on the top of the upper portion of the passenger seat.
- Look through the rear window; scan the area behind the vehicle.
- Place the left hand in the 12 o'clock position, and, with upper body turned, release the brake, and slowly accelerate.
- Back the vehicle while steering, using the left hand and a smooth motion.
- When driving in reverse, consider the option of using mirrors.
- Except in an emergency, always back slowly.

UNIT 4 | LIGHTS AND SIRENS

LESSON 1 | Night and Subdued Light Driving

LESSON GOAL: At the end of this lesson, you will understand factors that influence a driver's performance while operating a vehicle during reduced lighting or nighttime hours and certain techniques to use to improve vision while driving at night or under reduced visibility.

OBJECTIVES

VO910.6.A. Identify types of sensory influences the driver may experience at night.

VO910.6.B. Identify techniques that may improve vision at night.

Although only one-third of all driving is done at night, more than half of all fatal crashes occur during hours of darkness. This happens because drivers believe that they can drive as fast at night as they can during the day. This perception and false confidence, combined with reduced visibility, create a more hazardous driving environment.

Several factors may influence driving performance at night:

- **overdriving of vehicle headlights**—The most common night driving error is to overdrive the distance the vehicle's headlights project. According to s. 316.237, F.S., vehicle headlights should reveal a person 450 feet away with the high beams and a distance of 150 feet with the low beams. When increasing speed, you may not be able to stop your vehicle within the visible area that the vehicle's headlights create. This factor is most important when driving in emergency mode. High speed increases stopping distance and decreases reaction time.
- **reaction distance**—Reaction time remains the same whether driving during the day or night. However, lack of light increases the time required to initially observe a hazard.
- **field of vision**—At night, peripheral vision decreases. Less light narrows the field of vision.
- **loss of visual cues**—At night, it is easy to lose many visual cues that are available during the day, which lowers the ability to judge distance and the speed of oncoming traffic.
- **glare**—Glare from oncoming vehicles or other outside sources can temporarily blind a driver. When driving at night, human eyes adjust to the lack of light and use night vision. When the light suddenly changes, eyes need time to readjust.
- **emergency lights**—When driving in emergency mode, emergency lights can increase the amount of glare encountered. The high intensity of the emergency lights easily reflects off objects.

You can use these techniques to improve your vision while driving at night and to react properly to oncoming vehicular traffic:

- reducing speed and not looking directly at the headlights of oncoming vehicles
- looking off to the shoulder of the roadway to protect night vision while using the white line at the edge of the road for guidance

- dimming the headlights for oncoming traffic to reduce glare and protect the night vision of other drivers
- using low beams while driving in fog or smoke during the day or at night, which limits the amount of glare reflected back at the driver
- reducing glare by controlling all interior lights

UNIT 4 | LIGHTS AND SIRENS

LESSON 2 | Preparation for Emergency Mode

LESSON GOAL: At the end of this lesson, you will have an understanding of basic laws that impact law enforcement emergency vehicle operation. You will also have an understanding of the liabilities of law enforcement driving.

The decision to operate a law enforcement vehicle in emergency mode is one an officer must never take lightly. Driving in emergency mode can place you and the public at risk. Responding in emergency mode or pursuing a vehicle is among the most dangerous driving situations, because officers may experience psychological and physiological effects.

You must follow specific Florida laws that relate to the operation of emergency vehicles. Individual agency policies can add further restrictions to state law as to when and how you will operate vehicles in emergency mode. You must revert to your specific agency's policies relating to emergency mode operation. Court opinions and legislation continuously change laws. Consult your supervisors and your agency legal advisers about issues specific to your respective agency to stay up to date.

According to s. 316.003(1), F.S., an authorized emergency vehicle refers to:

Vehicles of the fire department (fire patrol), police vehicles, and such ambulances and emergency vehicles of municipal departments, public service corporations operated by private corporations, the Department of Environmental Protection, the Department of Health, the Department of Transportation, and the Department of Corrections, as are designated or authorized by their respective department or the chief of police of an incorporated city or any sheriff of any of the various counties.

According to s. 316.271(6), F.S.,

Every authorized emergency vehicle shall be equipped with a siren, whistle, or bell capable of emitting sound audible under normal conditions from a distance of not less than 500 feet and of a type approved by the department, but such siren, whistle, or bell shall not be used except when the vehicle is operated in response to an emergency call or in the immediate pursuit of an actual or suspected violator of the law, in which event the driver of the vehicle shall sound the siren, whistle, or bell when reasonably necessary to warn pedestrians and other drivers of the approach thereof.

According to s. 316.126(3), F.S.,

An authorized emergency vehicle, when en route to meet an existing emergency, shall warn all other vehicular traffic along the emergency route by an audible signal, siren, exhaust whistle, or other adequate device or by a visible signal by the use of displayed blue or red lights. While en route to such emergency, the emergency vehicle shall otherwise proceed in a manner consistent with the laws regulating vehicular traffic upon the highways of this state.

OBJECTIVES

VO910.1.A.3. Identify the Florida Statutes that govern vehicles operating in emergency mode.

VO910.1.A. Identify guidelines for operating in emergency mode.

According to s. 316.126(1)(a), F.S.,

Upon the immediate approach of an authorized emergency vehicle, while en route to meet an existing emergency, the driver of every other vehicle shall, when such emergency vehicle is giving audible signals by siren, exhaust whistle, or other adequate device, or visible signals by the use of displayed blue or red lights, yield the right-of-way to the emergency vehicle and shall immediately proceed to a position parallel to, and as close as reasonable to the closest edge of the curb of the roadway, clear of any intersection and shall stop and remain in position until the authorized emergency vehicle has passed, unless otherwise directed by any law enforcement officer.

According to s. 316.072(5)(a)1., F.S.,

The driver of an authorized emergency vehicle, when responding to an emergency call, when in the pursuit of an actual or suspected violator of the law, or when responding to a fire alarm, but not upon returning from a fire . . . may exercise the privileges set forth in this section, but subject to the conditions herein stated.

According to s. 316.072(5)(b), F.S., a driver operating in emergency mode may do the following:

- park or stand, irrespective of the provisions of this chapter
- proceed past a red or stop signal, or stop sign, but only after slowing down as may be necessary for safe operation
- exceed the maximum speed limits so long as the driver does not endanger life or property
- disregard regulations governing direction or movement or turning in specified directions so long as the driver does not endanger life or property

These provisions do not relieve the law enforcement driver of a vehicle specified in s. 316.072(5)(a), F.S., from the duty to drive with due regard for the safety of all persons, nor do they protect the driver from the consequences of his or her reckless disregard for the safety of others.

UNIT 4 | LIGHTS AND SIRENS

LESSON 3 | Operating in Emergency Mode

LESSON GOAL: At the end of this lesson, you will know various safety issues and expected psychological and physiological effects to consider while operating a law enforcement vehicle in emergency mode.

After deciding to drive in emergency mode, an officer must be continuously concerned about certain safety factors while responding.

Effects of Driving in Emergency Mode

Many concerns accompany operating a vehicle in emergency mode. Remember to always control your vehicle by using proper steering, braking, and accelerating techniques. It is possible to respond rapidly and safely when using good judgment and good driving techniques.

Responding to an emergency call causes stress, which can lead to many psychological and physiological reactions. The psychological stress of an emergency call may cause you to exceed your ability or your vehicle's ability in trying to catch the violator at any cost or get there before anyone else. Physiological effects are the measurable changes to normal body functions. These include tunnel vision, selective hearing, increased heart rate, time distortion, and loss of spatial awareness or fine motor skills. It is important for you to be aware of these effects and keep them under control when responding in emergency mode.

Several techniques help officers respond safely in emergency mode. You must use all available emergency equipment properly. You are responsible for ensuring a safe response. Make decisions about the use of lights based on the response to the call, not on extraneous factors such as concerns about waking people during the night or causing inconvenience to other drivers on the road. You should also realize that a siren is not a protective shield. Many motorists drive with their radios and air conditioners on and their windows up, and it is possible that they do not hear the siren.

You must approach intersections correctly, yielding or stopping when the situation warrants to ensure that you adhere to due regard for the safety of others when requesting right-of-way. Make eye contact with other drivers at an intersection whenever possible before driving through that intersection.

Maintain proper following distances from privately owned vehicles, as well as other emergency vehicles. If you follow a vehicle too closely, it is possible that the driver will not see your lights in the rearview mirrors.

Always offset your vehicle to the left of the available roadway but within your lane. That makes your vehicle more visible to the vehicles you are following, as well as those approaching from the opposite direction. Following this position should enable the driver in front of you to see your vehicle in both their rear and side mirrors.

Always keep in contact with the dispatcher and other responding units when driving in emergency mode.

OBJECTIVES

VO910.5.A. Identify possible psychological stress on the driver in emergency mode.

VO910.5.B. Identify possible physiological effects on the driver in emergency mode.

VO910.4. Identify safe emergency driving techniques.

UNIT 4 | LIGHTS AND SIRENS

LESSON 4 | Pursuit Considerations

OBJECTIVES

VO910.1. Identify how to make a decision to operate in emergency mode.

VO910.1.B. Define pursuit.

VO910.1.A.2. Explain case law regarding operating a vehicle in emergency mode.

VO910.2. Notify communications and supervisor when a pursuit is initiated.

VO910.3. Activate the emergency equipment.

VO910.7. Identify when to coordinate with other responding units and with dispatch via radio.

VO910.9. Identify the conclusions to a pursuit.

LESSON GOAL: At the end of this lesson, you will know the case law that influences policy regarding pursuits. You will know how to communicate during a pursuit and how to identify the possible conclusions to a pursuit.

The goal of pursuit is to apprehend a fleeing violator. You cannot control the violator's driving or the route the violator takes. While your own driving will be a response to the violator's actions and route, you should never let a violator's driving dictate your own.

An officer's decision to initiate a pursuit depends on the officer's knowledge of agency policies and the Florida Statutes, as well as the conditions and circumstances at the time. You must weigh the risks to yourself and the public against the benefits of apprehending a violator after a pursuit.

Pursuit is an active attempt, by driving an authorized emergency vehicle (with emergency equipment activated), to apprehend occupants of a moving vehicle if the driver of such occupants' vehicle increases vehicle speed, takes other evasive actions, or refuses to stop in an apparent attempt to avoid apprehension.

Be aware of your duties to the public as they relate to emergency and pursuit

driving. You must consider your decision to engage the fleeing vehicle, as well as the consequences that might come of beginning a pursuit and terminating it, if the violator then continues to operate the vehicle recklessly.

Court cases address officers' duty to care for the public while operating police vehicles. In *DeShaney v. Winnebago County Department of Social Services*, 489 U.S.189 (1989), the U.S. Supreme Court stated that an officer or agency has no duty to guarantee a person's safety unless a special relationship exists between the police and that person. This type of relationship exists, for example, between police and a person in custody. After police restrict the person's freedom of movement, they assume responsibility for that person's safety and must keep the person reasonably free from harm.

Pursuit situations generally mean that you begin a pursuit but have no duty to continue it. When you terminate a pursuit, it is unlikely that you will be liable if the violator continues to drive recklessly. According to the Florida case *City of Pinellas Park v. Brown*, 604 So.2d 1222 (Fla. 1992), law enforcement has a duty to protect the public when choosing to continue a pursuit.

In the *Pinellas Park* case, officers and deputies from three jurisdictions engaged about 15 police cars in a pursuit on the main roadway. All officers and deputies violated department policies by continuing the pursuit. Another officer driving an unmarked police vehicle entered the roadway from a side street in an attempt to join the pursuit. At the same time, a vehicle occupied by two sisters waited to cross the roadway. Without warning the women, an officer entered from a side street and turned right onto

the main road in an effort to get ahead of the pursuit. When the light turned green, the sisters pulled into the path of the pursued vehicle. Both sisters and the fleeing driver were killed.

The Florida Supreme Court held that the police action in this case created a risk to the public that was foreseeable and preventable. The Court did not prohibit police pursuits; it simply stated that any police decision to start or continue a pursuit is subject to court review under the doctrine of negligence, not just as a use of force under the Fourth Amendment. If police have a duty of care to a resident and if police action or inaction causes injury or death to that person, the court must determine whether police act reasonably. The Court also noted that in modern times, “losing” a vehicle during pursuit does not mean the police will never find the car nor bring its occupants to justice. It is not always a matter of “catching them now or never.” Police may identify a violator for apprehension later. Following agency policies is the best way to avoid liability in a pursuit scenario.

In *Brower v. County of Inyo*, 489 U.S. 593 (1989), the U.S. Supreme Court addressed the issue of deadly force in a police pursuit. In that case, the Court held that certain pursuit tactics might result in a claim of a constitutional violation as a seizure by deadly force. In *Brower*, the police set up a roadblock by parking an 18-wheeler around a curve in the roadway and placing a police car with its headlights positioned to blind Brower as he drove around the curve. The combination of these caused Brower to strike the stationary truck, resulting in his death.

In reaching its opinion, the Court relied heavily on its earlier decision regarding deadly force in *Tennessee v. Garner*, 471 U.S. 1 (1985). The Court was concerned with the use of deadly force to apprehend a person for committing a non-dangerous crime and drew a distinction between the act of pursuing and the act of blocking or seizing a person. Brower clearly was seized; the police actively tried to block him, so responsibilities associated with seizure applied to their actions.

In *Brower*, as in *Garner*, the Court took the position that deadly force should not be used to apprehend citizens for minor offenses such as traffic violations. This distinction also highlights the relationship between the violator’s and officers’ actions. When merely pursuing, officers have no special relationship with the violator and assume no responsibility for the violator’s injury or death. However, if the officers take affirmative steps to halt or force the fleeing individual to stop, whether by roadblock or physical contact between vehicles, the officers are responsible for the results. Their actions become a seizure under the Fourth Amendment.

The issue of using a police vehicle as deadly force is best addressed in specific policy. When police intentionally use a vehicle as a weapon, it becomes a deadly weapon. An agency’s use of force policy governs the vehicle’s use just as it governs any other weapon of opportunity. Questions often arise regarding use of tactics such as ramming. Another tactic, Pursuit Immobilization Technique (PIT), will be discussed later in the lesson.

Graham v. Connor, 490 U.S. 386 (1989), is the U.S. Supreme Court’s key case regarding use of force. In this case, the Court made an observation about law enforcement officers’ decisions during emergency and pursuit driving. Chief Justice Rehnquist wrote: “Police officers are often forced to make split-second judgments—in circumstances that are tense, uncertain, and rapidly evolving—about the amount of force that is necessary in a particular situation.” Rehnquist went on to say the courts will not second-guess those judgments as long as they are objectively reasonable in light of the totality of circumstances.

Another issue is the standard for judging whether you are responsible for injury or death caused by pursuit or emergency response. In *County of Sacramento v. Lewis*, 523 U.S. 883 (1998), the U.S. Supreme Court adopted the standard referred to in earlier cases involving force. The officers may be liable if their actions were sufficient to “shock the conscience” of the Court. This standard must be decided on a case-by-case basis. The Court distinguished between mere carelessness or negligence, deliberate indifference, and

the intent to cause harm. To “shock the conscience” under the conditions of a high-speed pursuit, the officer must have intended to cause harm to the violator without justification for the use of deadly force.

Although the *Lewis* decision involved a minor offense that resulted in the death of a passenger on a motorcycle, the Court again recognized the dynamic nature of some law enforcement activities. Writing for the majority, Justice Souter wrote, “A police officer in deciding to give chase must balance on one hand the need to stop a suspect and show that flight from the law is no way to freedom, and, on the other, the high-speed threat to everyone within stopping range, be they suspects, their passengers, other drivers, or bystanders.” This “balancing test” is what officers must consider when deciding to engage in, continue, or terminate a pursuit.

In 2007, the U.S. Supreme Court decided another pursuit/use of force case in *Scott v. Harris*, 550 U.S. 372, 127 S.Ct. 1769 (2007). Deputy Scott pursued Victor Harris for a traffic offense at high speeds for several minutes before attempting to terminate the chase using PIT, though at much higher speed than was recommended by PIT training. Writing for the majority, Justice Scalia said, “Whether or not Scott’s actions constituted application of ‘deadly force,’ all that matters is whether Scott’s actions were reasonable.” Scalia disagreed with Harris’s argument that the public endangered by the chase could have been protected if Scott and the other officers had just stopped chasing Harris.

Because Florida officers are bound by the *Pinellas Park v. Brown* decision, which imposed a negligence standard for injuries caused during chases, the *Scott* decision does not give the green light for an “anything goes” approach to pursuits. However, under the Fourth Amendment’s use of force analysis, injury to the fleeing driver will generally not be considered to be the result of unreasonable force.

Once engaged in a pursuit, you must notify dispatch that you are starting or stopping a pursuit. You must activate and properly use all available emergency equipment during the pursuit. You must keep in contact with dispatch and other assisting units during the entire pursuit, notifying them of any changes or additional help needed. When engaged in a pursuit, control your vehicle as well as speed by pacing the violator’s vehicle, using the four-second rule to establish a safe distance between your vehicle and the violator’s vehicle. Practice good driving techniques, and keep in mind that the chance of brake fading or loss of traction increases as the pursuit continues. Also remember that it is necessary to alter driving methods to accommodate nighttime conditions. Immediately end a pursuit when the risk to the public or yourself (or other officers) outweighs the benefit of apprehending the violator.

A pursuit has five possible conclusions:

1. The violator stops voluntarily, and the pursuit ends.
2. The violator is stopped involuntarily, resulting in the violator’s apprehension or death.
3. You end the pursuit without apprehending the violator, permitting the violator to escape, at least temporarily.
4. The violator crashes.
5. You crash.

Pursuit Termination Techniques

Some Florida law enforcement agencies use tactics and technologies to conclude vehicular pursuits more safely and more rapidly. Those agencies have training and policies that teach and govern the application of forcible-stop techniques.

Roadblocks

A **roadblock** is the use of vehicles, barricades, cones, or other objects to block traffic flow partially or completely. Its purpose is to demonstrate overwhelming police superiority and position so that the violator will stop and surrender. According to *Brower v. County of Inyo*, a roadblock must be positioned so the violator has sufficient time to stop. Using a roadblock poses a hazard to you, other motorists, pedestrians, and the violator. Therefore, it is necessary to use care and caution when choosing a location for a roadblock and while setting it up.

Appropriate locations for roadblocks include areas that provide a clear view of the roadblock from both sides and highways, streets, or roads. Inappropriate locations for roadblocks include locations over the crest of a hill and locations in, on, or around a curve. Never select a location where the violator has no warning that the crash may occur, unless the use of deadly force is necessary. Never use non-police equipment to block the roadway, and never remain seated in vehicles used to obstruct the roadway. This places you in extreme danger. Communication between officers establishing the roadblock and officers in pursuit is vital. All officers involved in the pursuit should be informed of the roadblock technique to be used.

Tire Deflation Devices

Many brands of tire deflation devices are available for law enforcement agencies. The employing agency's policies and training will provide guidelines for using tire deflation devices. All tire deflation devices share common characteristics:

- hollow spikes that puncture a vehicle's tire and allow air to be released, causing the tire to deflate
- track or mat base
- some form of deployment

Pursuit Immobilization Technique (PIT)

Some law enforcement agencies use the **Pursuit Immobilization Technique (PIT)** to stop a violator's vehicle by using the police vehicle to apply force to either the rear right or left side of the violator's vehicle to end the pursuit. You may use this technique only if you are properly trained and are following your agency policies.

Pursuit Reporting

When you are involved in a pursuit, promptly report the details of the pursuit to the agency. Policies on reporting differ between agencies, but prompt reporting is always required.

SECTION VOCABULARY

pursuit

Pursuit Immobilization Technique (PIT)

roadblock

CHAPTER 2

First Aid for Criminal Justice Officers

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As the first person on the scene of an emergency, you have a special role. You can make a difference in a life-threatening situation. By applying your knowledge, skills, and abilities, you can stabilize patients and keep things from getting worse until EMS arrives. Your ability to help with medical emergencies and your ability to remember legal guidelines are important skills, as are your sound judgment and good common sense.

When called to respond to an emergency, be aware of your attitude, appearance, and behavior at all times. As a criminal justice officer, convey the message that you are competent and trustworthy. A professional and confident manner will reassure and comfort the patient, family, and bystanders in times of panic or chaos.

UNIT 1 | PREPARING TO RESPOND TO EMERGENCIES

LESSON 1 | Introduction to First Aid

OBJECTIVES

FR004.1.A. Identify the roles and responsibilities of the criminal justice first aid provider within the Emergency Medical Services system.

FR004.2. Uphold responsibilities for medical treatment in accordance with Criminal Justice Standards and Training Commission (CJSTC) standards when responding to a medical emergency.

LESSON GOAL: At the end of this lesson, you will be familiar with your roles and responsibilities within the Emergency Medical Services system.

The criminal justice officer ensures the safety of victims and bystanders, gains access to patients, provides basic first aid, and alerts the Emergency Medical Services (EMS) system. The **EMS system** is a network of trained professionals linked to provide advanced, out-of-hospital care for victims of sudden traumatic injury or illness.

The roles and responsibilities of criminal justice officers differ from those of other professional out-of-hospital caregivers. At the scene of a medical emergency, the criminal justice officer can be the first person providing basic

first aid. Advanced, specialized training prepares paramedics, emergency medical technicians (**EMTs**), and other responders to provide more comprehensive care than criminal justice officers can provide. The EMS system has teams of highly skilled people trained to respond to emergencies daily.

Criminal Justice First Aid Provider Levels of Training

Your first aid duties will include:

- airway care
- patient assessment
- cardiopulmonary resuscitation (**CPR**)
- bleeding control
- stabilizing injuries to the spine and extremities or limbs
- care for medical and trauma emergencies
- use of limited amount of equipment
- assist other EMS providers
- no medication administration

Criminal Justice First Aid Provider Responsibilities

When providing first aid, you will meet people of various races, ages, genders, cultures, and socioeconomic backgrounds. You need to interact professionally with every person you encounter on the job. When you are in the role of a first aid provider, your primary concern is the patient. However, you do have other responsibilities to fulfill while maintaining the appropriate standard of care.

- Protecting your safety, the safety of the patient, and the safety of bystanders is your first priority. Wear personal protective equipment (PPE) and stay aware of your surroundings. You cannot help the patient if you are injured. Getting injured forces other rescuers to rescue you. After ensuring safety at the scene, you must make the patient's needs your primary concern.
- Gain access to the patient. In some emergencies, you may need to move one patient to reach a more critically injured patient.
- Determine whether the emergency is life-threatening. As soon as possible, perform an initial assessment to identify and correct Airway, Breathing, and Circulation (**ABCs**) problems.
- Stay calm. Some emergencies are life-threatening or emotionally charged situations. Maintaining your composure enables you to assess the scene and set priorities. Communicate clearly with the patient and responding EMS personnel so that nothing is misunderstood. Try to work efficiently, but avoid working so quickly that you make mistakes or have misunderstandings with others.
- Keep your appearance neat, clean, and professional. If you look professional, you can instill confidence in the patient, and cleanliness reduces the risk of contaminating wounds.
- Maintain a caring attitude. Often when arriving on a scene, you meet emotional patients, family members, and bystanders. Identify yourself, give reassurance, and begin to stabilize the patient. Let everyone know more help is on the way.
- Alert EMS. When a patient needs transport to advanced medical facilities, you must remain with that patient until other EMS personnel relieve you. When they arrive, relay all pertinent information.
- As you await EMS, provide the patient with care based on needs you identified during your assessment.
- When asked, assist EMS personnel by following their instructions.
- Keep your skills current. The medical community and researchers often discover better ways officers can perform their jobs as criminal justice first aid providers. Take continuing education classes to maintain your skills.
- Keep records and collect data, as required by your agency. You may be required to provide documentation if a patient refuses care.
- Work with other public safety personnel, including local, state, and federal law enforcement, fire department personnel, and other EMS providers.

As criminal justice officers providing basic first aid, you play a vital role in delivering emergency care to patients who experience sudden illness or injury. What makes your role so vital is that you are responsible for the patient in the first few minutes after the trauma. The EMS system depends on your actions during those minutes. What you do sets the foundation for the remainder of

SECTION VOCABULARY

ABCs

CPR

EMS system

EMT

the rescue. Correcting a breathing problem or stopping bleeding can save a life. In this role, you also help other patients who are not in critical condition by preventing more injuries, performing proper assessments, gathering medical histories, and preparing for EMS personnel to arrive.

UNIT 1 | PREPARING TO RESPOND TO EMERGENCIES

LESSON 2 | Legal and Ethical Issues

LESSON GOAL: At the end of this lesson, you will be familiar with legal guidelines to assist with emergency medical situations.

Ethical Responsibilities

Legal and ethical issues significantly affect your roles and responsibilities. These issues may be as easy as asking for and receiving a patient’s consent, or as difficult as a patient’s refusal of treatment. The public expects—and the law requires—you to be competent with behavior that is always above reproach. You will meet a variety of people throughout the course of your career. You must protect them, their families, and their confidentiality while providing appropriate care. Placing the public’s well-being first during an emergency reduces your likelihood of acting unethically.

Make the patient’s physical and emotional needs a priority. Respect their needs without regard to nationality, race, gender, or age. Practice your skills, continue your education, and uphold professional standards. Show respect for the competence of others in the medical field. Review your performance; seek ways to improve your actions and communication skills. Maintain patient confidentiality, unless the law requires you to reveal it. Work with other medical professionals to reach a positive outcome to the emergency.

Duty to Act

According to *Black’s Law Dictionary*, **duty to act** is “a duty to take some action to prevent harm to another, and for the failure of which one may be liable, depending on the relationship of the parties and the circumstances.”

Duty to act refers to your contractual or legal obligation to provide care. If you are a correctional officer or correctional probation officer, you have an obligation to provide care to a patient who needs and consents to care only while you are on duty. If you are a law enforcement officer, you have a duty to act 24/7 within your jurisdictional boundaries. Refer to your agency policies and procedures, as jurisdictional boundaries can extend due to a mutual aid agreement. **Breach of duty** occurs when you either fail to act or act inappropriately.

OBJECTIVES

- FR005.1.** Identify legal and ethical issues for a criminal justice first aid provider when responding lawfully to a medical emergency.
- FR005.2.A.** Identify how the duty to act applies to the criminal justice first aid provider.
- FR005.2.B.** Identify how the standard or scope of care applies to the criminal justice first aid provider.
- FR005.2.** Identify how the Good Samaritan Act affects the criminal justice first aid provider.
- FR005.3.** Identify the implications of abandonment, negligence, and battery for the criminal justice first aid provider.
- FR005.4.** Identify the legal and ethical considerations of patient consent for a criminal justice first aid provider.
- FR005.5.** Identify the role of a Do Not Resuscitate (DNR) Order (DNRO) for a criminal justice first aid provider in patient refusal of care.
- FR005.6.** Identify the role of organ donor notification for a criminal justice first aid provider when responding to a medical emergency.
- FR005.7.** Identify the legal and ethical considerations of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) for the criminal justice first aid provider.

FR005.8. Identify actions a criminal justice first aid provider should take to assist in preservation of a crime scene.

Standard or Scope of Care

Black's Law Dictionary defines standard or scope of care as “the degree of care that a reasonable person should exercise.” Under the law of negligence, it is “the conduct demanded of a person in a given situation. Typically, this involves a person’s giving attention both to possible dangers, mistakes, and pitfalls and to ways of minimizing those risks.”

Standard or scope of care is care that you are expected to provide to the same patient under the same conditions as would any criminal justice first aid provider who received the same level of training. For example, providing CPR is within your scope of care as a criminal justice officer but performing open-heart surgery is not.

Good Samaritan Act

The *Good Samaritan Act* protects a first aid provider from liability for medical care performed in good faith or medical care similar to that expected of another first aid provider with equal training. Medical care includes using an automated external defibrillator (*AED*) as provided for in s. 768.1325, F.S. The Good Samaritan Act does not stop someone from filing a lawsuit; however, it does provide a defense if you performed according to the standard of care for a first aid provider. Always render care to the best of your ability. Do not go beyond the scope and level of your training. Maintain the patient’s best interests.

While duty to act requires law enforcement officers to provide care 24/7 within their jurisdictional boundaries, the Good Samaritan Act protects law enforcement officers when they are acting outside their jurisdictions. Correctional officers and correctional probation officers have a duty to act while on the job. The Good Samaritan Act protects them when providing care during off-duty hours.

Abandonment

Abandonment is giving up a right or interest with the intention of never again claiming it.

You abandon the patient when you stop providing care without ensuring that the patient continues or begins to receive the same or better care. You must continue providing emergency first aid until another medical professional with the same or higher-level training replaces you, or you are unable to continue.

Negligence

Negligence is defined in *Black's Law Dictionary* as “the failure to exercise the standard of care that a reasonably prudent person would have exercised in a similar situation; any conduct that falls below the legal standard established to protect others against unreasonable risk of harm, except for conduct that is intentionally, wantonly, or willfully disregarding of other’s rights.”

Negligence occurs if all these conditions are present:

- duty to act—You had a legal duty to the patient (you were supposed to administer care to the patient)
- breach of standard of care—You had a legal duty to act or you failed to act in a certain way (you acted or failed to act in a manner that a reasonably prudent person would act)

- causation—Your action or inaction actually caused the patient’s injury (makes the distinction that a person’s negligent behavior actually *caused* the injury)
- damages—The patient was harmed as a result of your actions, and the court is able to compensate the patient (usually monetarily) for their injuries

If patient care deviates from accepted standards and causes further injury, negligence can become a legal liability. Your best defense against negligence is to be professional, provide care within the scope of your training, and document the care you provide.

Battery

Battery is unlawful physical contact. *Black’s Law Dictionary* describes battery as “any unlawful beating, or other wrongful physical violence or constraint, inflicted on a human being without his consent.”

When you provide emergency care without the patient’s consent, you can face a battery charge if you touch a patient’s body or clothes.

Consent

Gain the patient’s consent, or permission, before providing emergency first aid. For consent to be valid, the patient must be competent and the consent informed. As a criminal justice first aid provider, you must fully explain the care you plan to render and its possible related risks.

To refuse medical care, a patient must be competent. A competent adult is one who can make an informed decision about medical care. The patient must understand your question and the implications of decisions made about medical care. Consider an adult incompetent if they are under the influence of alcohol or drugs and meet the criteria for the Marchman Act. (See Chapters 3 and 6 in the Law Enforcement Academy basic recruit textbook, or Chapter 7 in the Correctional Probation Officer Academy textbook for further information on the Marchman Act.) An incompetent adult can be in an altered mental state and meet the criteria of the Baker Act. (See Chapters 3 and 6 in the Law Enforcement Academy basic recruit textbook, Chapter 7 in the Corrections basic recruit textbook, or Chapter 3 in the Correctional Probation Officer Academy textbook for further information on the Baker Act.) Consider an adult incompetent if they are seriously ill, have an injury that affects judgment, or are mentally ill or mentally challenged.

You must have a responsive, competent adult’s consent before rendering first aid. To obtain consent from an adult, begin by identifying yourself. State your level of training. Carefully explain to the patient what first aid you need to render. Explain your plan for rendering aid in terms the patient understands. Be sure to state possible risks involved. The patient needs a clear idea of all factors that may affect a reasonable person’s decision to either accept or refuse.

There are three types of consent:

- ***implied consent***—The assumption that a person has given permission for an action because of their actions, rather than explicitly expressed. For example, when a patient rolls up their sleeve for a blood sample or extends their arm for a blood pressure reading.

You make assumptions of implied consent. You may assume that the unresponsive patient is at risk of death, disability, or deterioration of condition and would agree to care if able to consent. Implied consent may also apply to conscious patients who do not stop you from providing treatment, refuse care, and then become unresponsive and are not competent to refuse care.

- **expressed consent**—Consent that is clearly and unmistakably stated or written by the patient or legal guardian.

Expressed consent is affirmative consent, such as verbal or physical assertion of agreeing to medical care.

- **informed consent**—A person's agreement to allow something to happen, made with full knowledge of the facts, benefits, risks, and alternatives. The information given to the patient must be fully understood by the patient or their legal guardian.

When a patient chooses a treatment or a procedure, they make this choice after a physician or other health-care provider discloses whatever information a reasonably prudent provider in the medical community would give to a patient about the risks involved in the proposed treatment. Informed consent involves the exchange of more information between the medical provider and the patient than expressed consent does.

In Florida, children younger than 18 are minors. You must have a parent's or legal guardian's permission before providing care. However, if the parent or legal guardian is not available in life-threatening or disabling emergencies, provide emergency care based on the principle of implied consent. An emancipated minor is one who is married, an active member of the military, or one who is financially independent or lives away from home with court permission. You do not need a parent's or legal guardian's permission to treat an emancipated minor. The minor's consent is sufficient.

A mentally ill person who has been found to need care under the Baker Act is not considered competent to give expressed consent. Therefore, you must have a legal guardian's permission to treat a mentally ill person. If the legal guardian is not available and the emergency is life-threatening, act on the principle of implied consent, and provide care.

Competent adults have the right to refuse treatment for themselves and their children. Follow the law. Inform them of the treatment and the possible risks involved in refusing it. A competent adult may refuse verbally or physically by pulling away, pushing you away, or shaking their head in a negative manner. Competent adults also have the right to withdraw from treatment after it begins. This is true for patients who consent and then change their minds. It also applies to a patient who is unconscious when treatment begins, regains consciousness and mental competence, and asks you to stop. Refusal of first aid must follow the rules of expressed consent. Make every effort to persuade the patient to consent to treatment. Be sure the patient is able to make a competent, rational decision.

A person involved in a traumatic incident, such as an auto accident, may be emotionally, intellectually, or physically impaired. If the person continues to refuse treatment, keep them under observation. If the patient loses consciousness and you believe a life-threatening situation exists, immediately begin first aid.

For situations involving minors in life-threatening emergencies needing medical care against parental consent, refer to your agency policies and procedures, and s. 39.401, F.S., for guidance. Notify the Department of Children and Families by calling 1-800-96-ABUSE.

Do Not Resuscitate/Advance Directive

A terminally ill patient may have a directive in place, written in advance, and signed by both the patient and a physician. Commonly known as a Do Not Resuscitate Order (*DNR*)/(*DNRO*) or an advance directive, it is legally binding in Florida, according to s. 401.45, F.S. See Figure 2-1 for an example.

The DNR documents the terminally or chronically ill patient’s wish to refuse resuscitation. An *advance directive* documents the patient’s request to withhold specific medical care.

Criminal justice first aid providers do not have authorization to honor a DNR or an advance directive. You cannot withhold resuscitation or first aid. You must immediately begin first aid. Licensed medical professionals, EMTs, or paramedics, however, can honor a DNR or advance directive.

Medical Alert

You may have a patient who wears an identification bracelet or necklace or carries a card in their wallet that alerts you to a specific medical condition, such as an allergy, epilepsy, or diabetes. On the jewelry or card, you may find a telephone number to call for detailed information about the patient. This bracelet, necklace, or card is known as a *medical alert*.

Organ Donor

You may also have a patient who, according to s. 765.521, F.S., has written legal documentation, a signed donor card, or an organ donor designation on their driver’s license that indicates the patient is an organ donor. Treat potential organ donors as you would treat any other patient. Remember, they are patients first and organ donors last.

State of Florida
DO NOT RESUSCITATE ORDER
(please use ink)

Patient's Full Legal Name: _____ Date: _____
(Print or Type Name)

PATIENT'S STATEMENT
Based upon informed consent, I, the undersigned, hereby direct that CPR be withheld or withdrawn.
(If not signed by patient, check applicable box):

Surrogate Proxy (both as defined in Chapter 765, F.S.)
 Court appointed guardian Durable power of attorney (pursuant to Chapter 709, F.S.)

(Applicable Signature) (Print or Type Name)

PHYSICIAN'S STATEMENT
I, the undersigned, a physician licensed pursuant to Chapter 458 or 459, F.S., am the physician of the patient named above. I hereby direct the withholding or withdrawing of cardiopulmonary resuscitation (artificial ventilation, cardiac compression, endotracheal intubation and defibrillation) from the patient in the event of the patient's cardiac or respiratory arrest.

(Signature of Physician) (Date) Telephone Number (Emergency)

(Print or Type Name) (Physician's Medical License Number)

DH Form 1896, Revised December 2004

PHYSICIAN'S STATEMENT
I, the undersigned, a physician licensed pursuant to Chapter 458 or 459, F.S., am the physician of the patient named above. I hereby direct the withholding or withdrawing of cardiopulmonary resuscitation (artificial ventilation, cardiac compression, endotracheal intubation and defibrillation) from the patient in the event of the patient's cardiac or respiratory arrest.

(Signature of Physician) (Date) Telephone Number (Emergency)

(Print or Type Name) (Physician's Medical License Number)

DH Form 1896, Revised December 2004

State of Florida
DO NOT RESUSCITATE ORDER

Patient's Full Legal Name (Print or Type) _____ (Date) _____

PATIENT'S STATEMENT
Based upon informed consent, I, the undersigned, hereby direct that CPR be withheld or withdrawn.
(If not signed by patient, check applicable box):

Surrogate
 Proxy (both as defined in Chapter 765, F.S.)
 Court appointed guardian
 Durable power of attorney (pursuant to Chapter 709, F.S.)

(Applicable Signature) (Print or Type Name)

FLORIDA DO NOT RESUSCITATE ORDER
This form is printed in yellow

Figure 2-1

HIPAA

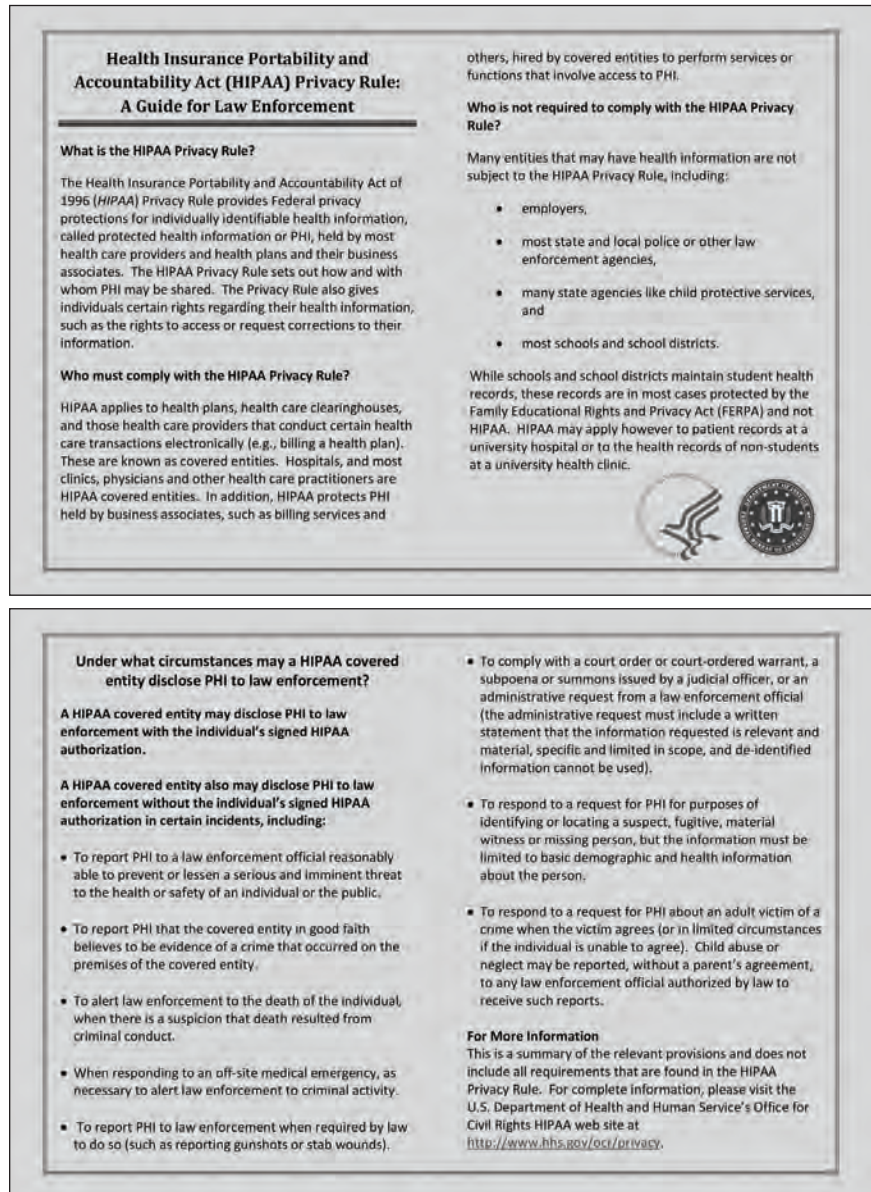
A patient’s privacy, medical history, condition, and emergency care are, by law, confidential information. The patient or a legal guardian must sign a written release before the release of any medical information, except when relaying information to EMS.

The Health Insurance Portability and Accountability Act of 1996 (*HIPAA*) protects the rights of patients and the release of patient information. Do not release patient health information without a signature unless another health-care provider needs patient information to continue medical care or you receive a request to provide patient information as part of a criminal investigation. The law requires you to report special situations, such as child abuse, elder abuse, and spouse abuse. As long as you make the report in good faith, related laws often grant immunity from liability for libel, slander, or defamation of character. A legal subpoena may require you to provide patient information in court.

Every Scene Is a Potential Crime Scene

You may respond to a call that could be both a crime scene and a medical emergency. Examples may include any scene involving suicide, homicide, drug overdose, domestic dispute, abuse, hit-and-run, or robbery, or any scene involving battery, gunfire, or a weapon. As always, your first concern is your personal safety. If you believe the perpetrator remains in the area, ensure scene safety before caring for the patient. When the scene is safe, the patient becomes your priority.

Remember that any item on the scene may be evidence. Observe and document anything unusual at the scene. Touch only what you need to touch. Move only items you need to move to render emergency care. To avoid contaminating evidence, do not use



HIPAA information card for law enforcement

Figure 2-2

a telephone found on the scene unless doing so is necessary. Move the patient only if they are in immediate danger and advanced emergency care is not nearby. Try to preserve the patient's clothing; it may be evidence. If you suspect rape, do not allow the person to bathe or wash. Explain the need to collect evidence.

You need to understand the legal and ethical issues related to your responsibility as a criminal justice first aid provider. Remember to provide care to the best of your ability and within the scope of your training.

SECTION VOCABULARY

abandonment

advance directive

AED

breach of duty

DNR/DNRO

duty to act

expressed consent

Good Samaritan Act

HIPAA

implied consent

informed consent

medical alert

negligence

UNIT 1 | PREPARING TO RESPOND TO EMERGENCIES

LESSON 3 | Professionalism and Communication

OBJECTIVES

FR006.3. Reassure patients, family members, and bystanders while working in a confident and efficient manner.

FR006.4. Communicate professionally with patients who have special considerations when responding to a medical emergency.

LESSON GOAL: At the end of this lesson, you will know how to maintain a professional demeanor and communicate effectively as you provide first aid during a medical emergency.

Communication

When responding to a crisis or medical emergency, effective communication helps you get needed information and give reassurance to patients, their families, and bystanders. By responding in a calm, caring, and polite way, you can convey a sense of confidence and assurance in a frightening situation.

Identify yourself and tell the patient you are there to help. Position yourself in a nonthreatening way. Make eye contact. Ask questions in a calm, steady voice. Tell the patient what you will do before you do it. Do not make false statements or give false assurances. Address patients by their surnames, if possible.

Treat all patients as individuals, and do not base the standard of care you provide on a patient's culture, gender, age, or socioeconomic status. Do not let any preconceived ideas about a person alter the standard of care you provide. Remember, all patients deserve equal care.

Nonverbal communication, such as offering a tissue or a warm blanket or placing your hand on the patient's shoulder, can comfort patients and families. Simple acts of kindness can help ease fear and reassure them that someone cares. Communication involves not only talking but also listening. Good listening skills display a caring attitude and are part of good communication. Let the patient explain what happened. Listen carefully to what they say. To show a patient that you are listening, rephrase or restate their words and repeat them back to the patient. Avoid saying things like, "I know what you mean."

When dealing with a hysterical patient, family member, or bystander, redirect the conversation to divert their attention. Recognize the person's concerns or focus their attention on the immediate situation or a meaningful task. Remember, your main goal is to treat the medical emergency the patient experiences; family members and bystanders are secondary concerns.

Being able to see yourself in another person's situation and share their feelings or concerns helps you understand what the patient experiences. Empathy is one of the most helpful tools you can use to deal with a crisis.

Effective communication includes not only how you talk and act but also how you present yourself. You should look professional at all times. Be well groomed, clean, and neat. Your professional attitude, conduct, and neat appearance convey much-needed reassurance to the patient, family, and bystanders.

Patients With Special Considerations

You may need to help or render first aid care to patients who have special needs or require special considerations. To provide effective emergency first aid to these patients, be aware of their particular disabilities and special needs.

Visual Impairments and Blindness—When initially surveying the scene, be alert to signs indicating that the patient is visually impaired. Clues include eyeglasses, a collapsible, white cane with a red tip, or a guide dog. If you are unsure, ask the patient if they are visually impaired. Although people learn to compensate for visual impairment by using other senses, an accident or emergency can cause disorientation. Keep speaking to the patient, providing information about the surroundings. Clearly describe what you will do before you render care, because they may not be able to see you or any equipment you use. Think about how frightened you might be if someone was performing a medical procedure on you while you could not see what was going on.

A patient with a guide dog may be more concerned about the dog than their own situation. If possible, keep the patient and the dog together. Let the patient direct the dog or tell you how to handle the dog. Remember that most guide dogs are protective. Taking charge of or handling the guide dog without the patient's direction can confuse the dog.

Hearing Impairments and Deafness—Communicating with a person who has a hearing impairment can be a challenge. A person who has been deaf for some time will probably indicate the condition to you by pointing to an ear and shaking their head. If you do not know sign language, communicate in writing or with gestures.

One technique is to look directly at the patient, touch a place on your body, and make a face that indicates pain. Continue looking directly at the patient, and repeat the procedure on the rest of your body. Most hearing-impaired patients will understand what you are doing. (However, do not touch a conscious patient who is hearing-impaired unless that patient acknowledges your intent.) You can perform a complete patient assessment in this manner. Continue to use gestures to inform the patient. Physical touching, such as a comforting hand on the patient's shoulder, may give support and reassurance.

If a patient uses sign language and has a hearing family member who signs, consider asking that person to interpret. You probably don't want to ask a child to interpret, though, because of the situation—especially if the patient is their parent.

When you render care to a patient who is hearing-impaired, identify yourself. Show your identification. Use touch to communicate. Face the patient when you speak so they see your lips and expressions. Speak slowly and distinctly. Do not shout. Use simple, clear language. Watch the patient's face for indications of understanding. Use paper and pencil to communicate, if necessary. When interviewing a hearing-impaired patient, an interpreter may be required.

If an accident or illness causes a patient to have temporary deafness, deal with the patient's panic or anxiety. Point at your ear and shake your head to indicate deafness, or write the question, "Can you hear?" on paper. This can reassure the patient that you recognize and understand the problem. Continue to write to keep the patient informed. Let the patient know that help is on the way.

Elderly Patients—Many senior citizens do not fit the traditional image of the elderly person. However, many older patients do have specific age-related needs. If you are sensitive to any conditions, you can relieve fears and get their cooperation for treatment. Be alert to the patient's ability to hear, see, and understand their medical condition. In your initial assessment, look for such items as hearing aids, glasses, walkers, and wheelchairs.

Aging sometimes brings confusion, loss of short- or long-term memory, inability to follow directions, or hostile behavior. A gentle voice and calm attitude can be effective communication tools, even if the patient does not understand your words. Address older patients by their title and last name unless they invite you to use their first names. Elderly patients may fear change or loss of independence, resist transport to a medical facility, or feel embarrassed by their physical appearance or condition. Elderly patients may experience loss of bowel or bladder control, be unable to accurately hear or answer questions about their health histories, and be more seriously ill or injured than they appear. They may react more sensitively to hot and cold temperatures, sustain fractures because their bones are brittle, suffer from multiple medical conditions, or take multiple medications.

Chronically Ill Patients—Medical advances in treating patients with serious, chronic conditions make it possible for people to live in the community rather than in a hospital or long-term care facility. Because of this, you may encounter a vast number of complex medical devices: pacemakers, surgically inserted breathing tubes, ventilators, catheters, and so on. Do not be overwhelmed or distracted by the complex equipment. Patients do not expect you to understand how their machines work, so ask the patient or caregiver how special equipment works as you provide first aid.

Patients Who Speak Another Language—In rendering first aid, you may encounter a patient with whom you cannot communicate because of language differences. Contact your public safety telecommunicator regarding access to an interpreter. If no interpreter is available, you can apply some techniques used to communicate with hearing-impaired patients—again, keep in mind that a child might be too upset at seeing a loved one in distress to be a reliable interpreter. Shouting at patients in your language does not increase their ability to understand you. Hand gestures can be the best way to communicate with the patient if no interpreter is available.

Developmentally Disabled—Communicating with developmentally disabled patients can be a challenge. Try to designate a single person to communicate with the patient. Speak in short sentences and use simple words. Repeat or rephrase your statements until the patient understands. Remember that you can easily confuse or inspire fear in the patient. You may need extra time to reassure a developmentally disabled patient.

Infants and Children—When communicating with a younger patient, staying calm is important. Children are sensitive and can respond negatively to what they observe and feel. Often, their maturity regresses during a crisis. Because you are an unfamiliar person, it may increase their anxiety and fear in an already frightening situation. Avoid removing a child from parents; separation anxiety can become a major concern. Involve parents or caregivers in the exam and treatment of their child.

While communicating with younger children, get down to their eye level. Move slowly. Include the children in your conversation, keeping them informed about what you are doing. This can help ease their fears. Adolescents and older children are sensitive to peer pressure and public embarrassment. Be aware of their modesty.

Along with proper communication with younger children, you should also be aware of asking medical or legal questions and jurisdictional limitations regarding questioning children who are victims of crime. Section 914.16, F.S., requires each judicial circuit to set limits on the number of times law enforcement officers may question juveniles. Make sure you are familiar with your circuit's limits.

UNIT 1 | PREPARING TO RESPOND TO EMERGENCIES

LESSON 4 | Health Issues

LESSON GOAL: At the end of this lesson, you will know the health issues that criminal justice officers encounter and guidelines for reducing the risk of acquiring communicable diseases.

Stress

Stress is an inevitable, unavoidable part of life. Providing emergency medical care can add to your stress. Recognizing stress is important. So is taking steps to reduce or prevent it. Learn to identify the warning signs of stress:

- inability to concentrate
- difficulty sleeping, nightmares
- anxiety
- inability to make decisions
- guilt
- changes in appetite
- changes in personal relationships
- isolation
- changes in work or recreation habits

While high stress levels may require medical intervention, you can make personal lifestyle choices that help you cope with, reduce, or alleviate stress.

Lifestyle Choices

- **nutrition**—A healthy, well-balanced diet and regular meals can help prevent and reduce stress. Certain foods, such as sugar, caffeine, and alcohol, can elevate the body’s response to stress. While some people may think smoking or having a drink will help them relax, in reality, alcohol, tobacco products, and other kinds of self-medication actually increase stress levels.

OBJECTIVES

FR007.1.A. Identify signs and symptoms of stress a criminal justice officer may display.

FR007.1. Identify possible steps the criminal justice officer may take to help reduce stress.

FR007.1.B. Identify possible long-term emotional reactions that a criminal justice officer may experience when facing death and dying.

FR007.1.C. Approach and communicate appropriately with a family confronted with death and dying when responding to a medical emergency.

FR007.3. Identify ways a criminal justice officer is exposed to bloodborne pathogens and infectious diseases.

FR007.2. Identify the importance of body substance isolation (BSI) when applying first aid.

FR007.4. Identify the importance of using personal protective equipment (PPE) when applying first aid.

FR007.5. Demonstrate how to put on, properly remove, and discard disposable gloves.

FR007.6. Identify personal behaviors that may help reduce the risk of contracting a bloodborne disease when applying first aid.

FR011.2. Identify how to maintain equipment and supplies for the next emergency medical response.

FR007.7. Identify how to prevent contracting hepatitis A.

FR007.8. Identify how to prevent contracting hepatitis B.

FR007.9. Identify how to prevent contracting hepatitis C.

FR007.10. Identify how to prevent contracting Human Immunodeficiency Virus (HIV).

FR007.14. Identify ways a criminal justice officer is exposed to airborne pathogens and communicable diseases.

FR007.11. Identify personal behaviors that may help reduce the risk of contracting tuberculosis when applying first aid.

FR007.12. Identify general symptoms of most food-related illnesses.

FR007.13. Identify the most common sexually transmitted diseases (STDs).

- **exercise**—Exercise is a great stress reliever. Its many benefits include a release for pent-up emotions. Criminal justice officers should incorporate regular exercise programs in their daily schedules.
- **relaxation**—Relaxation takes many forms: meditation, religion, sports, hobbies, or other activities. Make sure your schedule also includes adequate time for sleep and rest.

On-Scene Stress Relief

If, during an emergency, you experience irritability, inability to concentrate, or indecisiveness, stress may be the cause. These techniques may help when you know you are too stressed:

- **breathing**—Take several long, deep breaths; focus on counting each breath.
- **thought patterns**—Consciously change your thought patterns. Remind yourself that you are essential; you are in control. It may help to remind yourself that a stressful situation is temporary. Think, “This too shall pass.”

Death and Dying Situations

Dealing with death and dying is part of emergency medical care. When you or the patient realizes that death is imminent, consider the patient’s emotional needs as well as injury or illness. Show the patient the greatest possible care. Respect the patient’s dignity by talking to the patient as if they were fully alert. Assure them you are doing everything possible.

Communicate with the family. Answer their questions and explain what is happening. If possible, let the family speak to the dying patient. That may positively affect all involved and allow closure. Avoid making negative statements about the patient’s condition. If the patient asks if they are dying, do not confirm it. Instead, say, “We are doing everything we can.”

Patients who insist that death is imminent may want messages delivered to survivors or to make a dying declaration if they have been a victim of a crime. If necessary, take notes, as this information can be useful in court. Assure these patients that you will do what you can to honor the requests.

Accept all emotions as real and necessary. Allow family members to grieve as you maintain control of the situation. Culture influences the display of emotion, which can range from hysteria to a total lack of emotion. Hysteria, lack of emotion, or other symptoms of grief may require additional medical attention. Do what you can to comfort the family without interrupting your emergency care of the patient.

The dying or death of a patient can affect everyone involved in the situation. One well-recognized model describes people’s reactions to death and dying as a five-stage process: denial, anger, bargaining, depression, and acceptance. While not everyone moves through all these grief stages at the same rate or in the same way, recognizing the reality and necessity of these emotions is important.

- denial—feeling that the death is not happening or did not happen; refusing to accept reality
- anger—acting out, perhaps in ways that endanger others
- bargaining—trying to make a deal to postpone the inevitable
- depression—feeling and acting unusually silent, distant, and withdrawn
- acceptance—unhappy, but resigned to reality

These stages are often also present in a serious trauma or crisis. Your responsibility as an officer is to recognize these emotional reactions and to give initial comfort and care to those involved.

You need to monitor yourself for signs of stress and grief following any traumatic event. Recognize that you may experience these stages and that you should not minimize or deny your emotional reaction. A debriefing session usually takes place soon after a critical incident in which serious injury or death occurred. The session gives you a chance to vent feelings. Many agencies formally debrief individuals involved in crises or emergencies. Public agencies also provide access to mental health professionals for those affected by trauma. You are encouraged to use these services.

Officer Safety

Criminal justice officers encounter injured people who can also be sick or carriers of disease. Knowing how diseases are transmitted and how you can protect yourself from unnecessary exposure may ease your fears so you can do your job with confidence. Certain job-related tasks that involve physical contact, such as CPR, first aid care, property searches and confiscation, frisks and custodial searches, any response to resistance, crime scene investigation, or prisoner transport, may expose you to body substances that contain bloodborne pathogens. Regard body fluids that you encounter while you perform your duties as contaminated with bloodborne pathogens that can infect you. **Bloodborne pathogens** are disease-producing microorganisms in human body fluids. They can infect and cause disease in people who are exposed to blood or body fluids containing the pathogens.

Body Substance Isolation (BSI)

The Centers for Disease Control & Prevention (**CDC**) defines **universal precautions** as a set of procedures designed to prevent transmission of human immunodeficiency virus (HIV), hepatitis B virus, and other bloodborne pathogens to first-aid or health-care providers. The CDC standard instructs providers to assume that all blood and body fluids are infectious.

When in doubt, treat any body fluid as if it is contaminated. Adhere to the saying: “If it is wet, sticky, and not yours, do not touch it.”

Called Body Substance Isolation (**BSI**), the standard requires using a form of infection control with all patients. Isolating body substances from yourself and other patients is critical in preventing disease and infection transmission. BSI includes two basic behaviors: use of medical personal protective equipment and practice of personal behaviors that reduce risk.

Personal Protective Equipment

Always use appropriate personal protective equipment (PPE) in any emergency. **PPE** serves as a barrier against infection. Medical PPE includes eye protection, gloves, protective clothing (gown or coveralls, sleeves, shoe covers), masks or shields, and biohazard bags. The following sections cover guidelines for properly using PPE.

Gloves

Gloves minimize skin contact with blood or other body fluids. Always use gloves if you expect to have physical contact with a patient or prisoner; if you have skin contact with people who are bleeding or have open sores, rashes, blisters, burns, or other broken skin conditions; and if you have open cuts, sores, burns, rashes, or other broken skin conditions on your hands. Universal precautions apply in any situation where you can clean and decontaminate spilled blood or other body fluids, handle body fluids or blood-contaminated equipment (such as handcuffs), or handle containers (such as red or yellow bags) labeled biohazardous or biomedical waste. See Figure 2-3 for instructions on using and removing disposable gloves.

Hand Washing

If your hands are visibly dirty or soiled with blood or other body fluids, wash them with plain or antimicrobial soap and water. If your hands are not visibly soiled, use an alcohol-based hand rub to decontaminate them. If you have had no contact with blood or other body fluids, consider using sanitizing hand wipes as alternatives to washing with plain soap and water. When washing your hands with soap and water, first wet them with water. Then apply soap and rub your hands together vigorously for at least 15 seconds. Lather all hand surfaces. Rinse your hands with water, and thoroughly dry them with a disposable towel. Use the towel to turn off the faucet. When using an alcohol-based hand rub, apply it to one palm and rub your hands together. Rub all hand surfaces until they dry.

Protective Eyewear

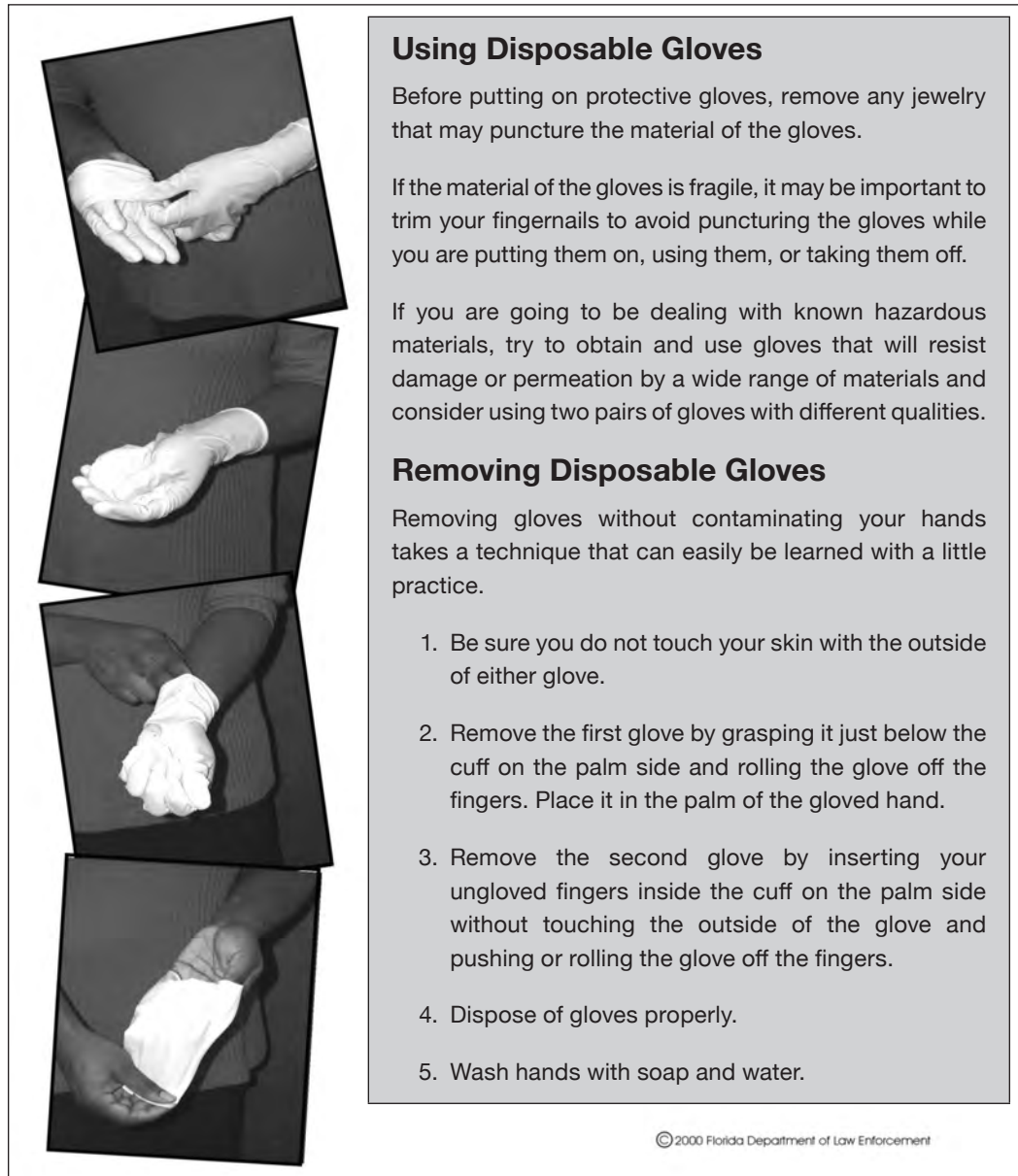
Use protective eyewear, facemask, or face shield if you are in a situation where blood or body fluid might splash, spray, fly, or splatter into your eyes and face.

Protective Clothing

Protective clothing serves as a barrier to prevent clothing and skin contact with blood and body fluids. It is usually single-use and disposable. Use it when you anticipate significant blood or body fluid contamination of clothing. Your uniform, leather or cloth gloves, and everyday footwear are not PPE.

Masks

You may use two types of masks: filter masks and CPR masks. A filter mask can provide protection against airborne diseases. CPR masks are barrier devices with one-way valves used when performing CPR ventilations. They may be disposable or multi-use. Resuscitation devices with one-way valves, designed to prevent the patient's saliva or vomit from entering the caregiver's mouth, are available from your agency. Although no cases of HIV transmission through saliva have been documented, transmission of other infectious diseases can occur when performing CPR. The presence of blood or open sores in the rescuer's or victim's mouth increases the transmission risk. The CPR course trains you to use CPR masks.



Using and removing disposable gloves

Figure 2-3

Discard disposable resuscitation devices after use. Clean and properly disinfect multi-use devices before returning them to their storage containers. Remember to wear gloves when handling resuscitation devices contaminated with blood or body fluids. Carefully place a contaminated disposable resuscitation device in a plastic bag, and discard it according to agency policies. Avoid contaminating the outside of the bag. Place a biohazard sticker on the bag unless you use a red biohazard bag. Follow agency policies for decontamination and replacement procedures.

Handling Biohazardous Wastes

You have learned that you could contract a bloodborne infection from contact with blood or body fluids on equipment and surfaces. To minimize this danger you must properly handle and discard materials contaminated with blood or body fluids. The procedures you use to handle biomedical or biohazardous wastes must comply with federal Occupational Safety and Health Administration (OSHA) requirements for identifying and segregating blood or waste material saturated with body fluids. OSHA requires color-coded bags or containers for storing biomedical waste, such as red or yellow bags or containers with the international biohazard symbol. Rigid plastic sharps containers secure used syringes and needles to prevent injuries. Follow local protocol or department policies for disposal of wastes classified as biomedical or biohazard.

Personal Behaviors to Help Reduce Risk

Personal behaviors can reduce your risk of occupational exposure to bloodborne pathogens. Cover cuts, scrapes, burns, sores, or broken skin on exposed portions of your face, neck, arms, and hands with suitable dressing and bandages. This helps protect these injured areas from blood or body fluid splashes. Routinely wash your hands during your work shift. Always wash your hands after removing gloves or other PPE, before eating, drinking, smoking, or applying cosmetics, after using the restroom, after contact with blood or body fluids, and at the end of your shift.

Properly remove clothing contaminated with blood or body fluids as soon as possible. Thoroughly wash contaminated skin with soap and water. When clothing and skin contamination occurs, shower with soap and warm water. Contact your personal physician for more ways to protect your health if you are HIV positive or receiving medical treatment that may affect your immune system. Avoid risky behaviors in your personal life that might expose you to bloodborne pathogens.

If exposure occurs, pay attention to obvious personal hygiene, such as thoroughly washing affected areas with soap and water. Change your clothing as soon as possible. Report your exposure according to local protocol and department policy.

Prevent MRSA

Methicillin-resistant *Staphylococcus aureus* (**MRSA**) is a type of bacteria that is highly contagious and resistant to certain antibiotics. Staph infections, including MRSA, occur most frequently among people in hospitals, health-care facilities, and detention facilities. People are more likely to get an infection if they have skin-to-skin contact with the hands, wound drainage, or nasal secretions of a person who is infected with MRSA. People who participate in contact sports, have openings in their skin, such as cuts or abrasions, or have poor hygiene are more likely to get an infection.

Signs and symptoms of a skin infection can be a wound site that is red, swollen, or painful, or an area that is warm to the touch or is draining pus. The site may look like a spider bite, pimple, or boil, and the person may have a fever.

Follow these precautions to avoid contracting MRSA:

- Shower with soap and water as soon as possible after direct contact with an open sore and use a clean, dry towel.
- Do not share equipment, towels, soap, or any personal care items.
- Do not share drinking containers.

- Do not share ointments, creams, or antibiotics.
- Keep your hands away from your nose, mouth, and eyes.
- Keep all skin wounds completely covered with a bandage.
- Wash towels, equipment, uniforms, and any other laundry in hot water and detergent daily.

Maintain Equipment and Supplies

Examine the condition of supplies and equipment you used during your response. Sometimes, this means only replacing gloves or replenishing first-aid supplies. Use disposable items whenever possible. If you work with reusable items, clean, disinfect, or sterilize them before the next use. During this process, be sure to wear protective gloves and eyewear, if appropriate.

The cleaning process involves thoroughly washing away blood, fluids, and other contaminants. Follow these general rules:

- Disinfect items exposed to the patient's intact skin.
- Sanitize items exposed to body fluids or mucous membranes.
- Follow the manufacturer's recommendations and local protocol to clean, disinfect, and sanitize.
- Follow local protocol for contaminated equipment and uniforms.
- Clean other equipment, such as restraints, with soap and water.
- After cleaning, disinfect using a hospital-grade disinfectant or chlorine bleach and water. The acceptable standard for dilution is one part chlorine bleach to 10 parts water. Mix them just before use.

Take proper care of your equipment. As with any other tool you use on the job, be familiar with using and maintaining your medical and safety equipment.

Infectious Diseases and Illnesses

Bloodborne Diseases

Hepatitis has many strains; the most common ones are hepatitis A, B, and C. All can cause liver disease. HIV is a virus that attacks the immune system. All these diseases are life altering.

Hepatitis A—The *hepatitis A virus* causes hepatitis A, which is technically not a bloodborne disease. It is highly infectious, but is preventable with BSI and appropriate PPE. Its incubation period ranges from two weeks to two months. Person-to-person contact primarily transmits hepatitis A, generally through fecal contamination and oral ingestion. Poor personal hygiene, poor sanitation, and intimate contact facilitate transmission. Common-source epidemics from contaminated food and water also occur. Hepatitis E is a variant of hepatitis A and is transmitted in the same fashion.

Hepatitis B—Outside of occupational settings, sexual contact or sharing contaminated needles (through intravenous drug abuse) primarily transmits the *hepatitis B virus*. It can remain infectious in dried body fluids for an undetermined time.

The CDC estimates that each year in the United States more than 200,000 people of all ages contract hepatitis B. Close to 5,000 die of the illnesses it causes. A person can transmit the disease while not experiencing obvious symptoms. At the time of initial assignment, officers should receive information about the vaccine and the opportunity to receive the three separate doses. Over 90% effective against hepatitis B for seven or more years after vaccination, the vaccines stimulate active immunity. They are also 70% to 88% effective when given within one week after hepatitis B virus exposure. Hepatitis D is a variant of hepatitis and is only present in patients infected with hepatitis B.

Hepatitis C—According to CDC reports, hepatitis C is the most common chronic bloodborne infection in the United States and is caused by the *hepatitis C virus*. The incubation period varies from person to person. Direct contact with human blood primarily transmits hepatitis C. This occurs from sharing needles or drug paraphernalia, needle sticks, contaminated sharps, or an infected mother delivering her baby. Sexual contact with an infected person can also (rarely) spread the virus. Of all people infected with the hepatitis C virus in the United States, about one-third pass through jails and prisons each year. No vaccine for hepatitis C exists.

Signs and Symptoms of Hepatitis—Signs and symptoms of hepatitis may include flu-like symptoms, fever, body aches, fatigue, loss of appetite, and weakness. Later stages of hepatitis include symptoms such as jaundice (yellowing of the skin or eyes), dark urine, light colored stool, diarrhea, itchy skin, weight loss (anorexia), severe liver damage, enlarged and tender abdomen, and even death. Not everyone infected necessarily experiences all these symptoms.

Human Immunodeficiency Virus (HIV)—Another bloodborne virus that attacks the immune system is HIV, which causes Acquired Immune Deficiency Syndrome (*AIDS*). Transmission occurs primarily during sexual contact with an infected person, when intravenous drug abusers share contaminated needles, from an infected mother to her unborn child, and from contact with blood, certain body fluids, and tissue from an infected person. HIV has three infection stages: asymptomatic, symptomatic, and AIDS.

A person infected with HIV may show no symptoms initially or have mild flu-like symptoms. Infected individuals may live many years without obvious symptoms of infection. A person infected with HIV becomes a lifelong carrier who can transmit the infection to others. A chronic condition, HIV attacks the immune system and the body's natural defense mechanisms against disease. No vaccine prevents HIV. However, using BSI and appropriate PPE can prevent this highly infectious disease from spreading. Take all reasonable precautions to avoid exposure to HIV and all communicable diseases.

HIV and TB Infections—A growing concern is the increase in the number of people with HIV who develop tuberculosis (*TB*). A person with both HIV and TB infections is far more likely to develop TB disease. HIV weakens the body's immune system, allowing TB bacilli to multiply rapidly and spread.

Airborne Diseases

Any infection spread from person to person through the air is an *airborne infection*. Breathing in microscopic pathogenic organisms causes airborne infections. An infected person who coughs or sneezes into the air, particularly in a relatively confined space, transmits airborne diseases. The lungs provide accumulation sites for airborne infectious microorganisms (bacteria and viruses) that cause communicable diseases, such as the common cold, chicken pox, both forms of measles, mumps, meningitis, influenza, and TB. Many airborne pathogen diseases require prolonged exposure for an infection to occur. For those working in an enclosed correctional environment, a greater opportunity exists for exposure than for other criminal justice personnel.

Tuberculosis

TB is a concern for officers. Nearly one-third of the world's population has TB, and it kills more than 3 million people every year. The 1980s saw a resurgence of TB outbreaks in the United States and the birth of a new drug-resistant, more deadly strain. If a TB patient does not respond to or comply with treatment, they can be civilly detained. If transporting a person with active TB, ensure adequate ventilation to the unit or vehicle providing transportation.

Tuberculosis Infection versus Tuberculosis Disease—TB organism infection differs from having TB disease. Infected people carry the TB germs or bacteria in their bodies, but their bodies' defense system protects them from the disease. Over 10 million Americans carry TB germs, but less than 10% of them actually develop the disease. An infected person is not contagious until they develop the disease. A person can be infected for years and seem perfectly healthy. However, when illness weakens the immune system, TB infection can become TB disease.

Although coughing or sneezing spreads TB germs through the air, becoming infected is not easy. Brief exposure to a TB source rarely results in infection, nor does handling bed sheets, books, furniture, or eating utensils. TB usually transmits through family members, close friends, and people who work or live together, sharing close, confined spaces over extended periods of time.

If you suspect you or someone you know has signs and symptoms of TB disease, seeing a doctor immediately is important. Without treatment, victims can spread the infection and disease to others.

People at Higher Risk—Anyone can contract TB, but some people have a higher risk of developing active TB disease, such as people with HIV infections or AIDS and people in close contact with those who are contagious. People who work in or reside at long-term care facilities, such as prisons, nursing homes, and some hospitals, people who are malnourished, alcoholics, IV drug users, elderly, infants, or transplant recipients, and people with serious medical conditions are at a higher risk of developing active TB disease.

Signs and Symptoms of TB—A person with TB infection has no symptoms. A person with TB disease may have any, all, or none of the following symptoms: coughing up blood or a cough that does not go away, fever, constant fatigue, weight loss, loss of appetite, and night sweats.

Testing for TB Infection and Disease—The TB skin test determines if a person has TB infection. A chest X-ray and mucus test determines if a person has TB disease. If your TB test result is positive, seek professional medical advice.

Preventing TB and Other Airborne Diseases—At adequate flow rates, fresh-air ventilation disperses TB droplet nuclei, decreasing the potential for disease transmission. For example, when you transport people who might have TB infection or any other airborne disease, open your vehicle's windows. Maintaining good health and practicing good health habits help strengthen your immune system. Any person in a high-risk category should have regular TB skin tests. If your work places you in contact with people who have active TB disease, closely follow workplace policies, procedures, and OSHA guidelines for infection control. Remember to use BSI and appropriate PPE (gloves, masks, goggles).

Food-Related Illnesses

Thousands of types of bacteria exist naturally in our environment and even our food supply. Some are beneficial, such as bacteria used to make cheese and yogurt. However, some bacteria or pathogens cause mild to serious illness if ingested with food. Hepatitis A is one serious illness transmitted by food.

SECTION VOCABULARY*AIDS**airborne infection**bloodborne pathogens**BSI**CDC**hepatitis A virus**hepatitis B virus**hepatitis C virus**HIV**MRSA**PPE**STD**TB**universal precautions*

Many people do not recognize food-related illness, as its symptoms often mimic the flu. Symptoms may not occur for two or more days after eating contaminated food. These symptoms can be severe but often last only one or two days. They range from fever, chills, headache, and backache to abdominal cramps, nausea, vomiting, diarrhea, and general weakness.

Other Infectious Diseases

Sexually transmitted diseases (*STDs*), or sexually transmitted infections, are among the most common infectious diseases in the United States today. Of at least 20 identifiable sexually transmitted diseases and infections, seven are most common: chlamydia, genital herpes, genital warts, gonorrhea, HIV infection and AIDS, syphilis, and hepatitis B. All are preventable.

UNIT 1 | PREPARING TO RESPOND TO EMERGENCIES

LESSON 5 | Human Body

LESSON GOAL: At the end of this lesson, you will be familiar with basic human anatomy.

Skeletal System

The *skeletal system* is the supporting framework for the body, giving it shape and protecting vital organs. It attains mobility from the attached muscles and makes red blood cells. The main components of the skeletal system are: the skull, spinal column, chest, shoulder girdle, pelvis, lower extremities, and upper extremities. The skull houses and protects the brain. It also gives shape and function to the face. The hinged jawbone attached to the skull permits the jaw to move. The spinal column protects the spinal cord and is the primary support for the entire body. It consists of separate bones called vertebrae that stack one on top of each other and are held together by muscles. The shoulder girdle consists of the collarbone and shoulder blades. The chest consists of the breastbone (sternum) and ribs. It protects the heart, lungs, liver, and spleen. The pelvis protects the reproductive organs and supports the organs in the lower abdominal cavity.

The lower extremities consist of the upper leg, lower leg, ankle, and foot. The upper leg consists of the longest, strongest bone in the human body, the thighbone (*femur*). The lower leg consists of two bones attached to the ankle. The lowest portions of the lower extremities are the feet and toe bones. The upper extremities consist of the upper arm, forearm, wrist, hand, and finger bones that comprise the arm. The upper arm consists of one bone. The lower arm, like the lower leg, contains two bones.

Muscular System

The *muscular system* gives the body shape, protects internal organs, and provides body movement. The body contains three types of muscles. Muscles used for deliberate acts, such as chewing, bending, lifting, and running, are *voluntary muscles*. These are muscles attached to the skeleton and under the control of the nervous system and brain. The individual can contract and relax these muscles. *Involuntary muscles*, or smooth muscles, carry out many automatic body functions. They are in the walls of the tube-like organs, such as ducts, blood vessels, and the intestinal wall. A person does not normally control these muscles. Found only in the heart, the *cardiac muscles* work constantly to expand and contract the heart.

OBJECTIVES

FR008.1.A. Identify the function of the skeletal system and its main parts.

FR008.1.B. Identify the function of the muscular system and types of muscle.

FR008.1.C. Identify the function of the nervous system and its two main parts.

FR008.1.D. Identify the function of the respiratory system and its basic parts.

FR008.1.E. Identify the function of the circulatory system and the four major arteries.

FR008.1.F. Identify the function of the digestive system and its main organs.

FR008.1.G. Identify the function of the endocrine system.

FR008.1.H. Identify the function of the genitourinary system.

FR008.1.I. Identify the function of the skin.

Nervous System

The *nervous system* controls voluntary and involuntary body activity. It also supports higher mental functions, such as thought and emotion. It lets a person be aware of and react to the environment and keeps the rest of the body's systems working together. It has two main systems. The *central nervous system* is located in the brain and in the spinal cord. Its components are the body's mainframe computer. This is where all communication and control originate. The *peripheral nervous system* includes nerves that connect to the spinal cord and branch out to every other part of the body. These nerves serve as a two-way communication system. Some carry information from the brain and spinal cord to the body. Others carry information from the body back to the brain.

Respiratory System

The *respiratory system* delivers oxygen to and removes carbon dioxide from the blood. The body can go without oxygen only for a few minutes. The nose, mouth, throat, voice box, and windpipe make up the airway that brings oxygen to the lungs. The passage that connects the upper airway with the lower airway is the windpipe (trachea). At the upper end of this passageway is a small leaf-shaped flap (epiglottis) that keeps food and other foreign objects from entering the windpipe. A large muscle (diaphragm) below the lungs at the bottom of the chest cavity helps move air in and out of the lungs.

The respiratory systems of infants and children differ from an adult's. Their airways are smaller and more easily obstructed. Their tongues take up proportionally more space in their mouths. Their windpipes are narrower, softer, and more flexible. Very young infants breathe mostly through their noses.

Circulatory System

The *circulatory system* pumps blood throughout the body. It delivers oxygen and nutrients to and removes waste from the body's tissues. Basic parts of the circulatory system are the heart, veins, capillaries, arteries, and blood. Positioned behind the sternum, slightly to the left in the chest cavity, the heart is a hollow, muscular organ about the size of your fist. It functions like a two-sided pump. Blood is under constant pressure and circulation by the heart's pumping action.

The heart consists of two sides, each having an upper and lower chamber. The right side pumps blood to the lungs, which pick up oxygen, and returns the oxygenated blood to the left side of the heart. The left side delivers the oxygenated blood throughout the body and returns the blood to the right side of the heart.

Blood vessels are a system of tubes through which blood flows. Vessels called arteries carry blood away from the heart to the rest of the body. The following major arteries determine blood flow and set the patient's pulse rate:

- carotid—major artery in the neck, felt on either side of the neck
- femoral—major artery in the thigh, felt in the groin area
- radial—major artery in the lower arm, felt at the thumb side of the wrist
- brachial—major artery in the upper arm, felt on the inside of the upper arm

Vessels called veins carry blood back to the heart. Throughout the body, small vessels called capillaries connect arteries to veins.

Blood is composed of several elements. Plasma is a clear, straw-colored fluid. Red blood cells carry oxygen from the lungs to the body and bring carbon dioxide back to the lungs. White blood cells fight infection and destroy bacteria and other disease organisms. Platelets initiate the blood-clotting process.

Digestive System

The *digestive system* has two main functions: ingesting and digesting food and nutrients. Mainly in the abdomen, this system's organs include the stomach, pancreas, liver, gallbladder, and small and large intestines.

Endocrine System

The *endocrine system* regulates body systems by secreting hormones directly into the bloodstream from glands. These glands include the thyroid, adrenals, ovaries, testes, and the pituitary. Located at various places throughout the body, they affect physical strength, reproduction, hair growth, voice pitch, mental ability, and behavior. The endocrine system also maintains water balance and blood pressure in the body.

Genitourinary System

The *genitourinary system* is responsible for reproduction and waste removal. Urinary organs include kidneys, ureters, the urethra (tubes through which urine flows), and the bladder. Male reproductive organs include the testes and the penis. The female reproductive system consists of ovaries, fallopian tubes, the uterus, the vagina, and external genitals.

Skin

The *skin* serves as the protective covering for the inside of the body. It provides a barrier against bacteria and other harmful substances and organisms. Covering the entire body, skin helps regulate body temperature. Acting as a communication organ, the skin also receives and relays information about heat, cold, touch, pressure, and pain. It transmits this information to the brain and spinal cord through nerve endings.

SECTION VOCABULARY

cardiac muscles

central nervous system

circulatory system

digestive system

endocrine system

femur

genitourinary system

involuntary muscles

muscular system

nervous system

peripheral nervous system

respiratory system

skeletal system

skin

voluntary muscles

UNIT 2 | RESPONDING TO EMERGENCIES

LESSON 1 | Scene Size-Up

OBJECTIVES

FR009.1. Visually assess a scene when you arrive to determine if the scene is safe to enter before providing first aid.

FR009.2. Identify the difference between a trauma and a medical patient before providing first aid.

FR009.4. Determine the need for more or specialized help when providing first aid.

LESSON GOAL: At the end of this lesson, you will know the components of scene size-up, taking into consideration common or potential hazards and how to communicate scene size-up to other responders.

Scene Safety

Scene size-up begins as soon as you become aware of a situation, whether you have been notified by radio or you come upon it in the course of duty. Although it takes only moments to perform, scene size-up is crucial to all involved. Before you enter the scene, take an overall view of what is happening. Doing the right thing at the wrong time can get an officer killed—for example, entering a scene and rendering first aid before checking for any threats at the scene.

The size-up has four components: scene safety, mechanism of injury or nature of illness, the number of victims, and the need for more rescuers and special equipment.

Scene safety always begins with your safety. If the scene is not safe and you have no means to make it safe, do not enter! If you do, you can become another victim. Be aware of everything. Take note of what you see, hear, smell, and feel. Quickly put all your observations together to help determine what you and others need to do to make the scene safe. Only after determining if the scene is safe to enter can you deal with the patient's safety.

Possible dangers vary greatly, depending on the scene type. Some situations commonly encountered on duty include vehicle crashes that involve specific dangers, such as unstable vehicles, entrapment, spills, fire, and scenes that may involve ongoing violence, weapons, and unruly crowds or groups of inmates who dislike officers. Other situations can include environmental dangers, such as hurricanes, tornados, sinkholes, and floods. Downed power lines present a problem during these conditions. The presence of hazardous materials may include unseen dangers, such as chemical spills. Multiple casualties may require various personnel to respond and can be a source of mass confusion. Keep in mind that, although some scenes may be similar, none is the same. Each presents its own dangers.

Mechanism of Injury or Nature of Illness

While assessing scene safety, try to determine the mechanism of injury to the patient or the nature of the illness. Simply put, try to figure out what happened. Understanding what happened helps you judge the extent of injury or illness. Are you dealing with a trauma patient or a medical patient? A trauma patient is an injured person; a medical patient is a person who is ill. Knowing which type of patient you have helps you determine the type of help or equipment needed. A patient who belongs to both categories requires treatment for each.

Number of Victims

The next size-up component is determining the number of victims. If there is more than one, find out how many and where they are. In certain situations, such as rollover car crashes, patients ejected from a vehicle may be difficult to find. In those situations, you may need to question other victims, witnesses, or bystanders.

Need for More Rescuers or Special Equipment

Assess the need and relay a request for more resources, special equipment, or special rescue teams, such as trauma teams, fire department, canine, search and rescue, utilities, and so on. Resources available depend on your local protocol and department policy.

In a clear and concise manner, verbally transmit all information gathered during your size-up. Doing so makes the communications center or responding units aware of the circumstances. Relay your information about overall scene safety, type and extent of injuries, number of patients, and the need for special units to assist. The quicker you relay information, the faster additional resources can respond. Relaying scene size-up information accurately and quickly better prepares responding units for what they might encounter when they arrive on scene.

UNIT 2 | RESPONDING TO EMERGENCIES

LESSON 2 | Patient Assessment

OBJECTIVES

- FR010.1.** Conduct an initial assessment when making a general observation of a patient.
- FR010.2.** Assess mental status when making a general observation of a patient.
- FR010.5.** Determine the patient's level of responsiveness.
- FR010.8.** Manually stabilize a patient's head and neck when conducting an initial assessment.
- FR010.3.** Assess if a patient is breathing adequately at a normal breathing rate.
- FR010.4.** Assess a patient's circulation to include taking a pulse.
- FR010.11.** Assess a patient's skin color and condition when conducting an initial assessment.
- FR010.6.** Perform a physical assessment of a patient, including checking for external bleeding.
- FR010.7.** Assess a patient's pupils when conducting an initial assessment.
- FR010.12.** Assess for pulse, motor, and sensation for a broken bone injury.
- FR010.9.** Obtain SAMPLE history from a patient when conducting an initial assessment.
- FR010.10.** Conduct an ongoing assessment of a patient while awaiting additional EMS resources.
- FR011.1.** Update EMS during a medical emergency.

LESSON GOAL: At the end of this lesson, you will know what an initial patient assessment involves.

Initial Assessment

Every patient you encounter needs assessment. Some will be conscious, alert, and able to help with your assessment. Others will be unconscious or unable to provide information. Remember from CPR training that assessment begins with airway, breathing, and circulation, the ABCs. Consider the position of the patient with regard to spinal injury and airway compromise. As you approach, begin your assessment by generally observing the patient. Note details about the patient's gender, approximate age, and positioning. Listen for sounds the patient may make. Identify yourself and tell them you came to help. Gently touch and speak to the patient.

Consider the patient's response in determining the *LOC (level of consciousness)*. Establishing a patient's LOC includes trying to see if the illness or injury has changed the patient's mental status. A head or spinal injury can change a person's normal mental state and cause confusion. Speak clearly, state your name, and explain that you came to help.

Assessing an adult's mental status is often easier than determining a child's mental status. Conscious adults can tell you what is wrong. Children might not talk to you if they are scared. Visual assessment of an infant or child is your most valuable tool. If an infant or child appears drowsy or is in obvious respiratory distress, consider this condition serious. Ask the infant or child's caregiver why they called you, what the complaint is, and how the infant or child's behavior has changed. Infants should respond appropriately to sound, movement, and stimuli.

Alert, Verbal, Pain, and Unresponsiveness (AVPU)

After you rule out life-threatening conditions, get a general overview of the patient, including their mental alertness or responsiveness. Identify responsiveness on four levels: alertness, verbal ability, pain response, and unresponsiveness (*AVPU*).

Alert—Determine if the patient is alert. Ask simple questions such as, “What is your name? What day is it? Where are you?” Consider a patient who responds correctly and spontaneously as alert and oriented.

Verbal—A patient who responds verbally to your questions but appears disoriented, or only responds to loud noises, is responding to verbal stimuli.

Pain—A patient who does not respond to verbal stimuli but responds to pain stimuli is at the pain responsiveness level. You can assess pain responsiveness with a pinprick, by pinching the ear lobe, or giving a sternal rub.

Unresponsive—A patient who responds to none of the stimuli listed above is unresponsive or unconscious. If you determine that the patient is unresponsive, follow the steps for CPR.

Spinal Immobilization

If scene size-up and initial assessment suggest spinal injury, manually stabilize the patient’s head and neck (cervical spine) in the position you found them.

1. Kneel at the patient’s head.
2. Place your palms on either side of the patient’s head below the ears.
3. Hold the patient’s head in the position you found it.
4. If the patient is not breathing, use the jaw thrust to open the airway to initiate rescue breathing.
5. You must keep the patient in position until EMS completely immobilizes the patient.

Jaw Thrust With Spinal Immobilization

Perform a jaw thrust maneuver when you suspect the patient has a spinal injury and you need to establish an airway.

1. Kneel at the patient’s head. Place one hand on each side of the patient’s head with your thumbs resting on the cheekbones.
2. Grasp the angles of the patient’s lower jaw on both sides and press down with your thumbs as you lift the jaw. If the lips close, push the lower lip open with your thumb.
3. Use a lifting motion to move the jaw forward with both hands. This pulls the tongue away from the back of the throat.
4. You must keep the patient in position until EMS completely immobilizes the patient.

After you commit to stabilizing the head and neck, you must stay with the patient until EMS relieves you. The object is to keep the breathing patient’s head in the same position you found it and to prevent movement until advanced medical personnel arrives.

Airway and Breathing

Place the side of your face near the patient's mouth and nose to detect breathing. Watch the patient's chest. Look for the rise and fall of the chest. Are the patient's efforts to breathe increasing or decreasing? Is the patient wheezing or snoring? At the same time, listen and feel for breathing from the mouth and nose. If the patient is breathing, are they breathing adequately? Good skin color and effortless breathing characterize adequate breathing. Inadequate breathing causes poor skin color, particularly in the mouth and nose areas, and patients may experience labored breathing.

To calculate a patient's breathing rate, watch the patient's chest rise; count the number of breaths taken over 15 seconds. Multiply this number by four to arrive at the average breathing rate.

Normal breathing rates:

- adult: 12–20 breaths per minute
- child: 15–30 breaths per minute
- infant: 25–50 breaths per minute

Note the quality of breathing, which includes the rhythm and depth of breath, described in the following terms:

- rhythm—the interval between breaths
 - regular—equal time between breaths
 - irregular—time varies between breaths
- depth or manner of breathing
 - normal—breathing is average and hardly noticeable
 - shallow—short gasps; very little airflow
 - deep—hyperventilation; large airflow
- labored or painful breathing

Relay vital information to responding medical personnel. Report the rate first and then the qualities, for example, “slow, irregular, and shallow.”

Circulation

Assess patient circulation by pulse rate (also known as *perfusion*), skin color, and skin temperature. To take a patient's pulse, place your fingers (not your thumb) on a pulse point. Count the number of beats for 15 seconds. Multiply this number by four to arrive at the patient's average pulse rate.

- On a conscious adult or child, check the radial pulse.

- On an unconscious adult or child, check the carotid pulse.
- On an infant, check the brachial pulse.

Classify pulse quality by its rate, rhythm, and force.

- rate:
 - adult: 60–100
 - child: 100–120
 - infant: 120–160

If the patient's pulse rate is outside these ranges, consider the situation a life-threatening emergency. Look for and treat uncontrolled bleeding before continuing with the assessment.

- rhythm, the interval between beats:
 - regular—equal time between beats
 - irregular—time varies between beats
- force, strength of the pulse:
 - bounding—strong pulse
 - weak—pulse you can barely feel; “thready”

Relay vital information to responding medical personnel. Report the rate first and then the qualities, for example, “slow, irregular, and weak.”

Skin Color and Condition

Assess a patient's skin temperature by placing the back of your hand against the patient's skin to determine relative skin temperature. If the skin feels cool, the patient could be suffering from heat exhaustion, shock, or exposure to a cold environment. If the skin feels hot, the patient could have a fever or heat stroke. Change in body temperature can indicate poor circulation. A hot spot on the skin can indicate an infected area.

The skin quality indicates possible circulation problems. The patient's skin color and condition may be:

- pale
- red (flush)
- blue (*cyanosis*)
- yellow (jaundice)

- moist
- dry

Treat for life-threatening conditions before continuing if the following conditions exist: decreased LOC, abnormal breathing, or abnormal circulation (shock). Signs of conditions that rapidly lead to shock include uncontrolled bleeding, tender or distended abdomen (internal bleeding), unstable pelvis, femur fractures, or anaphylaxis. *Anaphylaxis* is a severe allergic reaction in which air passages swell and restrict breathing. Check vital signs every five minutes, including pulse, respirations, skin condition, and eyes. If the patient's condition worsens, repeat every step of the initial assessment.

Physical (or Secondary) Assessment

Initial assessment helps to identify life-threatening situations. After completing the initial assessment, perform a physical assessment. This is a thorough head-to-toe evaluation performed to find other signs of injury or illness by looking, listening, and feeling. It may involve removing clothing in a respectful manner to expose hidden injuries.

Make an overall observation of the patient. Observe various body parts, as well as any discomfort the patient shows. Also, note any medical alert items the patient wears. For example, the patient may wear a medic alert necklace, anklet, or bracelet indicating special medical considerations, such as diabetes or allergies.

If some clothing appears wet with blood, the patient may be bleeding externally. Carefully remove the clothing to find the bleeding. If the patient is bleeding externally, try to control it now.

Listen to what the patient says and any sounds made. Listen carefully to the patient's breathing.

Carefully work from head-to-toe, inspecting and palpating (touching) each body part before moving to the next. Compare an injured body area to a similar, uninjured area. Look for deformities, open injuries, tenderness, and swelling (*DOTS*):

Deformities

Open injuries

Tenderness

Swelling

Start at the head. Observe anything out of the ordinary, such as swelling, fluid loss from the ears or nose, discoloration around the eyes (raccoon eyes), mouth injuries that may obstruct the airway, and discoloration behind the ears (Battle's sign, which may indicate brain trauma).

Look at the patient's pupils, the dark-colored areas of the eye. Do they appear round, equally sized, constricted (pinpointed), or dilated (enlarged)? Do they move or remain fixed? If you have a low candlepower penlight, flash it at each pupil and watch the reaction. Both pupils should react equally. This test can help you detect a head injury or the presence of alcohol, drugs, or other substances.

Gently palpate the scalp and skull. Feel for depressions, open wounds, and swelling. From the head, move to the neck.

Gently palpate the cervical or neck area. Feel for deformities. Look at the throat for signs of trauma or deformities, particularly those related to airway obstructions. While doing this, ask the conscious patient to wiggle their fingers and toes. Ask if the patient's extremities feel numb or tingly. Does the patient have neck pain?

If you are not committed to stabilizing the patient's head, continue the physical assessment. Gently squeeze the shoulders inward. Palpate the chest for areas of pain or tenderness. Does the chest rise and fall equally? Are there noises coming from the chest wall? Squeeze lightly on the ribcage. Look to see if both sides of the chest rise and fall equally during breathing, feel for fractured ribs, and look for bruising. Continue to the abdomen, following the same palpating procedures. Tenderness here may indicate internal injury. Swelling may indicate abdominal injury or pregnancy. Palpate the pelvis; gently squeeze inward and down, checking for tenderness or deformities. Is the pelvis stable or unstable?

Examine the extremities. Gently palpate the entire length of each arm and leg, checking for deformities and tenderness. Check the pulse, motor, and sensory capacity (PMS) in each extremity. Check for capillary refill by squeezing the patient's finger or toe nail bed for two seconds. After releasing, measure the time it takes to return to the original color, which should be from white to pink. If it takes less than two seconds, blood flow should be sufficient.

Does the patient feel their toes and fingers? Can the patient move their toes and fingers? Place your hands along the soles of the patient's feet, and ask them to press them against your hands. You should feel equal pressure from both feet. Ask the patient to hold your fingers and squeeze them simultaneously. Both hands should have equal strength.

If you have a compelling medical reason and the necessary assistance, roll the patient to check their back. Again, follow the same palpating procedures. Feel along the spine for possible fractured ribs and deformities. Look for any bruising or swelling that could indicate internal bleeding.

Assess Pulse, Motor, and Sensory Function (PMS)

Assess for pulse, motor, and sensory functions (*PMS*).

Pulse—Assess for circulation before and after splinting by checking for *distal circulation* below the injury site.

- In upper extremities, check the radial pulse, or leave the fingers exposed and check for capillary refill.
- In lower extremities, check the pedal pulse on the top of the foot (finding a pedal pulse is very difficult), or leave the toes exposed and check for capillary refill.

Motor—Assess for motor function (movement) of upper extremities. Ask the patient to move their fingers or squeeze your hand. To assess the motor function of lower extremities do the following:

1. Use BSI and appropriate PPE.
2. Ask the patient to move their feet.
3. Place your hand on the bottom of the foot, and ask the patient to push against your hand.
4. Place your hand on the top of the foot, and ask the patient to pull against your hand. As the patient pushes and pulls, you can feel and evaluate the strength of the extremity.

Sensory—Assess for sensation before movement. Ask the patient if they have feeling where you touch.

Assess for source of injury. If the patient has fallen or been involved in a motor vehicle crash, consider stabilizing the patient's head and neck to prevent movement and further damage. When assessing a patient wearing a full coverage helmet (motorcycle, football, sports) do not remove the helmet unless it obstructs the airway.

SAMPLE

While conducting your physical assessment, talk to the patient. Try to learn their medical history. If the patient is unconscious, begin by questioning family members. Any information you get helps in providing care to the patient.

The **SAMPLE** method may help you get information useful in determining causes of injury or illness. SAMPLE stands for:

Signs and symptoms—What can you see? (sign/objective) What does the patient feel? (symptom/subjective)

Allergies—Does the patient have allergies? Does the patient wear medic alert jewelry?

Medications—Is the patient taking medication; when was the last dose?

Past—What other medical problems may contribute to the patient's current condition?

Last oral intake—When did the patient last eat or drink?

Events—What events led to this incident?

All this information can help you determine the extent of injuries or illness. Include the information in your report when handing the patient off to appropriate medical personnel.

Ongoing Assessment

If the patient is stable and maintains their ABCs, continue an ongoing assessment until medical personnel relieve you. In your ongoing assessment, reassess the patient's responsiveness level, airway and breathing, and pulse rate and quality. You may need to repeat parts of the physical assessment to detect changes in the patient's condition. Continue to reassure and calm a conscious patient. The patient's state of mind is important to treatment. If the patient is stable, reassess every 10 to 15 minutes. If unstable, reassess about every five minutes.

As the first person on the scene of a medical emergency, you must relay scene and patient information to medical responders when they arrive. In some situations, you will provide information by radio to EMS personnel en route. Doing so prepares them to treat the patient as soon as they arrive.

Updating EMS

Effective verbal communication is the key skill needed to relay patient assessment information as accurately as possible. As the first officer on the scene, you may have the earliest information about the patient's condition. In particular, the patient's baseline pulse and respiration rate are of extreme importance to medical personnel. This information helps them determine if the patient's

condition is improving, stable, or deteriorating. Here are some typical questions EMS may ask:

- “How many patients are there?”
- “Where are they?”
- “Who are the high priority patients?”
- “What treatment did you render?”

EMS personnel complete a pre-hospital care form, or run report, and may include your patient information.

Specialized personnel, such as firefighters and EMS, may become involved in a rescue, based on local protocol and department policy. EMS providers may ask you to assess the extent of a person’s injuries, render emergency care or protection to a patient, or perform emergency moves. EMS may ask you to maintain the patient’s cervical stabilization and an open airway and help lift patients onto stretchers. As a criminal justice first aid provider, do what you can safely do, use the equipment available to you, and stay within the limits of your training and qualifications.

SECTION VOCABULARY

anaphylaxis

AVPU

cyanosis

distal circulation

DOTS

LOC (level of consciousness)

perfusion

PMS

SAMPLE

UNIT 2 | RESPONDING TO EMERGENCIES

LESSON 3 | Moving Patients

OBJECTIVES

- FR040.1.** Identify your role in assisting medical personnel with moving a patient.
- FR039.1.** Identify under what circumstances a criminal justice first aid provider moves a patient.
- FR039.3.** Lift a patient properly.
- FR039.4.** Place a patient in a recovery position.
- FR039.5.** Perform a walking assist with a patient you may have to move.
- FR039.6.** Perform an emergency drag of a patient you may have to move.
- FR039.7.** Perform an extremity lift or carry of a patient you may have to move.
- FR039.8.** Perform a logroll of a patient you may have to move.

LESSON GOAL: At the end of this lesson, you will know how to move patients in a medical emergency.

Proper Lifting Techniques

In an emergency, you may have to move patients to safety or reposition them in response to their changing medical conditions. You may also be required to assist EMS in moving patients or removing an entrapped patient. Follow their direction and assist when needed.

Perform an *emergency move* when a patient is in immediate danger or the patient's location prevents providing care to that patient or another patient. Perform a non-emergency move, such as a walking assist, when the situation is not urgent. Always use BSI and appropriate PPE when moving a patient.

When moving patients, using basic body mechanic principles and observing the rules of proper lifting and moving is essential. Maintain correct alignment of your spine, shoulders, hips, and feet. Use proper breathing techniques. Be aware of your physical limitations. Lift with your legs, hips, and buttocks, not your back. Contract your abdominal muscles while lifting. Keep the patient's weight as close to your body as possible. Limit the distance you need to move the patient if possible.

Recovery Position

Position a patient based on their medical condition. Place an unresponsive, breathing patient with no suspected neck or back injuries in the recovery position: roll the patient, preferably onto their left side, with knees slightly bent. The *recovery position* helps maintain an open airway if the patient becomes nauseated or vomits and may prevent positional asphyxia.

Positional asphyxia is a term used to describe the placement of a body in a position that interferes with the ability to breathe. Positional asphyxia can happen if a suspect is placed face down, with their chest on a hard surface, arms restrained behind their back, and left in this position for a significant period of time. It can also happen as a result of accident or illness.

Walking Assist

The most common non-emergency move for a responsive, ambulatory (capable of walking) patient is the walking assist. Patients with leg injuries or visual impairments benefit from a walking assist.

1. Stand next to the patient on the same side as the injury.
2. Place the patient's arm across your shoulder.
3. Place your arm around the patient's waist. Grab their belt, if necessary.
4. Help the patient to a safe or comfortable place and encourage the patient not to put body weight on the injury.

Emergency Drags

A critical issue when moving a patient is the danger of making an existing spine injury worse. Use an emergency drag if the patient is on the floor or ground. Make every effort to maintain the patient's head, neck, and shoulder alignment.

One or Two Person Drag

1. If the patient is unconscious, secure their hands to protect them during the move.
2. Stand at the patient's head.
3. Bend your knees.
4. Pull the patient's shirt under their head to form a support.
5. Using the shirt as a handle, pull the patient toward you.

Blanket Drag

1. Place a blanket directly against the patient's side.
2. Gather the blanket into accordion-style, lengthwise pleats.
3. Kneel on the patient's side opposite the blanket.
4. Reach across the patient and grasp their hip and shoulder.
5. Roll the patient toward you onto their side.
6. Tuck the pleated side of the blanket under the patient.
7. Roll the patient onto the blanket, preferably onto their back.
8. Wrap the blanket around the patient.
9. Grab the part of the blanket under the patient's head and drag it toward you.

Shoulder Drag

1. Stand at the patient's head.
2. Bend your knees.
3. Slide your hands under the patient's arms.
4. Firmly grasp the patient's wrists, and fold them across the patient's chest.
5. Stand up. As you do, lift the patient up and toward you.
6. Drag the patient toward you. The patient's feet will drag on the ground.

Extremity Lift or Carry

Extremity lifts or carries are often easier and require less time than drags. Considered non-emergency moves, these lifts require at least two officers' efforts. Use these techniques to move unresponsive patients from the floor or ground. However, do not perform an extremity lift if you suspect or know a patient has an injury to the spine or an extremity injury.

Two-Person Extremity Lift

1. Officer 1, kneel on one knee at the patient's head.
2. Place your hands, palms up, under the patient's shoulders.
3. Lift the patient to a sitting position.
4. Support an unconscious patient's back with your kneeling leg.
5. Slide your hands under the patient's arms.
6. Firmly grasp the patient's wrists, and fold them across the patient's chest.
7. Officer 2, stand between the patient's knees with your back to the patient. If necessary, separate the patient's feet.
8. Bend your knees and grasp under the patient's knees.
9. Officer 1, standing at the patient's head, delivers all commands. Simultaneously both officers stand while lifting the patient.

SEAL Team Three Carry

Use a SEAL team three carry to move a patient who is non-ambulatory. Remember to use proper body mechanics. Do not perform an extremity lift if you suspect or know a patient has an injury to the spine or an extremity injury. Officers 1 and 2 stand behind the patient.

1. Place the patient's arms around the shoulders of both officers.
2. Have the patient use their arms to hold onto the rescuers, if able.
3. Hold the patient's arms around the rescuer's neck if the patient is not able to hold on.
4. Grab the patient's belt, pants, or back pocket.
5. Lift and go.

Logroll

Use this technique only when moving the patient is necessary or when assisting medical personnel. The purpose of a logroll is to roll the patient onto their back, front, or side.

1. Perform a logroll on the floor or ground with at least three officers on their knees.
2. Officer 1, constantly maintain head, neck, and spinal stabilization.
3. Officer 2, take your position at the patient's shoulder and hip. Stay far enough away from the side of the patient's body so there is room to roll the patient toward you.
4. Officer 3, take your position on the same side of the patient as officer 2. Stand at the patient's thigh and lower leg. Stay far enough away from the side of the patient's body so there is room to roll the patient toward you.
5. Officer 2, reach across the patient. Place your hand on the patient's shoulder. Place your other hand on the patient's hip.
6. Officer 3, reach across the patient. Place your hand closer to the second officer's hand on the patient's hip. Place your other hand on the outside of the patient's knee area.
7. Officer 1, issue all commands to roll the patient toward officers 2 and 3. Simultaneously maintain the patient's head, neck, and cervical spine alignment.
8. Assess the patient for injuries.
9. If applicable, reverse the process to return the patient to their original position.

SECTION VOCABULARY

emergency move

positional asphyxia

recovery position

UNIT 2 | RESPONDING TO EMERGENCIES

LESSON 4 | Multiple Casualty Incident

OBJECTIVES

- FR012.1.** Identify the role of the first officer on the scene of a multiple casualty incident or disaster area.
- FR012.2.** Identify the steps of triage used during a multiple casualty incident.
- FR012.3.** Identify your role when assisting in a multiple agency response.

LESSON GOAL: At the end of this lesson, you will know how to respond and how to set priorities when providing emergency medical care.

You may respond to some incidents that involve more than one victim. Such an incident is a Multiple Casualty Incident (**MCI**). You may be the first to arrive at the scene of an MCI, and you must know how to respond and set priorities when providing emergency medical care.

Follow local protocol and department policy when defining an MCI. Most involve only a few victims. Most agencies have a plan in place to manage an MCI. Generally, your role as the first officer on the scene involves establishing command of the scene, communicating with EMS, and beginning triage.

Establish Command of the Scene

Bring order to the scene to enable you to conduct a scene size-up. Ideally, you accomplish these tasks simultaneously. Establishing command of the scene allows you to perform a thorough size-up.

Communicate With EMS

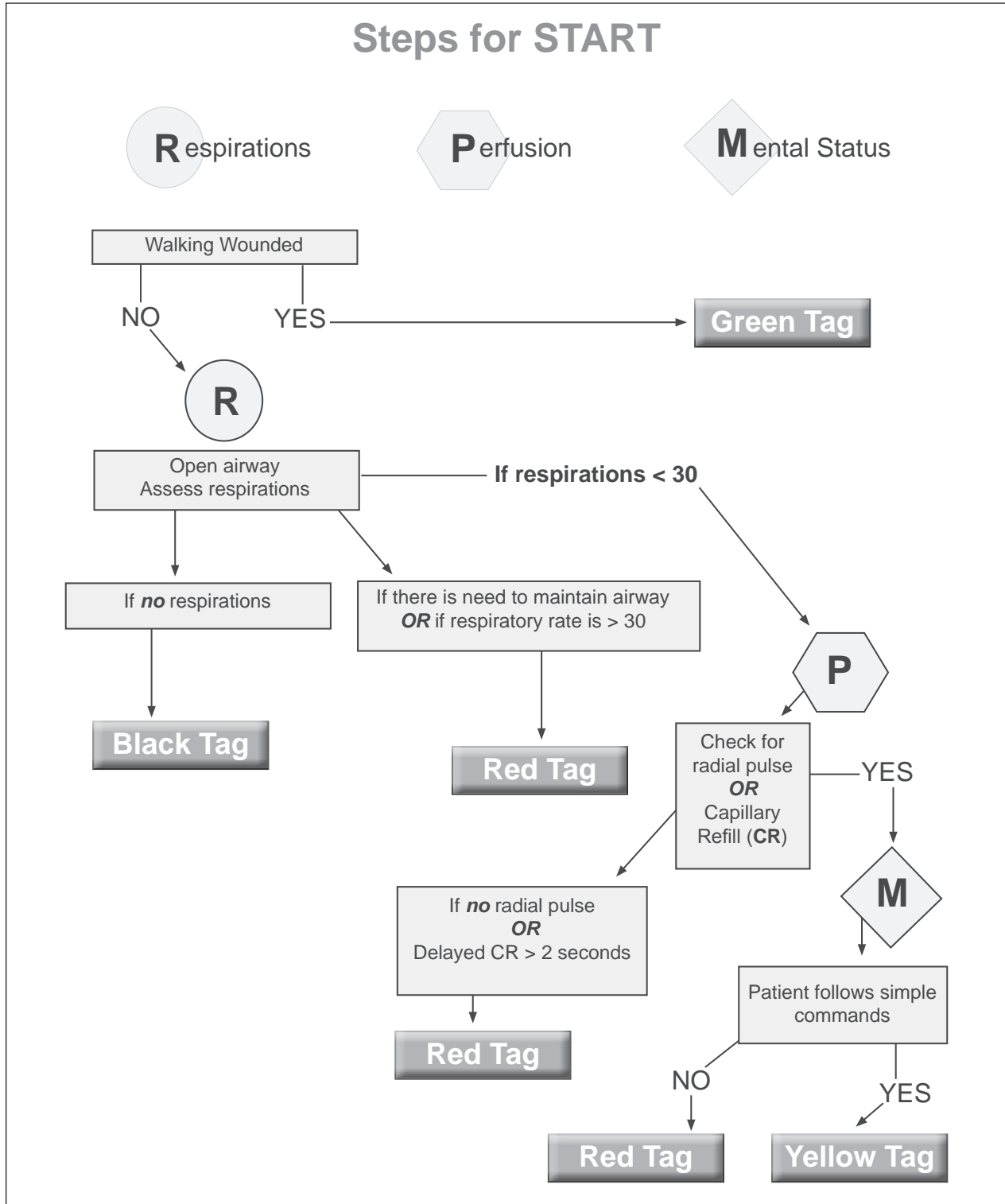
Relay all information to your communications center and responding EMS personnel. Inform them of more resources or equipment you may need.

Begin Triage

Your next step is to begin triage. **Triage** is the term given to sorting and classifying patients. Triage determines in which order patients receive medical attention. Although methods of performing triage differ, its basic principles remain the same. Check local protocol and department policy to determine if they recommend a specific method.

Simple Triage and Rapid Treatment (START)

This is the initial triage system based upon *Florida Field Operations Guide (FOG)*. The **START** method of triage assesses a large number of victims rapidly, and personnel with limited medical training can use it effectively.



Simple Triage and Rapid Treatment—START

Figure 2-4

1. Use BSI and appropriate PPE.
2. Locate and remove all of the walking wounded into one location away from the incident, if possible. Do not forget these victims. Someone should triage them as soon as possible. Say “Everyone who can hear my voice and can walk, come to this area.” Now move quickly through the remaining patients.
3. If available, triage and tag the remaining injured patients with triage ribbons (color-coded plastic strips) by tying them to an upper extremity in a visible location (wrist if possible).
4. Classify patients according to the START protocols.

RED—immediate

YELLOW—delayed

GREEN—ambulatory (minor)

BLACK—deceased (non-salvageable)

5. Remember the mnemonic RPM. (Respiration, Perfusion, Mental Status).
 - Assess respirations:
 - a. If respiratory rate is 30 or fewer breaths per minute, go to perfusion assessment.
 - b. If respiratory rate is more than 30 breaths per minute, tag RED.
 - c. If the victim is not breathing, open the airway, remove obstructions if seen, and assess for (a) or (b) above.
 - d. If the victim is still not breathing, tag BLACK.
 - Assess perfusion:
 - a. Perform by palpating a radial pulse or assessing capillary refill (CR) time.
 - b. If no radial pulse is present or the CR time is greater than two seconds, tag RED.
 - c. If radial pulse is present or CR is two seconds or less, go to mental status assessment.
 - Assess mental status:
 - a. Assess the victim’s ability to follow simple commands and their orientation to time, place, and person.
 - b. If the victim follows simple commands, tag YELLOW.
 - c. If the victim does not follow simple commands, is unconscious, or disoriented, tag RED.

Note: Depending on injuries (burns, fractures, bleeding) it may be necessary to tag YELLOW.

6. Make independent decisions for each victim. Do not base triage decisions on the perception of too many reds, not enough greens.
7. If you encounter borderline decisions, always triage to the most urgent priority (GREEN/YELLOW patient, tag YELLOW).
8. Direct the movement of patients to proper treatment areas, if necessary.
9. Provide appropriate medical treatment (ABCs) to patients before movement as incident conditions dictate.
10. The first assessment that produces a RED tag stops further assessment of that patient. During triage, only manage the correction of life-threatening problems, such as airway obstruction or severe hemorrhage.
11. The triage priority determined in the treatment phase should be the priority used for transport.
12. If you identify a victim in the initial triage phase as a RED and transport is available, transport right away.

In a multiple agency response, your role depends on your arrival time, department policies, and local protocol. Florida implements the Incident Command System (*ICS*) for multiple agency response in times of disaster. If you are the first person on the scene, assume command until you can transfer control to the correct authority or agency. During the transfer, you can provide a briefing or report on what occurred since your arrival.

A multiple casualty incident can overwhelm anyone who reaches the scene first. Understanding the role of the first officer on the scene can reduce the stress of the situation. Taking control of the scene, getting information to responding personnel, and beginning triage helps make the combined response successful.

SECTION VOCABULARY

ICS

MCI

START

triage

UNIT 3 | TRAUMA-RELATED ISSUES

LESSON 1 | Shock

OBJECTIVES

FR014.2. Identify signs and symptoms of shock.

FR014.4. Identify treatment for shock.

FR014.1. Perform general treatment for shock for a patient in a medical emergency.

LESSON GOAL: At the end of this lesson, you will know how to treat a patient for shock.

Shock is the failure of the heart and blood vessels (circulatory system) to maintain enough oxygen-rich blood flowing to the vital organs of the body. Shock occurs to some degree with every illness or injury.

Signs and Symptoms

Shock can be life threatening. The principles of prevention and control are to recognize the signs and symptoms and to begin treatment before shock completely develops. It is unlikely that you will see all the signs and symptoms of shock in a single patient. Sometimes the illness or injury disguises the signs and symptoms of shock or the symptoms may not appear immediately. They can appear hours later. Signs and symptoms of shock may include:

- anxiety, restlessness, and fainting
- nausea and vomiting
- excessive thirst
- eyes that are vacant and dull (lackluster) with large (dilated) pupils
- shallow, rapid, and irregular breathing
- pale, cool, or moist (clammy) skin
- weak, rapid, or absent pulse

Treatment for Shock

To treat shock:

1. Maintain an open airway.
 - Remember your CPR training: use the head tilt-chin lift method to open the patient's airway. If you suspect spinal or neck injuries, use the jaw thrust method.
2. Prevent further blood loss by controlling bleeding.

3. Elevate the lower extremities.
 - Position the patient on their back, and elevate the lower extremities 6 to 12 inches.
 - If you suspect the patient has serious head, neck, spinal, or pelvic injuries, do not elevate the lower extremities.
4. Keeping the patient warm is imperative.
 - Cover the patient with suitable material to maintain body heat.
5. Perform ongoing assessment of the patient for life-threatening conditions. Maintain ABCs.
6. Be prepared to perform CPR and use an AED if available.

SECTION VOCABULARY*shock*

UNIT 3 | TRAUMA-RELATED ISSUES

LESSON 2 | Bleeding and Soft Tissue Injuries

OBJECTIVES

- FR013.2.** Identify treatment for closed soft tissue injuries.
- FR013.3.** Identify treatment for open soft tissue injuries.
- FR013.4.** Stop the bleeding of a patient with an open wound.
- FR013.5.** Dress and bandage an open wound for a patient who is bleeding.

LESSON GOAL: At the end of this lesson, you will know how to treat a patient for bleeding.

Closed Soft Tissue Injuries

Types of closed soft tissue injuries include:

- **contusion** (bruising)—a closed injury that is discolored and painful at the injury site. **Bruising** is the obvious discoloration (black and blue) of the soft tissue at the injury site.
- **hematoma** (swelling)—a closed injury that appears as a discolored lump. **Swelling** is the soft tissue raised when blood or other body fluids pool beneath the skin at the injury site.

Treatment for closed soft tissue injuries—Lacking the obvious signs of open soft tissue injuries, closed soft tissue injuries can be just as life threatening.

1. Use BSI and appropriate PPE.
2. Treat large contusions by applying a cold compress to the injury site.
 - A contusion is an indication of internal bleeding. Internal bleeding can cause the patient to go into shock. Large contusions—those the size of the patient’s fist—may indicate a 10% blood loss because of blood pooled at the injury site.
 - Small contusions normally require no treatment, but applying cold compresses to the injury site helps reduce pain and swelling.
3. If you cannot assess the seriousness of a closed wound, treat the patient as if they have internal bleeding, and monitor for shock.
4. Perform ongoing assessment of the patient for life-threatening conditions. Maintain ABCs, and treat for shock.
5. Be prepared to perform CPR and use an AED if available.

Open Soft Tissue Injuries

Types of open soft tissue injuries include:

- **abrasion**—open wound caused by scraping, shearing away, or rubbing the outermost skin layer
- **amputation**—gross removal of appendage
- **avulsion**—injury characterized by a flap of torn or cut skin that may not be completely loose from the body
- **evisceration**—open wound where the organs protrude
- **laceration**—open wound that varies in depth and width
- **puncture wound**—result of driving a sharp or blunt, pointed object into soft tissue

The most important first aid responsibilities to a patient with an open soft tissue injury are to control bleeding and prevent further contamination of the area.

Bleeding Control

There are three types of bleeding:

- In **arterial bleeding**, bright red blood spurts from a wound, indicating a severed or damaged artery.
- In **venous bleeding**, dark red blood flows steadily from a wound, indicating a severed or damaged vein.
- In **capillary bleeding**, dark red blood oozes slowly from a wound, indicating damaged capillaries.

To treat the patient by controlling bleeding:

1. Use BSI and appropriate PPE.
2. Cover the wound with a clean dressing.
3. Apply direct pressure until bleeding stops.
 - If the first layer of dressing does not control the bleeding, do not remove it, and apply additional layers as needed.
 - When treating avulsions:
 - a. Remove any large debris from the wound.
 - b. Align the torn flap to its normal position to maintain proper circulation.
 - c. Secure the wound in place with a dry, clean dressing and bandage.
4. If major bleeding does not stop, apply an agency-approved tourniquet.

SECTION VOCABULARY

*abrasion**amputation**arterial bleeding**avulsion**bruising**capillary bleeding**contusion**evisceration**hematoma**laceration**puncture wound**swelling**tourniquet**venous bleeding*

Applying Dressings and Bandages

Applying dressings and bandages to wounds can stabilize the wound site, control bleeding, and limit further contamination and damage. To apply a dressing and bandage:

1. Use BSI and appropriate PPE.
2. Expose the entire injury site to ensure that there are no other hidden injuries.
3. Apply dressings (for example, any variety of gauze or dressing to encourage blood clotting, such as a hemostatic dressing) first.
 - Dressings are coverings applied directly to wounds. If possible, do not touch the side of the dressing that will make contact with the wound.
4. Apply bandages.
 - Bandages are coverings that hold dressings in place. Bandages do not touch the wound. They can create pressure to help control bleeding, support an injured extremity or body part, and prevent the wound from further contamination and damage.

5. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
6. Be prepared to perform CPR and use an AED, if available.

Tourniquet

A **tourniquet** is a device that restricts blood flow to an extremity such as an arm or leg. A tourniquet is used when the amount of blood lost endangers the victim's life and other methods of controlling the bleeding have failed. You can control most external bleeding by using direct pressure. Bleeding from clean-edged amputations usually requires no more than pressure dressing to control bleeding. The injured blood vessels seal themselves shut as a result of spasms produced by the muscle walls of the vessels. The most common type of injury requiring a tourniquet is a rough-edged amputation. These amputations are a result of a tearing or crushing type of injury and prevent blood vessels from shutting as in a clean-edged injury.

If a commercially manufactured tourniquet is not available, you can make a tourniquet using materials such as a cravat (nonstretchy material, such as triangular bandages found in first aid kits, terry cloth, or linen handkerchiefs) wrapped around the extremities with the use of a rigid object, such as a stick, pen, or screwdriver. The band should be at least 2 inches wide when applied. Place padding around the limb where the tourniquet will be applied to help protect the site and provide additional pressure. Set the tourniquet band material around the tourniquet site and tie the band as tight as possible with a half knot. Position the rigid object on top of the half knot and tie a full knot over the rigid object. Twist the rigid object either clockwise or counter-clockwise until the tourniquet is tight and bleeding has stopped (absence of distal pulse). Secure the rigid object to prevent the tourniquet from loosening. Mark the victim on the forehead by writing a "T" to alert medical personnel that a tourniquet has been applied, and note the time and date. Once the tourniquet is in place, do not remove or loosen! In some cases you may need to apply a second tourniquet; apply it directly next to the first tourniquet. Only medical staff should remove or loosen a tourniquet.

UNIT 3 | TRAUMA-RELATED ISSUES

LESSON 3 | Puncture Wounds

LESSON GOAL: At the end of this lesson, you will know how to give emergency care for puncture wounds.

Puncture wounds are usually the result of an object, blunt or sharp, penetrating the skin's soft tissue. A penetrating or puncture wound's severity depends on the wound's location, the penetrating object's size, and the forces that created the injury.

Impaled Object

An impaled object is an object that punctures the soft tissue and stays in place. An object impaled in the head, neck, or thorax (chest) needs immediate care followed by prompt EMS transport.

To treat a patient for an impaled object:

1. Use BSI and appropriate PPE.
2. Do not remove the object from the wound unless it obstructs the patient's airway.
3. Expose the entire injury site. Cut away clothing around the impaled object to:
 - a. determine if the patient has other wounds
 - b. expose enough skin to apply the stabilizing dressing
4. Apply proper dressing to prevent further contamination of the injury.
5. Secure the object. Surround it with stabilizing dressing or any material that prevents the object from moving. You might use, for example, two pillows, rolls of gauze, or a paper cup.
6. Control bleeding. Only apply enough pressure to the wound site to stop bleeding. Be careful not to put pressure on the embedded object.
7. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
8. Be prepared to perform CPR and use an AED if available.

OBJECTIVES

FR016.2. Identify when to remove an impaled object.

FR016.3. Identify how to apply a stabilizing dressing around an impaled object.

FR016.1. Identify treatment for an impaled object.

FR017.2. Identify the need to clean a wound if appropriate.

FR017.1. Identify treatment to control bleeding from a human or animal bite.

FR017.5. Identify the type of bite and possible need to call a specialized unit.

FR018.2. Identify complications resulting from a gunshot wound.

FR018.3. Identify the need to expose the entire injury site.

FR018.1. Identify treatment for a gunshot wound.

Human or Animal Bites

A bite can be a serious body injury. The wound can become infected and cause severe discomfort. In rare instances, limbs are lost.

To treat a patient for a human or animal bite:

1. Use BSI and appropriate PPE.
2. Wash the wound site with warm soapy water.
 - Human or animal bites are more likely to become infected than other wounds. With human bites, be aware of the possibility of bloodborne pathogens. If you receive a human bite, follow agency policies and procedures for reporting.
3. Look for embedded teeth. If you find one, treat it as an impaled object.
4. Dry the wound, dress the injury, and bandage.
5. Apply only enough pressure to control bleeding.
6. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
7. Be prepared to perform CPR and use an AED if available.

If you are treating an animal bite, make every attempt to find the animal. It may carry rabies or other infections. Follow local protocol and department policy when contacting specialized units, such as animal control. You must notify the proper agency of all dog bites.

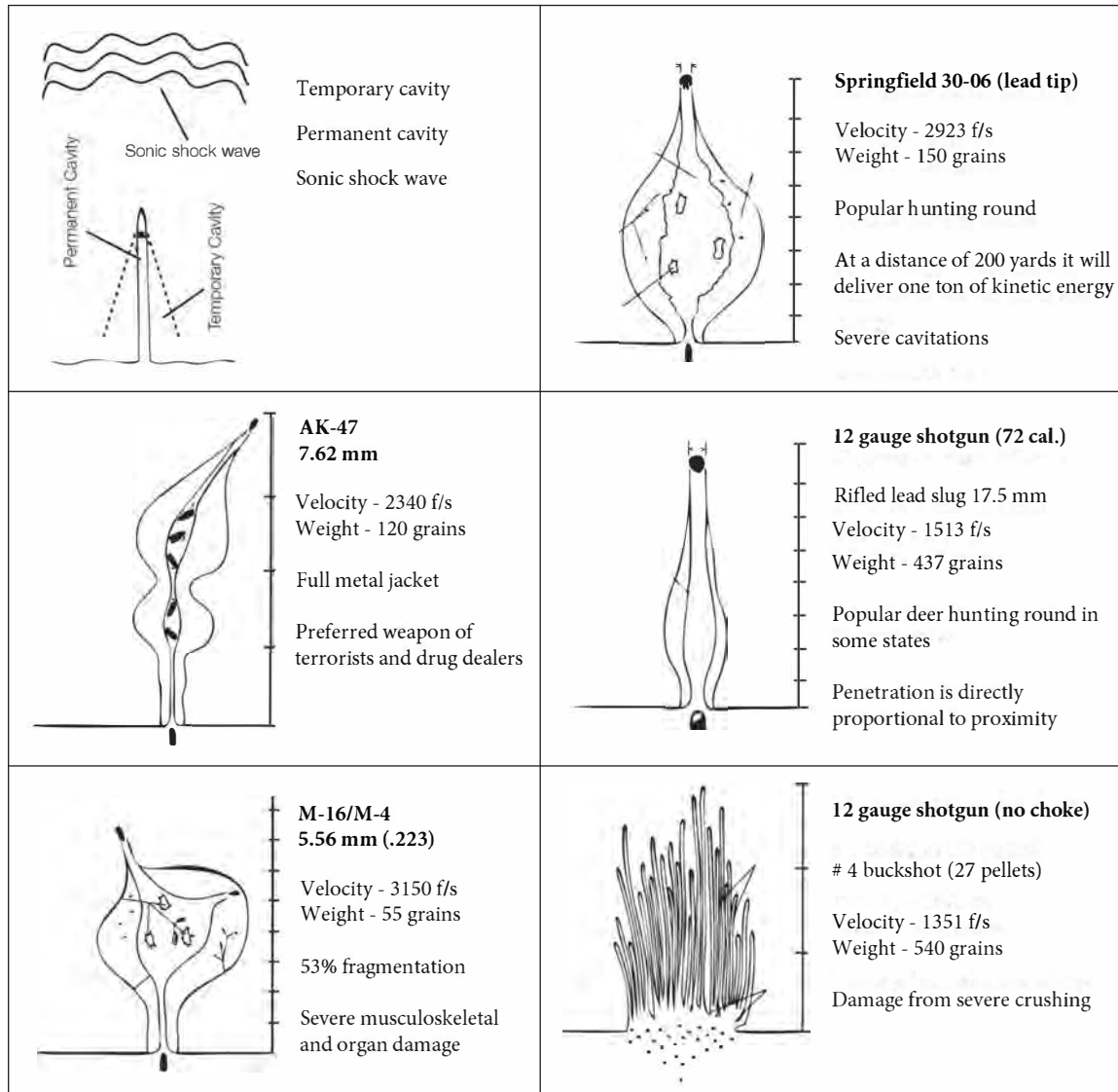
Gunshot Wounds

Gunshot wounds can cause serious injury by fragmenting, penetrating, vibrating, and otherwise damaging internal organs. They can cause cavitation, which is the space left by tissue that is destroyed. Complications from gunpowder, clothing, and bacteria drawn into the wound can cause infection. The damage from the wound may extend farther and deeper than just the exposed area. A small entry wound that causes little bleeding might mask severe internal injuries. Exit wounds are sometimes larger than entry wounds. Depending on the location, a gunshot wound may cause spinal cord injury. For any gunshot wound not in an extremity, consider spinal immobilization.

To treat a gunshot wound:

1. Use BSI and appropriate PPE.
2. Expose the entire injury site so you can look for the entry wound and possible exit wound.
3. Dress the wound.
4. Apply enough pressure to stop bleeding.
5. Bandage the dressing.

6. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
7. Be prepared to perform CPR and use an AED if available.



Gunshot wounds

Figure 2-5

UNIT 3 | TRAUMA-RELATED ISSUES

LESSON 4 | Spinal, Head, and Neck Injuries

OBJECTIVES

FR019.1. Identify treatment to control bleeding of head, face, and scalp wounds.

FR020.1. Identify treatment to control bleeding of a patient with a nosebleed.

FR021.2. Identify types of eye injuries.

FR021.1. Identify treatment for various types of eye injuries.

FR022.2. Identify important structures of the neck.

FR022.1. Identify treatment for a large open neck wound.

LESSON GOAL: At the end of this lesson, you will know emergency care for spinal, head, and neck injuries, which may be life threatening.

Spinal Injuries

If the patient has suffered a significant trauma, complains of neck or back pain, cannot move fingers or toes, or feels numbness or tingling, stabilize the head and neck to prevent movement and further damage. Injury to the head, neck, shoulders, back, and abdomen may cause injury to the spinal cord. A spinal injury can permanently interrupt the relay of messages from the brain to the body, eliminating a person's ability to move, feel, or even breathe. Difficult to identify, spinal injuries present some of these symptoms:

- constant or intermittent pain or tenderness in the spinal column
- weakness in the legs with or without movement
- respiratory distress (Constantly monitor the patient's airway and breathing.)
- injury to the head, neck, shoulders, back, and abdomen
- tingling, numbness, loss of sensation in upper or lower extremities
- obvious deformity of the spine (rarely seen)
- loss of bladder or bowel control
- persistent erection in males

If you suspect the patient has a spinal injury, your main objective is to protect the spine from further injury. To do so, follow these steps:

1. Size up the scene and perform an initial assessment.
2. Stabilize the patient's head and neck.
3. Conduct a physical assessment.
4. Keep the patient in position until EMS completely immobilizes the patient.
5. Maintain ABCs and treat for shock.

Head, Face, and Scalp Wounds

Head and neck injuries are among the most serious emergencies. They can impair the upper airway, causing breathing difficulties. Impacts to the head and neck can also cause hidden fractures. If a head or neck injury is obvious or suspected, or if a trauma patient is unresponsive, immediately stabilize the head and neck.

Scalp wounds may bleed profusely but are usually easy to control with direct pressure. Remember to protect yourself from blood by using BSI and appropriate PPE. The location and severity of the wound determines whether you apply direct pressure or loosely dress the wound. Never apply direct pressure to a head wound if the patient has an obvious or depressed skull fracture. You might drive fragments of bone into brain tissue, causing further damage.

For lacerations to the head, face, or scalp, use a dressing to apply direct pressure to the site. Be careful not to obstruct the airway and to allow for normal breathing. If fluid drains from the ears or the head wound, loosely cover the opening with a dressing. Trauma to the mouth can cause a lot of bleeding. Your main concern is establishing and maintaining an open airway. If teeth were knocked from the patient's mouth, wrap them in moist dressing and transport them with the patient. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.

Nosebleeds

Nosebleeds happen often in various situations. They tend to be more annoying than serious. With enough blood loss, though, a nosebleed can cause shock. It can also be a serious threat to an unresponsive patient's airway. Because nosebleeds can bleed profusely, remember to protect yourself by using BSI and appropriate PPE.

In most cases, treat a nosebleed by keeping the patient still and calm. Instruct the patient to sit down and lean forward but not so far that the head is below the heart. If other injuries make sitting impossible and the patient is lying down, elevate the head and shoulders. Instruct the patient not to blow their nose for several hours. Doing so can dislodge naturally clotted blood.

To control bleeding, apply pressure to the bridge of the nose (if it is not broken) and apply an ice pack. However, do not apply pressure if you suspect trauma to the nose. Do not pack anything into the nose. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.

Eye Trauma

Types of eye injuries can be eyelid injuries, chemical burns, objects impaled in the eye, and an extruded eyeball. When treating a patient for an eye injury, identify the injury's cause, when it occurred, whether it affects both eyes, and when the patient first noticed symptoms. Encourage the patient not to rub the eye. This can cause more damage to the eyeball. Carefully and separately, examine each eye. Because injuries around the eye area can bleed profusely, protect yourself by using BSI and appropriate PPE.

Treating eye injuries varies according to the nature of the injury. If an object entered the eye, such as dirt or sand, remove it by flushing the eye with water.

SECTION VOCABULARY*occlusive*

These injuries may need further medical attention:

- Eyelid injuries are trauma to the eyelid itself. Treatment can be as simple as gently applying a patch, preferably rigid, to the affected eye. This limits eye movement, which can cause further injury. Control bleeding with light pressure as long as the injury does not affect the eyeball itself.
- Chemical burn injuries to the eye require immediate attention. Flush the affected eye immediately with water to dilute the chemical and deter further damage to the eyeball. The water does not need to be sterile, but it must be clean. The chemical can continue to burn tissue in the eye, even after dilution. Position the patient's head so that the unaffected eye is above the affected eye. Flush the injured eye from its inner portion to its outer portion for 20 minutes. This helps prevent transferring the chemical to the uninjured eye (cross contamination). Hold the eyelid open while flushing. Be aware of where the runoff goes.
- Do not remove an impaled object or apply pressure to the eyeball or the object. Cover the unaffected eye to limit eye movement. As with other impaled objects, if the patient must move, stabilize the object.
- Trauma to the eye socket can cause the eyeball to come out of (extrude from) its socket. Do not try to restore the eyeball to the socket. Cover it with a moist dressing, and apply a bandage over the affected eye.
- Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
- Be prepared to perform CPR and use an AED if available.

Neck Injuries

The neck contains major blood vessels and the windpipe (trachea). Neck wounds can bleed profusely. Air entering a blood vessel in the neck can cause stroke, heart attack, or pulmonary embolism (clogged artery in the lungs). For deep lacerations, apply an *occlusive* (airtight) dressing. When assessing for a neck wound, look for obvious deformity of the neck, open wounds, swelling, and spinal injury.

To treat an open neck wound:

1. Use BSI and appropriate PPE.
2. Cover the wound with dressing and a bandage.
 - Do not wrap the bandage around the neck.
3. Apply only enough pressure to control bleeding while maintaining an open airway and cervical stabilization.
4. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
5. Be prepared to perform CPR and use an AED if available.

UNIT 3 | TRAUMA-RELATED ISSUES

LESSON 5 | Chest, Abdominal, and Genital Injuries

LESSON GOAL: At the end of this lesson, you will know emergency care of a chest injury, evisceration, and genital wounds.

Chest Injuries

A puncture wound in the chest area can affect the patient's breathing. A patient with this life-threatening injury needs immediate emergency care, followed by prompt EMS transport to a hospital.

A **closed chest injury** results from blunt trauma to the chest area. It damages internal organs and can cause internal bleeding. A **flail chest** is a type of closed chest injury. It occurs when two or more adjacent ribs are fractured in two or more places and become free floating.

An **open chest injury** occurs when penetration opens the chest area.

A **sucking chest injury** is a type of open chest injury in which air and blood escape into the area surrounding the lungs, creating a change in the pressure in the chest cavity. This can create breathing difficulties, because it will not allow the lungs to expand and contract properly. You may hear a sucking noise or the injury may bubble as air moves through the open injury.

To treat a chest injury:

1. Use BSI and appropriate PPE.
2. If it is an open chest injury, apply an occlusive (airtight) dressing to the injury.
3. If the patient has difficulty breathing, get them in a sitting or semi-sitting position. If the patient must lie down, position them on the injured side. Be aware that the patient may have neck and spinal injuries. If the patient is already seated, do not elevate their feet.
4. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
5. Be prepared to perform CPR and use an AED if available.

Evisceration

An **abdominal evisceration** is an open wound where the organs protrude from the abdominal cavity. The wound's appearance may alarm you and command your attention. Do not get tunnel vision! Patients with an evisceration may be unable to breathe on

OBJECTIVES

FR015.1. Identify factors that affect the severity of a chest wound.

FR015.2. Identify treatment for a closed chest injury.

FR015.3. Identify treatment for an open chest injury.

FR024.1. Identify treatment for an evisceration.

FR025.1. Identify treatment for a genital wound.

their own. Maintaining an open airway is your first priority. Care of the exposed organs is always secondary to ensuring that the patient can breathe. Large abdominal eviscerations may produce large amounts of blood and body fluids. Additional PPE, such as a gown (raincoat) and eye protection, should be worn if available. If the patient can breathe adequately and has no other life-threatening conditions, provide emergency care.

To treat an abdominal evisceration:

1. Use BSI and appropriate PPE.
2. Do not touch or reinsert the exposed organ(s). The patient is already at risk for infection.
 - Touching the organ(s) increases the potential for infection.
 - Repositioning the organ can stop blood flow.
3. Cover the wound with a moist dressing, and place an occlusive (airtight) dressing over the moist dressing. This prevents further contamination and moisture loss. A dry dressing pulls fluid from the organ that you need to keep moist. Drying out the organ can cause a loss of function.
4. Place the patient in a position of comfort, most often on their back with the legs elevated and bent as if they were sitting in a chair. This helps decrease the chance of cutting off circulation to the organs.
5. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
6. Be prepared to perform CPR and use an AED if available.

Genital Wounds

Treating a genital injury is similar to treating other soft tissue injuries. Genital wounds may bleed profusely. If bleeding is present, use direct pressure to stop active bleeding and a cold pack to control bleeding and pain. Prevent further contamination by covering the injury site with the appropriate dressing.

To treat a female patient:

1. Use BSI and appropriate PPE.
2. Use a trauma dressing or sanitary pad to apply direct pressure and a cold pack to the area.
 - Never insert or pack anything into the vagina.
3. If there is an impaled object, leave it in place.
4. Do not discard blood-soaked materials and clothing, which may be used to determine the amount of blood lost or may be used as evidence.
5. Do not clean or allow the patient to clean the area.

6. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
7. Be prepared to perform CPR and use an AED if available.

To treat a male patient:

1. Use BSI and appropriate PPE.
2. Use a trauma dressing to apply direct pressure and a cold pack to the area.
3. If there is an impaled object, leave it in place.
4. If any part of the genitals has been amputated, apply direct pressure to the wound. Try to find the amputated part. Wrap it in a dressing, place it in a plastic bag and keep it cool, but do not place it directly on ice.
5. For scrotal injuries, apply a cold pack.
6. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
7. Be prepared to perform CPR and use an AED if available.

SECTION VOCABULARY

abdominal evisceration

closed chest injury

flail chest

open chest injury

sucking chest injury

UNIT 3 | TRAUMA-RELATED ISSUES

LESSON 6 | Extremity Injuries

OBJECTIVES

- FR026.4.** Identify classifications of broken bone injuries.
- FR026.5.** Identify the mechanisms of injury for a broken bone.
- FR026.6.** Assess for open wound, painful swelling, deformity, and bleeding for a broken bone injury.
- FR026.3.** Identify treatment for a broken bone.
- FR026.9.** Identify treatment for a dislocation, sprain, and strain.
- FR026.1.** Splint broken bones in a lower extremity.
- FR026.2.** Splint broken bones in an upper extremity.
- FR027.4.** Identify procedures for treatment of an amputated body part.
- FR027.1.** Identify treatment of a patient with an amputation.

LESSON GOAL: At the end of this lesson, you will know emergency medical care for injuries to the extremities including broken bones, how to splint, and how to stabilize injuries to upper and lower extremities.

Classifications of Fractured Bones

The medical term for a broken bone is *fracture*.

- **open fracture**—The skin at the injury site is broken, and the bone may protrude through the skin. If lacerations appear near the fractured bone, treat the break as an open fracture because you do not know if the bone penetrated the skin.
- **closed fracture**—The skin at the injury site remains intact.

Remember, treating life-threatening conditions takes precedence over treating fractured bones: life over limb.

Mechanism of Injury

Several types of force break a bone.

- Direct force causes injury at the point of impact. Force may be delivered from a blow to the head with a baseball bat or as a driver's chest hits the steering wheel.
- Indirect force causes injury past the point of impact. The break may occur when a falling person extends the arms to break the fall and breaks their elbows.
- Twisting force causes injury when one part of a limb remains stationary, while the other twists. The result can be a spiral fracture, a bone break often caused by a sports injury or physical abuse.

Assess Before and After Splinting

1. Use BSI and appropriate PPE.
2. Check for DOTS.

3. Check for pulse, motor, and sensory function.
4. Ask the patient if they feel pain in the injured area.
5. Compare the injured extremity to the uninjured extremity.
6. Look for deformities.

Treatment—To prevent movement of an injured extremity:

1. Use BSI and appropriate PPE.
2. If the bone is exposed,
 - Cover the exposed bone with dressing.
 - Splint the extremity in the position found.

If you suspect:

- a fractured rib: watch for both sides of the chest to rise and fall equally as the patient breathes. Unequal rise and fall may indicate a flail chest or collapsed lung.
 - a fractured skull: assess by gently palpating the head to find deformity.
 - a fractured neck, back, or pelvis: assess for pain, movement, and sensation in the feet. Unless there is a life-threatening emergency, perform spinal immobilization, and wait for EMS to move the patient.
 - an ankle injury and the patient is wearing boots: leave the boot in place, and splint around it. The boot provides support; removing it can cause more ankle damage.
 - a femur (thighbone) fracture: it may be life threatening due to blood loss, and the patient is probably in extreme pain. The injured leg is usually shorter than the uninjured leg and may have rotated. The thigh may be very swollen. Treating a mid-shaft femur fracture involves applying tension to the leg by grasping the calf muscle just below the knee and leaning back until the patient feels less pain. Discontinue tension if you meet resistance or the patient complains of more pain. Maintain tension until EMS arrives or the patient's medical condition dictates other priorities.
3. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
 4. Be prepared to perform CPR and use an AED if available.

Dislocations, Sprains, and Strains

A **dislocation** occurs when the end of a bone comes out of its socket at the joint. Treatment for dislocations, sprains, strains, and fractured bones is the same. Do not try to put the dislocated bone back into place because major blood vessels and nerves can lie near the joint. Further injury may occur if you do this improperly. Treat sprains and strains like fractured bones.

Splint, Sling, and Swath

When EMS is delayed, or under certain circumstances, it may be necessary to splint, sling, or swath an extremity.

1. Use BSI and appropriate PPE.
2. If possible, remove jewelry from the patient's injured extremity before splinting or have the patient or a family member remove the jewelry. Document what happens to the jewelry.
3. To splint properly, immobilize the joints above and below the injury.
 - Various materials are appropriate for splinting, such as commercial splints, magazines, and boards.
4. If you feel a distal pulse, splint the extremity as you find it.
5. To support an injured upper extremity, splint first, then sling and swath.
 - A sling should support the entire arm and elevate the hand to decrease swelling.
 - A swath supports the arm, taking pressure off the collarbone. It prevents the arm from moving away from the body.
6. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
7. Be prepared to perform CPR and use an AED if available.

Amputation

There are two types of amputations: complete and incomplete. Amputations are visually disturbing injuries accompanied by a large amount of bleeding.

To treat an amputation:

1. Use BSI and appropriate PPE. If there is arterial bleeding or spurting blood, you may need eye protection.
2. With a gloved hand and a dressing, apply pressure directly to the wound.
3. If bleeding continues, apply more dressing/hemostatic gauzes, and continue direct pressure.
4. Apply tourniquet only if dressings and direct pressure are ineffective.
5. Do not delay the patient's treatment or transport to look for the amputated part. However, when you do find the amputated part
 - a. Wrap it in dressing.
 - b. In the case of multiple amputations, wrap each part separately.
 - c. Place it in a plastic bag.
 - d. Keep it cool, but do not place it directly on ice.

6. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
7. Be prepared to perform CPR and use an AED if available.

SECTION VOCABULARY*closed fracture**dislocation**fracture**open fracture*

UNIT 3 | TRAUMA-RELATED ISSUES

LESSON 7 | Burns

OBJECTIVES

- FR023.2.** Identify the seriousness of a burn as it relates to depth, location, and extent of the burn.
- FR023.1.C.** Identify special considerations for elderly and small patients who have burns.
- FR023.1.E.** Identify treatment for a patient with thermal burns.
- FR023.1.F.** Identify treatment for a patient with chemical burns.
- FR023.1.G.** Identify treatment for a patient with electrical burns.
- FR023.1.D.** Identify treatment for a patient with inhalation burns.

LESSON GOAL: At the end of this lesson, you will know emergency medical care for burns, how to prevent further infection, and how to monitor the patient for shock.

Classified by Depth

Burn injuries are classified by depth. Superficial burns are the least serious, partial thickness burns involve more skin layers and are more serious, and full thickness burns are the most serious.

- **Superficial** (first-degree) **burns** damage the first layer of skin, which becomes red and feels very painful.
- **Partial thickness** (second-degree) **burns** damage the first two skin layers, which blister and feel very painful. Do not puncture blisters, as the open wound is vulnerable to infection; try to keep the blisters intact.
- **Full thickness** (third-degree) **burns** damage all skin layers and affect muscles and nerves. Skin looks waxy, white, or charred. Because of nerve damage at the site of a full thickness burn, the patient may feel no pain. If a patient with a full thickness burn does feel pain, the pain originates from the area around the full thickness burn, which may be a partial thickness burn.

Burn Location

In addition to the depth and type of burn, the location of the burn is also a concern. Consider burns on the face, hands, feet, and genitals as critical.

A burn on the chest may limit chest expansion, resulting in breathing difficulty. If the patient's face is burned, they may also have suffered an **inhalation burn** (a burn to any part of the airway); swelling may obstruct the airway. Signs are singed facial hair, burning around the mouth and nose, soot on the face, breathing difficulty, and coughing.

The major long-term concern about burns is preventing infection. Any skin opening increases the chance of infection. The possibility of infection increases with the size of the burn area. Intact skin helps us maintain normal body temperature. If large areas of skin are burned, the body loses its ability to shiver and cannot maintain its normal temperature. This condition can put a patient into shock.

Children and the elderly are of special concern. A small burn on a child may cover a significant amount of skin in proportion to total body area. The effects of aging make the elderly more susceptible to serious injury, and they often have medical conditions that complicate the process of healing a burn.

To treat a burn patient:

1. Use BSI and appropriate PPE. Be aware of scene safety and the danger of wearing a polyester uniform in a fire situation.
2. Determine the burn type so you can choose the proper technique to stop the burning.
 - For thermal burns, separate the patient from the heat source, apply water, or if the patient is on fire, advise them to stop, drop, and roll.
 - For chemical burns, brush off any dry residue, and then irrigate the burn with water for at least 20 minutes. (Be careful! Some chemicals, such as dry lime, react to water.)
 - For electrical burns, personal safety is the major concern. Make sure the scene is safe before trying to treat the patient. Ask the power company to disconnect the line if it is still live, or locate a breaker box and throw the main breaker, as appropriate. Ask someone to stay at the breaker box to make sure the power remains off while you provide treatment. If lightning struck the patient, it is safe to touch the patient and move them to a safe location before providing emergency medical care. Be aware that electrocution sometimes causes spinal injury or cardiac arrest. Electricity travels the path of least resistance, which, in this case, would be the nerves and blood vessels. Therefore, it is important to check for entrance and exit wounds to determine if exposure affected major organs.
3. Remove any clothing necessary to expose the burn. Do not pull off clothing that is stuck to the wound.
 - If the patient has a chemical burn, remove all clothing, contact lenses, and jewelry to make sure that no chemicals are trapped under them.
 - If the patient has an inhalation burn, allow them to assume a comfortable position. Keeping the patient's airway open is always a priority.
4. For superficial burns, place clean, cool water on the area to reduce the pain, and then cover with a dry sterile dressing.
 - For partial thickness burns, be careful not to break any blisters, place clean, cool water on the area to reduce the pain (only if the blisters are intact), and then cover with a dry sterile dressing.
 - For full thickness burns, cut any clothing away from the burn area; if there is any clothing stuck in the burn, leave it there. Cover with a dry sterile dressing.
 - Do not apply creams or salves (such as, Aloe Vera, Vaseline, or butter) to the wound.
 - Do not bandage burned fingers together.
 - Do not apply ice directly to the burn.
5. Perform ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
6. Be prepared to perform CPR and use an AED if available.

SECTION VOCABULARY

full thickness burn

inhalation burn

partial thickness burn

superficial burn

UNIT 4 | MEDICAL ISSUES

LESSON 1 | Assisting in Childbirth

OBJECTIVES

FR028.1. Identify the anatomical structures of a patient who needs help in childbirth.

FR028.2.A. Identify the stages of labor of a patient who needs help in childbirth.

FR028.3. Identify the steps in the pre-delivery preparation of the mother.

FR028.4. Identify the steps to assist in the delivery of a newborn.

FR028.4.B. Identify the steps in caring for a newborn immediately after the delivery.

FR028.4.C. Identify the steps in the delivery of the placenta immediately after childbirth.

FR028.5. Identify post-delivery care of the mother who needs help in childbirth.

FR028.7. Identify treatment for a patient who suffers from complications of childbirth.

LESSON GOAL: At the end of this lesson, you will know the medical issues of childbirth.

A normal and natural life process, childbirth occurs every day. Most often, it takes place without complication in a hospital or home setting, but occasionally, complications arise with the delivery.

The Anatomy of Childbirth

While most pregnancies are routine and end in a successful delivery in a medical setting, in some cases, the delivery process begins and progresses so quickly the mother has no time to reach the hospital. By performing patient assessment and taking a few simple steps, you can assist in childbirth. To help deliver a baby, you must understand an expectant mother's anatomy. The following anatomical structures are present in childbirth:

- **uterus**—organ that holds the developing fetus
- **cervix**—neck of the uterus; contains a mucus plug
- **placenta**—disk-shaped inner lining of the uterus; provides nourishment and oxygen to the developing fetus
- **birth canal**—passage the fetus is pushed through during delivery
- **umbilical cord**—cord connecting the fetus and the mother; transports nourishment to the fetus
- **amniotic sac**—bag of fluid surrounding the fetus

Stages of Labor

The final phase of pregnancy, **labor** begins the birthing process. In this very intimate procedure, patient privacy is important. Explain what you will do before you do it. Labor consists of contractions of the uterine wall that force the fetus and placenta into the outside world. Normal labor occurs in three stages:

1. **dilation** (preparation)—The first stage begins with the first contraction and continues until the fetus enters the birth canal. Dilation is the opening of the cervix. During this stage, the amniotic sac may rupture. As a result, fluid gushes from the vagina. When this occurs the patient may say something like, “My water broke.”
2. **expulsion** (delivery of the baby)—In the second stage, the fetus moves through the birth canal and is born. As the fetus moves down the birth canal, the mother experiences considerable pressure and pain. She may have an uncontrollable urge to push down. Soon the fetus’s head crowns, or becomes visible, as it emerges from the vagina. The shoulders and the rest of the body follow.
3. **placental delivery**—In the third stage, the placenta separates from the uterine wall and moves through the birth canal for delivery. This stage usually occurs within 30 minutes of the baby’s delivery.

Assessing for Labor

When called to assist a woman in labor, size up the scene and perform an initial assessment. Ask questions that will help you plan your assistance in delivery, such as:

- When is your due date?
- Is this a multiple pregnancy?
- Has your water broken? What color was it?
- How many children have you had?
- Do you expect complications in this delivery?

Preparing for Delivery

Never delay or restrain delivery in any way. To prepare for delivery, perform these steps:

1. Position the patient on her back with her knees bent, elevate either hip, and spread legs apart.
2. If a blanket and towels are available,
 - a. Cover the patient with a blanket.
 - b. Place clean towels under the patient’s buttocks to elevate the hips slightly.
3. Look to see if the fetus is crowning. If so, delivery is imminent.

Large amounts of body fluids are present during childbirth. Use BSI and all available PPE, such as protective gloves, face shield, raincoat, and so on.

Assisting With Delivery

Do not attempt to pull the baby out at any time during delivery.

1. As crowning occurs, place a gloved hand on the top of the fetus's head. Apply light pressure to prevent an explosive delivery. This helps prevent tearing of the vagina and injury to the baby.
2. As the baby emerges, support its head.
3. If the amniotic sac does not break and the baby's head starts to deliver,
 - a. Tear it open with your fingers.
 - b. Push it away from the baby's nose and mouth.
4. Check to see if the umbilical cord is looped around the baby's neck. If so,
 - a. Encourage the mother not to push.
 - b. Try to slip the cord over the baby's head.
 - Never pull on the umbilical cord.

The section on Complications During Childbirth has more information on what to do if you cannot get the umbilical cord over the baby's head.
5. Continue to support the baby's head.
6. Be ready to catch the baby in a clean towel, grasping the baby's feet as they are delivered.
 - Remember, the baby will be wet and slippery.
 - Never pick up the baby by the feet to slap the buttocks.
7. Keep the baby on the same level as the mother.
8. Be sure to record the time of the delivery.
9. Arrange immediate transport to a medical facility.
10. Monitor and treat for shock.
11. Control bleeding.
12. Save all dressings and expelled tissue.

Care of the Newborn

After the newborn delivers:

1. Hold the baby in a face-down position or on its side.
2. Immediately clear the baby's nose and mouth using your fingers or the edge of the blanket.
 - The baby should start to cry immediately upon delivery.

If the baby is not breathing:

1. Rub the baby's back with a dry towel.
2. Flick the soles of the baby's feet to stimulate breathing.
 - If the baby does not begin to breathe on its own within the first minute after birth, begin rescue breathing.
 - If the baby has no pulse, begin infant CPR.

After breathing begins:

1. Keep the baby warm.
 - Wrap the baby in dry towels or blankets.
 - Cover the top of the baby's head.
 - Newborns have difficulty maintaining their body temperature, so keeping the baby warm is very important.
2. Hand the baby to the mother.
3. Encourage the mother to begin nursing the newborn.
 - Nursing stimulates contraction of the uterus to deliver the placenta and helps slow bleeding.

In a normal delivery, you do not need to cut the umbilical cord. However, you must clamp or tie it. Keep the newborn warm and wait until EMS personnel arrive.

Delivery of the Placenta

Never pull on the umbilical cord to deliver the placenta. The placenta usually delivers within 10 to 30 minutes after the baby's delivery.

After the placenta delivers:

1. Place it in a clean towel or container.
2. Place the placenta at the same level as the baby to help prevent the baby's blood from flowing back into the placenta.
 - Bleeding usually decreases after the placenta delivers.

3. Place a sanitary pad or towel over the vagina.
 - Do not insert anything in the vagina.
4. Encourage the mother to massage her uterus to help stop the bleeding.
5. Continue your ongoing assessment of both the mother and newborn.
6. Keep both warm.
7. Every few minutes reassess the mother and newborn for blood loss.

Complications During Childbirth

Prolapsed umbilical cord—In some deliveries, the umbilical cord comes out of the vagina before the baby's birth. The fetus's head compresses the cord against the birth canal. This cuts off the fetus's supply of oxygenated blood. If you notice a prolapsed cord, arrange for rapid transport and instruct the expectant mother to assume a knee-chest position.

Umbilical cord around the neck—If the umbilical cord wraps around the baby's neck and you cannot remove the cord:

1. Encourage the mother to continue breathing and stop pushing.
2. If necessary, place clamps or ties about 3 inches apart on the cord and carefully cut between them.
3. Remove the cord from the neck.
4. Follow the steps of a normal delivery.

Breech birth—A breech birth occurs when the fetus's feet or buttocks present down the birth canal first. If this occurs:

1. Arrange for prompt transport to a medical center.
2. Position and prepare the mother for delivery.
3. Support the fetus's legs and body as they deliver; the head will follow.
 - Never try to pull the baby from the vagina by the legs or trunk.

If the head does not deliver within three minutes:

1. Keep the baby's airway open by forming a V with the fingers of your gloved hand.
2. Turn your palm toward the baby's face.
3. Form an airway by pushing the baby's face away from the birth canal until the head delivers.

Limb presentation—A normal delivery is not possible if the fetus's leg or arm appears first. A physician needs to deliver this baby. Rapid transport to a medical facility is crucial.

Excessive bleeding after delivery—A mother loses about one or two cups of blood during normal childbirth. If the mother bleeds severely:

1. Place trauma dressings or sanitary pads or cold packs at the vaginal opening while elevating her legs and hips.
2. Treat for shock.
3. Arrange for rapid transport to a medical facility.

If the area between the mother's vagina and anus is torn and bleeding, treat it as you would an open wound.

1. Apply direct pressure using trauma dressings, sanitary pads, or gauze dressings.
2. Do not throw away blood-soaked pads; transport them with the mother.

Stillborn delivery—A baby who dies long before delivery generally has an unpleasant odor and exhibits no signs of life. Give special consideration to the stillborn baby and its mother:

1. Do not resuscitate.
2. Turn your attention to the mother, and provide physical and psychological support.
3. Carefully wrap the stillborn infant in a blanket.

Multiple births—Deliver multiple babies in the same manner as single babies. The mother will have a separate set of contractions for each baby. Each baby may also have a separate placenta, although this is not always the case. The second baby is usually born within 45 minutes. Do not worry: prepare to repeat the procedures you just completed for the first birth. Call for additional personnel to assist with the first baby born while you deliver the second.

SECTION VOCABULARY

amniotic sac

birth canal

cervix

dilation

expulsion

labor

placenta

placental delivery

umbilical cord

uterus

UNIT 4 | MEDICAL ISSUES

LESSON 2 | Asthma, Heart Attack, and Stroke

OBJECTIVES

FR041.2. Identify signs and symptoms of a severe asthma attack.

FR041.1. Identify treatment for a severe asthma attack.

FR043.2. Identify signs and symptoms of a stroke.

FR043.1. Identify treatment for a stroke.

FR042.2. Identify signs and symptoms of a heart attack.

FR042.1. Identify treatment for a heart attack.

LESSON GOAL: At the end of this lesson, you will know first aid for asthma, heart attack, and stroke.

Asthma

Asthma results from the narrowing of airway passages, which causes breathing difficulties. Signs and symptoms of asthma are breathing difficulty while exhaling, rapid breathing, cyanosis, and a wheezing or whistling sound. The patient may exhibit tense, frightened, or nervous behavior.

To treat a severe asthma attack:

1. Use BSI and appropriate PPE.
2. Position the patient for comfort, preferably seated.
3. Ask the patient if there is an accessible inhaler and encourage them to use it.
4. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
5. Be prepared to perform CPR and use an AED if available.

Stroke

A *stroke* is damage to part of the brain due to rupture or blockage of a blood vessel. Time is of the essence for transportation and professional treatment. Signs and symptoms of a stroke include:

- numbness/paralysis of extremities, typically on one side
- confusion or dizziness
- difficulty speaking or slurred speech
- difficulty with vision
- headache
- seizures
- diminished consciousness/unconsciousness

- difficulty breathing
- facial drooping

To treat a stroke:

1. Use BSI and appropriate PPE.
2. Notify EMS of a possible stroke patient and arrange immediate transport to a medical facility. Note the time of the onset of signs and symptoms.
3. Position the patient for comfort.
4. Continue to monitor the patient for life-threatening conditions until EMS arrives. Maintain ABCs, and treat for shock.
5. Be prepared to perform CPR and use an AED if available.

Heart Attacks

A **heart attack** is caused by oxygen deprivation to part of the heart, typically from a blocked blood vessel. This may lead to cardiac arrest; be prepared to administer CPR. Time is of the essence for transportation and professional treatment. Possible signs and symptoms include the following:

- chest pain (may radiate to other parts of the body such as the arm, jaw, neck, or stomach area)
- difficulty breathing
- cool, pale, moist skin/ profuse sweating
- nausea/vomiting
- dizziness, light headed, or fainting
- irregular pulse

A female also may experience:

- upper back pain, shoulder pain
- pressure in the center of the chest
- unusual fatigue, such as feeling as if she had just run a marathon

To treat a heart attack:

1. Use BSI and appropriate PPE.
2. Notify EMS of a possible heart attack patient and arrange immediate transport to a medical facility.

SECTION VOCABULARY

asthma

heart attack

stroke

3. Position the patient for comfort. Have the patient stop all activity.
4. Assist the patient in taking any prescribed medication for this condition. If the patient shows signs of shock or a weak or absent radial pulse, certain medications, such as nitroglycerin, should be avoided; in these instances, leave assistance with medication to trained medical personnel.
5. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
6. Be prepared to perform CPR and use an AED if available.

UNIT 4 | MEDICAL ISSUES

LESSON 3 | Diabetes and Seizures

LESSON GOAL: At the end of this lesson, you will know how to recognize and properly treat diabetic incidents and seizures.

Diabetes

Diabetes is a disease in which the body does not produce or properly use insulin. *Insulin* is a hormone needed to convert sugar, starches, and other food into energy needed for daily life. When blood sugar is too low or too high, the body reacts and a diabetic emergency occurs. There are two types of diabetes: Type I—insulin dependent, juvenile diabetes and Type II—diabetes that can be controlled by diet or medication.

Signs and symptoms of a diabetic emergency can include:

- intoxicated appearance (may mimic drunken behavior or drug overdose), including staggering or slurred speech; do not make assumptions and investigate further before making an arrest
- altered mental state, including dizziness, irritability, drowsiness, and confusion
- sweet, fruity, or acetone-smelling breath that you might mistake for the odor of alcohol
- irregular breathing
- rapid or weak pulse
- flushed, dry, warm or moist, sweaty, cool skin
- seizures

Treatment for Diabetic Emergencies

When assessing a conscious patient, ask if they have a medical condition. If the patient does say they have diabetes, inquire further. Ask if the person has eaten or taken medication or insulin. Also, look for medical alert tags or other obvious signs, such as syringes, insulin, insulin pumps, or blood sugar/glucose monitors.

1. Use BSI and appropriate PPE.
2. Give or encourage the patient to consume some honey or sugar dissolved in a glass of water, or a drink rich in sugar, such as fruit juice or a non-diet soda. Do not give the patient anything by mouth unless they are fully conscious.

OBJECTIVES

- FR029.3.** Identify signs and symptoms of a diabetic emergency.
- FR029.1.** Identify treatment for a patient with a diabetic emergency.
- FR030.2.** Identify causes of seizures.
- FR030.3.** Identify how to prevent further injury to a patient experiencing a seizure.
- FR030.1.** Identify treatment for a patient experiencing seizures.

3. If necessary, help the patient perform a blood sugar check.
4. Keep the patient from overheating or becoming chilled.
5. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
6. Be prepared to perform CPR and use an AED if available.

Seizures

Seizure symptoms range from a blank stare into space or random shaking to twitching extremities or whole body muscle contractions. The condition causes mild to severe convulsions of the body or a body part. Seizures are rarely life threatening unless they continue indefinitely or two or more consecutive seizures occur without a period of responsiveness in between.

People experiencing a minor seizure often exhibit signs and symptoms that resemble drunkenness or drug overdose and in some cases may show signs of aggression. Do not make assumptions; investigate further before making an arrest.

While having a seizure, the patient may stop breathing temporarily, bite their tongue, lose bowel or bladder control, make noises, spit and have foam around the mouth, display unusual behavior, or be unresponsive. Seizures have various causes:

- head injury
- trauma
- stroke
- high fever (predominately in children)
- shock
- poisoning, including alcohol and drug-related poisoning
- complications from pregnancy
- diseases such as epilepsy and diabetes
- unknown causes

Treatment for Seizures

Do not force anything between the patient's teeth or into the mouth.

Do not restrain the patient.

1. Use BSI and appropriate PPE.
2. Clear the area around the patient to prevent further injury.
3. Avoid responding to aggressive behavior with aggression.

4. Monitor the patient to ensure the airway is open.
5. After the seizure
 - a. Begin rescue breathing, if necessary.
 - b. Turn the patient on their side if the airway is not obstructed.
6. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
7. Be prepared to perform CPR and use an AED if available.

SECTION VOCABULARY*diabetes**insulin*

UNIT 4 | MEDICAL ISSUES

LESSON 4 | Heat- and Cold-Related Injuries

OBJECTIVES

FR031.1. Identify various ways the body adjusts to heat and cold.

FR031.3. Identify treatment for heat-related injuries.

FR031.2. Identify treatment for cold-related injuries.

LESSON GOAL: At the end of this lesson, you will know how to identify and treat heat- and cold-related injuries to minimize tissue damage.

Heat and cold emergencies may result in body injury and ultimately cause death. To adjust to outside temperatures, the human body undergoes chemical and physical changes. Many conditions contribute to heat or cold emergencies. Elderly people, infants, diabetics, and people with various preexisting health conditions may be more susceptible to these types of injuries.

The body maintains heat by constricting blood vessels near its surface. Hair stands erect (goose bumps) helping to keep warm air near the skin. The body produces heat by shivering.

The body stays cool by sweating (perspiration) and breathing (respiration). The body transfers heat without contact (radiation); the body also transfers heat with contact (conduction).

Heat-Related Emergencies

Heat-related emergencies can occur from loss of fluids and salts through heavy sweating. *Hyperthermia* occurs when the body cannot recover from this fluid loss. Hyperthermia has three stages: heat cramps, heat exhaustion, and heatstroke. Heatstroke can be life threatening. Signs and symptoms of heat-related emergencies can include:

- cramps in legs, arms, or abdominal muscles
- weakness, dizziness, fainting during the heat cramps and heat exhaustion stages
- strong, rapid pulse that weakens as condition worsens
- headache
- appetite loss, vomiting
- altered mental state or unresponsiveness during the heatstroke stage
- seizures during the heatstroke stage
- warm, sweaty skin during the heat cramps stage

- moist, cool skin in the extremities during the heat exhaustion stage
- hot, dry skin during the heatstroke stage—a sign of a life-threatening emergency that requires prompt EMS transport

To treat heat cramps or heat exhaustion:

1. Use BSI and appropriate PPE.
2. Remove the patient from the hot environment, and attempt to cool slowly.
3. Loosen or remove clothing.
4. Fan the body or apply a light mist of water.
5. Encourage an alert patient who is not nauseated to drink half a glass of cool water every 15 minutes.
6. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
7. Be prepared to perform CPR and use an AED if available.

To treat heatstroke:

1. Use BSI and appropriate PPE.
2. Remove the patient from the hot environment.
3. Cool the patient immediately.
4. Apply cold packs to the patient's neck, armpits, and groin, frequently replacing warm packs with cold packs.
5. Keep skin wet with towels or wet clothing.
6. If possible, place patient on their back.
7. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
8. Be prepared to perform CPR and use an AED if available.

It is important to remember that heat- and cold-related injuries range from mild to extreme and can cause death. Assessing and caring for the patient may stop the injury's progress as you await medical help.

Cold-Related Emergencies

Exposure to cold causes two types of emergencies: *hypothermia*—an excessive cooling of the body's core temperature; and *frostbite*—a localized injury from overexposure to cold.

Causes of hypothermia can include overexposure to cold, weather conditions such as windchill, improper clothing, submersion in cool water for an extended time, and an inability to heat physical surroundings adequately.

Signs and symptoms of hypothermia, ranging from mild to severe, include:

- shivering
- numbness
- changes in pulse rate and breathing
- low energy or drowsiness
- decreased muscle function
- sluggish pupils
- altered mental status
- bluish skin
- cardiac arrest

Never consider a hypothermic patient deceased until the patient is warmed in an appropriate medical facility. Continue to care for the patient until EMS relieves you.

To treat for hypothermia:

1. Use BSI and appropriate PPE.
2. Perform initial assessment.
3. Handle the patient gently.
4. Remove the patient from the cold environment, if possible.
5. Remove wet clothing and dry the patient.
6. Warm the body gradually by wrapping the patient in dry blankets or clothing.
7. Encourage a fully conscious patient to drink hot, non-alcoholic, non-caffeinated liquids.
8. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
9. Be prepared to perform CPR and use an AED if available.

Frostbite, or local cold injury, is the freezing or near freezing of a body part. Fluid in the cells freezes and swells, destroying or damaging them. Frostbite usually occurs in exposed body areas or areas with lower blood supply, such as ears, nose, fingertips, and toes. Frostbite can cause loss of the affected areas. Signs and symptoms of frostbite include skin that remains soft and turns pale when touched, an affected area that tingles as it re-warms, and the affected person losing feeling or sensation.

As frostbite progresses, the skin appears waxy and firm and becomes mottled and blotchy. The affected area swells and blisters. Thawed skin may have uneven color.

To treat for frostbite:

1. Use BSI and appropriate PPE.
2. Handle affected parts gently.
3. Remove wet clothing and cover the patient with a blanket.
4. If in a remote area or if transport is delayed, warm the frostbite area in tepid—not hot—water. Do not warm the area if there is the possibility of refreezing.
5. Cover the affected area with a dry dressing or padding.
6. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
7. Be prepared to perform CPR and use an AED if available.

SECTION VOCABULARY

frostbite

hyperthermia

hypothermia

UNIT 4 | MEDICAL ISSUES

LESSON 5 | Abdominal Pain, Poisoning, and Drug Overdose

OBJECTIVES

- FR032.1.** Identify treatment for a patient with acute abdominal pain or distress.
- FR033.2.** Identify modes of poisoning.
- FR033.3.** Identify signs and symptoms of poisoning.
- FR033.4.** Identify the need for specialized assistance in caring for a patient with poisoning.
- FR033.1.** Identify treatment for poisoning.
- FR034.2.** Identify signs and symptoms of insect bites or stings.
- FR034.1.** Identify treatment for insect bites or stings.
- FR037.2.** Identify signs and symptoms of an allergic reaction.
- FR037.1.** Identify treatment for an allergic reaction.
- FR035.2.** Identify signs and symptoms of snakebites.
- FR035.1.** Identify treatment for snakebites.
- FR036.2.** Identify signs and symptoms of marine life stings.
- FR036.1.** Identify treatment for marine life stings.
- FR038.1.** Identify signs and symptoms of a drug and opioid overdose.
- FR038.2.** Identify treatment for a drug overdose.

LESSON GOAL: At the end of this lesson, you will know treatment for abdominal pain that is significant enough for the patient to call for help, including treatment for poisons and allergic reactions to insect bites and stings, medications, foods, chemicals, drugs, and other substances.

Abdominal Pain

Separated from the chest cavity by the diaphragm, the abdominal cavity contains several body systems. The abdomen is a large part of the body, and abdominal pain is a common complaint. The patient may feel abdominal pain directly over the affected organ, or the pain may radiate to a different body part.

As the first officer on the scene, do not spend time trying to determine the cause of the pain. Instead, recognize that the patient has an abdominal problem, complete a thorough patient assessment, and wait for EMS. Treat any life-threatening symptom accordingly.

General treatment for severe abdominal pain includes:

1. Use BSI and appropriate PPE.
2. Allow the patient to assume a comfortable position.
3. Conduct an initial assessment.
4. Treat for shock, if necessary.
5. Never give the patient anything by mouth, including medication.
6. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs.
7. Be prepared to perform CPR and use an AED if available.

Poisoning

Poisons are substances that may cause an allergic reaction, injury, or death if introduced into the body. Poisons can be solids, liquids, or gases that enter the body through ingestion, inhalation, injection, or absorption.

Poisoning by ingestion occurs when poison enters the body through the mouth.

Poisoning by inhalation occurs when poison enters the body through the mouth or nose.

Poisoning by injection occurs when poison enters the body through a small opening in the skin.

Poisoning by absorption occurs when poison enters the body through contact with the surface of the skin.

Signs and symptoms of poisoning include:

- difficulty breathing
- cyanosis
- nausea, vomiting
- abdominal pain
- altered mental status
- dizziness, confusion
- decreased level of consciousness/unresponsiveness
- seizure
- signs of shock
- odd breath odor, burns around the mouth, diarrhea in poisoning by ingestion
- chest pain, cough or burning sensation in the throat, reddish color on skin (late sign) in poisoning by inhalation
- bite or sting mark, itchy skin, stinger or tentacle embedded in the skin, redness, swelling, pain around the site in poisoning by injection
- itchy skin, liquid or powder on skin, redness, rash, blistering in poisoning by absorption

FR038.3. Identify treatment for an opioid overdose

FR039.1. Identify signs and symptoms of an excited delirium situation.

FR039.2. Identify the proper response for an excited delirium situation.

To treat poisoning:

1. Use BSI and appropriate PPE.
2. Get the patient away from the source of poison.
3. Make every attempt to identify the poison by questioning the patient, the patient's family, and bystanders.
4. Use the following resources to determine the course of treatment.
 - Safety Data Sheet (SDS), and instructions for treating poisoning.
 - Follow local protocol or department policy for contacting poison control or the hazmat (hazardous materials) unit to determine course of treatment.
 - Poison control: 1-800-222-1222
5. Provide appropriate treatment as recommended by poison control.
6. Notify responding personnel of the type of poison.
7. Remove contaminated clothing, jewelry, and contact lenses from the affected area.
8. If the poison is a dry powder, brush it off.
9. Flush the area with a large amount of clean water for at least 20 minutes.
 - **Caution:** Water may activate some dry chemicals and cause a burning reaction.
10. If the eye area is affected, follow procedures for eye trauma.
11. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
12. Be prepared to perform CPR and use an AED if available.

Poisoning From Insect Stings

Africanized honey bees are very aggressive in nature and are sometimes referred to as killer bees. They have been known to chase victims to distances of ¼ mile. They can travel about 200 miles per year and live in Florida.

Vibrations of machines and disturbances of their nest agitate Africanized honey bees. When common honey bee hives are agitated, half the colony will exit the hive and attack victims. With Africanized honey bees, the entire colony will attack their victims. Although their venom is not any more toxic than the common honey bee, it is the number of stings that cause the victim to experience a possible life-threatening emergency.

When the first Africanized honey bee attacks someone, it breaks the stinger off, which leaves a scent for the rest of the colony to attack. Because these bees attack this scent, the rescuer should not seek shelter in swimming pools, streams, or areas of water, as these bees will attack the victim when they resurface.

You can't tell the difference between the common honey bee and the Africanized honey bee. If you suspect that a hive is of the Africanized honey bee type, do not enter the area, and contact an approved pest control handler.

Many people have severe allergies to substances in the venom of insects. When stung, highly allergic people need immediate medical care for anaphylaxis. Signs and symptoms of an insect bite or sting, as observed in patient assessment, are similar to those of injected poison.

General treatment for an insect sting or bite:

1. Use BSI and appropriate PPE.
2. Lower the affected part below the heart.
3. Examine the site to see if the stinger is in the skin. If so:
 - a. Remove it to prevent further poisoning and infection.
 - b. Scrape the stinger away from the skin with the edge of a plastic card held at an angle.
 - Do not use tweezers to remove the stinger. You may push it further into the skin and inject more poison.
4. Observe the patient for signs of an allergic reaction.
 - a. If the patient has an allergic reaction, ensure that they have an open airway and adequate breathing.
 - b. If the patient has a history of allergic reactions and carries an insect kit, assist the patient in preparing treatment.
5. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
6. Be prepared to perform CPR and use an AED if available.

Anaphylactic Shock

Anaphylactic shock, or anaphylaxis, results from insect bites or stings, medications, pollen, foods, chemicals, or any substance that triggers an allergic reaction. Anaphylactic shock is a life-threatening emergency! Reaction can occur within seconds after a sting, ingestion, or exposure. Patients who know they have allergies usually try to avoid substances that cause reactions. Avoidance is sometimes impossible, so these patients carry an anaphylaxis kit. Available only by a prescription, the kit contains a single dose of the drug epinephrine. When injected into the body, epinephrine counteracts the allergic reaction. The more quickly signs and symptoms appear, the greater the risk of fatality. Signs and symptoms of anaphylactic shock may include:

- warm, tingling feeling in the mouth, face, chest, feet, and hands
- itching skin and hives
- swollen eyes, hands, and feet
- cyanosis

- paleness
- swollen mouth, tongue, or throat that obstructs the airway
- painful, squeezing sensation in the chest
- cough
- whistling sound before loss of voice
- rapid or labored breathing
- noisy breathing, wheezing
- increased heart rate
- dizziness
- restlessness
- itchy, watery eyes
- headache
- runny nose
- sense of impending doom
- decreasing mental status

To treat for anaphylactic shock:

1. Use BSI and appropriate PPE.
2. Assess the patient's airway and breathing.
3. Ask the patient if they have an epinephrine auto-injector. If so, you may assist, but the patient must inject the medication.
4. Arrange for immediate transport.
5. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
6. Be prepared to perform CPR and use an AED if available.

Poisoning From Snakebites

Snake venom contains some of the most complex poisons known. These poisons can affect the central nervous system, heart, kidneys, and blood. Depending on the type of snake, snake venom is a digestive enzyme or a neurotoxin. Signs and symptoms of poisoning from snakebites include:

- one or two puncture wounds that may or may not bleed
- a semicircular bite site that may or may not bleed
- severe pain and burning sensation at the wound site
- swelling and discoloration at the wound site beginning within 30 minutes and perhaps lasting several hours
- shock
- nausea, vomiting
- blurred vision
- drowsiness, slurred speech
- increased sweating and salivation
- weakness, paralysis
- seizures, unresponsiveness

To treat for snakebite:

1. Presume that the snakebite was from a poisonous snake until proved otherwise.
2. Use BSI and appropriate PPE.
3. Immobilize the affected part.
4. Keep the affected area lower than the heart.
5. Minimize the patient's movement. Keep the patient quiet and lying down.
6. Remove, or ask family members to remove, rings, bracelets, and other constricting items from the bitten extremity.
7. If possible, safely bring the dead snake with you or give it to EMS personnel.
8. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
9. Be prepared to perform CPR and use an AED if available.

When treating snakebites:

- Do not apply ice to the bite site.
- Do not cut the wound.
- Do not apply a tourniquet.
- Do not apply alcohol to the wound.
- Do not use your mouth to suck venom from the wound.

Poisoning From Marine Life Stings

Stings from some marine life can be very painful. They can also make a person ill. Signs of poisoning from marine life stings are swelling and redness on the skin's surface.

To treat for a marine life sting do the following.

If the patient is stung by a jellyfish, sea anemone, hydra, coral, or Portuguese man-of-war:

1. Use BSI and appropriate PPE.
2. Immediately rinse with seawater and continue rinsing for about 30 minutes or until the pain is gone.
3. Remove dried tentacles.
4. Remove stingers as you would remove a bee stinger: scrape the stinger away from the skin with the edge of a plastic card.
5. If possible, pour vinegar on the affected area.
 - Vinegar often works best to offset the toxin and reduce pain.
 - Do not use meat tenderizer. Most tenderizers no longer include the active ingredient once used to reduce pain.
 - Do not rub the wound.
6. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
7. Be prepared to perform CPR and use an AED if available.

If the patient is stung by a stingray, sea urchin, or spiny fish:

1. Use BSI and appropriate PPE.
2. Flush the area with seawater.
3. Immobilize and soak the affected area in water as hot as the patient can stand. Continue soaking about 30 minutes or until the pain goes away.
 - Toxins from stingrays, sea urchins, or spiny fish are heat sensitive. Often a single application of hot water dramatically relieves local pain.
4. Treat a spine embedded in the skin as an impaled object; stabilize it in place and arrange for transport to a medical facility.
5. Perform an ongoing assessment for life-threatening conditions.
6. Maintain ABCs, and treat for shock. Be aware that a marine life sting can cause an anaphylactic reaction in some people.
7. Be prepared to perform CPR and use an AED if available.

Drug Overdose

A drug overdose is an emergency that involves poisoning by legal or illegal drugs. Most drug overdoses involve drug abuse by long-time users. However, a drug overdose can also result from an accident, miscalculation, confusion, use of more than one drug, or a suicide attempt. An overdose occurs when someone uses an excessive amount of a substance. It causes adverse reactions ranging from excited delirium to coma and death.

The most reliable indications of a drug overdose come from the scene and patient history. Similar to those of many medical conditions, signs and symptoms of an overdose vary widely and may include:

- unresponsiveness
- breathing difficulty
- abnormal pulse
- fever
- vomiting
- convulsions or seizures
- sweating
- tremors
- abnormal pupil reactions
- blurred vision
- slurred speech
- muscle spasms
- signs of illicit drug use (track marks, burns on fingers/lips)
- combativeness
- extraordinary strength
- endurance without fatigue
- sudden tranquility after frenzied activity
- paranoia
- memory loss
- hallucinations
- altered mental status/abnormal behavior

To treat for a drug overdose:

1. Use BSI and appropriate PPE.
2. Establish and maintain an open airway and breathing.
3. Monitor the patient's mental status.
4. In the presence of hyperthermia, cool the patient appropriately.
5. Prevent or decrease the patient's agitation by using a calm voice.
6. Place the patient in a position to prevent asphyxiation.
7. Notify responding personnel of drug used (if known).
8. Perform an ongoing assessment for life-threatening conditions. Maintain ABCs, and treat for shock.
9. Be prepared to perform CPR and use an AED if available.

Opioid Overdose

Fentanyl is a synthetic opioid that mimics morphine but is up to 100 times more potent than morphine and up to 50 times more potent than heroin.

Pharmaceutical fentanyl was designed for pain management. It is delivered through injection, a transdermal patch, flavored lozenges, dissolving tablets, and nasal spray. Illicit fentanyl and similar drugs like methamphetamines are produced in illegal labs. Some of these drugs, carfentanil for example, can be 100 times more potent than fentanyl.

Florida is seeing a sharp rise in deaths caused by fentanyl. The Florida Department of Law Enforcement's website provides publications emphasizing the importance of law enforcement officers exercising caution when responding to victims of possible fentanyl exposure. See <http://www.fdle.state.fl.us> for further information.

Common signs of fentanyl exposure include:

- disorientation
- difficulty speaking or walking
- slowed pulse
- nausea
- slow, shallow breathing
- respiratory arrest

Treatment for an opioid drug overdose or a victim who has been exposed to fentanyl depends on the route of exposure.

- Request medical assistance immediately, especially if injected.
- If ingested, ensure the victim has an unobstructed airway. If the victim is conscious, wash out their mouth with cool water.
- If inhaled, move immediately to fresh air; monitor respiration rate and pulse.
- If exposed to the skin, remove contaminated clothing immediately. Wash the skin with soap and water for 15 minutes, taking care not to further irritate the skin by scrubbing.
- If a pulse is absent, begin CPR.

Administering Naloxone

Naloxone is an antidote for opioid overdose. It is available as an injection and as a nasal spray. Follow the manufacturer's instructions and agency policies and procedures for storing, maintaining, and administering naloxone.

1. Administer a dose of naloxone every two to three minutes until the patient is breathing on their own for at least 15 minutes, or until EMS arrives.
2. If the signs and symptoms return, give another dose after two to three minutes.
3. Multiple doses of naloxone may be required to stabilize the patient.
4. Continuously monitor the patient's medical condition.

Fentanyl Exposure

It is important for officers administering naloxone to minimize their exposure to fentanyl by using PPE. Choose the appropriate PPE based on the level of risk.

Fentanyl Exposure			
	Description of Exposure	Examples	What You Should Do
low risk of exposure (little chance of fentanyl particles reaching your nose, mouth, eyes, or getting on your skin)	<ul style="list-style-type: none"> • not airborne • low quantity • no contamination 	<ul style="list-style-type: none"> • exposure to small amount of drugs • pills or capsules (container is sealed and intact) • what you would expect for street-level possession or sale 	<ul style="list-style-type: none"> • Put on gloves. • Wear long sleeves if possible. • Use mask and eye protection if appropriate.
moderate risk of exposure	<ul style="list-style-type: none"> • potential for airborne • moderate quantity • possible contamination 	<ul style="list-style-type: none"> • more than for personal use or street-level sale • potential for powder to become airborne 	<ul style="list-style-type: none"> • Cover your torso and arms. • Double glove. • Put on a mask and eye protection.
high risk of exposure	<ul style="list-style-type: none"> • airborne • high quantity • severe contamination 	<ul style="list-style-type: none"> • exposure to large amount of drugs • near loose powder • widespread contamination • drugs are concealed in a tight space, and would be difficult to remove and process 	<ul style="list-style-type: none"> • Evacuate immediately. • Call a hazmat team, preferably a team with clandestine lab training. • Have on-site decontamination ready if possible. • Have medical personnel on standby.

Additional tips to avoid fentanyl exposure include:

- Do not eat or drink when working with narcotics.
- Notify a second person to stay in visual contact if possible.
- Always use PPE correctly; adhere to agency policies regarding the order for putting PPE on and taking PPE off.
- Minimize exposed skin by wearing long pants if possible.
- Wear closed-toe shoes.
- Wear a disposable garment to cover the torso and arms if possible.
- Use a surgical or dust mask if needed.
- Use eye protection if necessary.
- Do not use alcohol, hand sanitizer, or any solvent to remove fentanyl; it can increase your skin's ability to absorb the drug.
- Follow decontamination procedures if necessary.

Officer safety is just as important as patient safety, so follow these tips as closely as possible.

Excited Delirium

“*Excited delirium* is a state of extreme mental and physiological excitement characterized by exceptional agitation and hyperactivity, overheating, excessive tearing of the eyes, hostility, superhuman strength, aggression, acute paranoia, and endurance without apparent fatigue” (Lewinski, 2006). It is usually a result of extreme drug abuse and can lead to death. Increased attention has been paid to the sudden and seemingly inexplicable deaths of some individuals being held in police custody. In most cases, the force required to subdue the person was not sufficient to cause death. Medical authorities have typically had extreme difficulty in identifying the cause of death. Signs and symptoms of excited delirium may include:

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excited delirium

- unbelievable strength
- imperviousness to pain
- ability to offer resistance against multiple officers for an extended period of time
- hyperthermia (temperatures can spike to between 105°F to 113°F)
- sweating
- shedding clothes or nudity
- bizarre and violent behavior
- aggression
- hyperactivity
- extreme paranoia
- incoherent shouting or nonsensical speech
- hallucinations
- attraction to glass (smashing glass is common)
- confusion or disorientation
- grunting or animal-like sounds while struggling with officers
- foaming at the mouth
- drooling
- dilated pupils

Excited delirium is a life-and-death situation. Request medical assistance immediately.

CHAPTER 3

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Officers face many dangers as part of their jobs, including the use of firearms. Failure to cautiously and consistently follow rules of firearm handling can result in injury or death. You must acquire proper training on the specific model of firearm you will carry and use before touching, handling, or loading any firearm.

UNIT 1 | FIREARMS SAFETY

LESSON 1 | Firearms Safety Procedures

OBJECTIVES

- FA1.1.1.** Identify the shooting hand.
- FA1.1.2.** Identify the support hand.
- FA1.1.3.** Identify the common cause of most firearm accidents.
- FA1.1.4.** Identify the general rules of safety that should be applied to all firearms.
- FA1.1.5.** Identify what safety rules to follow on the range.
- FA1.1.6.** Identify the requirements in the Florida Statutes for storing a firearm.

LESSON GOAL: At the end of this lesson, you will know and demonstrate the firearms safety procedures that you must follow when handling or using firearms.

When studying firearms, the term *shooting hand* is the hand you use to shoot the firearm. Your *support hand* is the hand that assists the shooting hand.

Safety is the most important element of firearms training. Carelessness is the most common cause of firearms incidents. Think before you act whenever you are around firearms. No matter how proficient you become at marksmanship, you and those around you are not safe if you carelessly handle or discharge a weapon. As students, and later as officers, you will follow all firearms safety rules at all times. Facilitators and instructors will enforce those rules any time firearms are present, issued, or handled. Remember: you are responsible for your firearm at all times.

Always refer to the manufacturer's manual for safety recommendations.

General Rules of Firearms Safety

1. Always treat every firearm as if it were loaded and ready to fire, whether you think it is or not.
2. Every time you pick up, put down, or hand a firearm to another person, pull back the slide to the locked position or open the cylinder or bolt to physically and visually check that the firearm is not loaded. This is called a *safety check*.

Safety Note: Do not rely on your memory to determine if a firearm is loaded. It is your responsibility to check the firearm and make sure it is safe to handle.

3. Always point the muzzle in a safe direction. This is very important when loading, unloading, or cleaning a firearm. If a weapon pointed in a safe direction fires, it causes no personal injury and minor, if any, property damage. The environment dictates what direction is safe. In a building, for instance, people may be above or below you.

Safety Note: A safe direction is generally muzzle pointed down at a 45° angle away from your body with your finger outside the trigger guard. Be aware of your surroundings, and remember that people are moving around you at all times while you are on the range.

4. Never point a firearm at anyone or anything that you do not intend to shoot, whether loaded or not.

5. Keep your finger off the trigger and outside the trigger guard when drawing your firearm or returning it to your holster.
6. Never leave a loaded firearm unattended.
7. Clean a firearm each time it is fired, and fully inspect it once a week. Safety check a firearm each time you use it.

Safety Note: Before cleaning or handling a firearm, make sure that it is unloaded and is pointed in a safe direction. Never clean a loaded firearm.

Rules for Firearms Safety on the Range

Follow these safety rules while on the firing range:

1. Immediately obey all directions and commands from the range instructor.
2. Care for and respect all firearms.
 - a. Never abuse firearms. Safety first! Remember that it is your responsibility to keep yourself and others safe on the range.
 - b. Perform a safety check each time you are issued or return a firearm.
 - c. Report loose screws or loose sights to the range instructor.
3. Make sure that the range instructor inspects all firearms for proper function before training.
4. Always keep the firearm secure and in its holster until you are told to perform an action.
 - a. Keep the safety or retention mechanisms engaged on holstered firearms at all times.
 - b. Never unholster a firearm behind the firing line.
 - c. When carrying unholstered firearms to and from the range, keep the action of the firearms open. The **action** is the mechanism of a firearm involved with presenting the round or cartridge for firing, and in removing the spent casing and introducing a fresh round or cartridge. This is known as “cycling the gun.”

Spent casing refers to the metal part of ammunition that is ejected from the weapon once a round has been fired, which then makes room for a new live ammunition round.

The following examples are how you will carry the firearm with the action open—meaning that there is no round present, and that the firearm is in a safe mode to carry.

- i. Carry pistols with their magazines removed, action open, and muzzle pointed in a safe direction (safety on, if applicable).
- ii. Carry revolvers by the tops of their frames with your fingers through the cylinder opening and the muzzle pointed in a safe direction.
- iii. Carry shotguns and rifles with their muzzles pointing in a safe direction, actions open, and with the safety mechanism engaged.

5. Keep your finger off the trigger and outside the trigger guard when drawing the firearm or returning it to your holster.
6. Do not do anything until the range instructor provides you with instructions. Follow the range instructor's commands.
 - a. "Load" only on the range instructor's command.
 - b. Do NOT retrieve dropped ammunition, speed loaders, magazines, or equipment until the range instructor declares it safe to do so.

Safety Note: Perform unloading procedures even if the firearm is unloaded when the range instructor issues the "unload" command.

7. You may "leave the firing line" only at the range instructor's command.
8. Always point unholstered firearms in a safe direction.
9. Stop firing immediately at the "cease fire" command.
10. Never handle firearms on the firing line while someone is downrange.
11. Dry fire on the firing line only under a range instructor's supervision.
12. Use only ammunition that is appropriate for your firearm. Your instructor will provide the ammunition you will use on the range.
13. Use ear and eye protection on or near the firing line.
14. Do not talk during range exercises unless your instructor speaks to you or in an emergency.
15. Do not eat or use tobacco products on the firing line.
16. Be courteous to fellow shooters.
17. When not training, watch other shooters and listen to the range instructor.
18. If you drop a firearm, do not pick it up; notify the range instructor immediately.
19. If a weapon fails to fire, keep it pointed in a safe direction and attempt to clear the malfunction. If you cannot solve the issue, notify the range instructor by raising your support hand.
20. Immediately report all injuries to an academy staff member. Know the location of the first aid kit on the range.

Storing Firearms Safely

You are responsible for making sure your weapon is secure at all times, including when you are off duty. Section 790.174, F.S., addresses requirements for storing firearms safely.

- (1) A person who stores or leaves on a premises under his or her control, a loaded firearm, as defined in s. 790.001, and who knows or reasonably should know that a minor is likely to gain access to the firearm without the lawful permission of the minor's parent or the person having charge of the minor, or without the supervision required by law, shall keep the firearm in a securely locked box or container or in a location which a reasonable person would believe to be secure or shall secure it with a trigger lock, except when the person is carrying the firearm on his or her body or within such close proximity that he or she can retrieve and use it as easily and quickly as if he or she carried it on his or her body.
- (2) It is a misdemeanor of the second degree, punishable as provided in s. 775.082, or s. 775.083, if a person fails to store or leave a firearm in the required manner and, as a result, a minor gains access to the firearm, without the lawful permission of the minor's parent or the person having charge of the minor, and possesses or exhibits it, without the supervision required by law:
 - (a) In a public place; or
 - (b) In a rude, careless, angry, or threatening manner in violation of s. 790.10.

This subsection does not apply if the minor [a person under the age of 16] obtains the firearm as a result of an unlawful entry by any person.

SECTION VOCABULARY

action

safety check

shooting hand

support hand

UNIT 1 | FIREARMS SAFETY

LESSON 2 | Use of Deadly Force

OBJECTIVES

- FA1.2.1.** Identify elements of the Florida Statutes as related to the use of force by criminal justice officers.
- FA1.2.2.** Define deadly force.
- FA1.2.3.** Identify the essential criteria to determine the justification of the use of deadly force.

LESSON GOAL: At the end of this lesson, you will be able to identify the statutes that govern the use of force and the legal aspects of using deadly force.

Use of Force—Firearms

Chapter 776, F.S., governs all use of force by criminal justice officers. Even though the statute refers to “law enforcement” officers, the legal guidelines regarding use of force apply equally to corrections and correctional probation officers. Section 776.05, F.S., identifies two general areas in which an officer’s

use of force is justified: to apprehend a subject and make an arrest, or to defend self or others. The statute states:

A law enforcement officer, or any person whom the officer has summoned or directed to assist him or her, need not retreat or desist from efforts to make a lawful arrest because of resistance or threatened resistance to the arrest. The officer is justified in the use of any force:

- (1) Which he or she reasonably believes to be necessary to defend himself or herself or another from bodily harm while making the arrest;
- (2) When necessarily committed in retaking felons who have escaped; or
- (3) When necessarily committed in arresting felons fleeing from justice. However, this subsection does not constitute a defense in any civil action for damages brought for the wrongful use of deadly force unless the use of deadly force was necessary to prevent the arrest from being defeated by such flight and, when feasible, some warning had been given, and:
 - (a) The officer reasonably believes that the fleeing felon poses a threat of death or serious physical harm to the officer or others; or
 - (b) The officer reasonably believes that the fleeing felon has committed a crime involving the infliction or threatened infliction of serious physical harm to another person.

Deadly Force

Deadly force is force that is likely to cause death or great bodily harm. Section 776.06, F.S., states:

- (1) . . . the term “deadly force” . . . includes, but is not limited to:
 - (a) The firing of a firearm in the direction of the person to be arrested, even though no intent exists to kill or inflict great bodily harm; and
 - (b) The firing of a firearm at a vehicle in which the person to be arrested is riding.

Section 776.07, F.S., states:

- (2) A correctional officer or other law enforcement officer is justified in the use of force, including deadly force, which he or she reasonably believes to be necessary to prevent the escape from a penal institution of a person whom the officer reasonably believes to be lawfully detained in such institution under sentence for an offense or awaiting trial or commitment for an offense.

Use of deadly force may be an officer’s first and only appropriate response to a perceived threat. Deadly force does not necessarily mean that someone died from the force used. It can cause great bodily harm or no harm at all. For example, returning fire is deadly force even if the officer misses the target.

You must base your decision to use deadly force on a clear, reasonable belief that you, a fellow officer, or another person faces impending danger of death or great bodily harm. You should never fire a firearm unless you are faced with a deadly force encounter. Once you have used your firearm, you have reached the highest level of force—deadly force. For more details regarding the use of force, refer to Chapter 4, Defensive Tactics.

SECTION VOCABULARY

deadly force

UNIT 2 | AMMUNITION USE

LESSON 1 | Ammunition Identification and Maintenance

OBJECTIVES

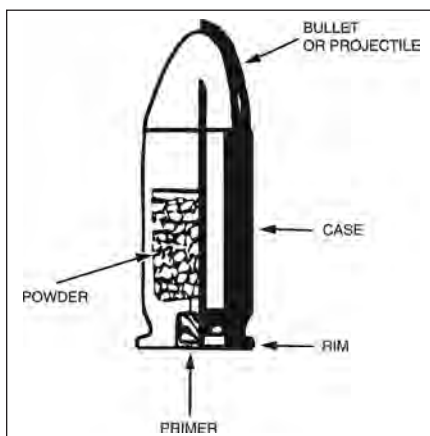
- FA2.1.1.** Identify ammunition parts and nomenclature.
- FA2.1.2.** Identify ammunition by appearance and caliber.
- FA2.1.3.** Identify shotgun ammunition by appearance and gauge.
- FA2.1.4.** Identify any abnormalities or defects on ammunition.
- FA2.1.5.** Identify proper storage procedures for ammunition.
- FA2.1.6.** Differentiate between duty life and shelf life.
- FA2.1.7.** Properly store and handle ammunition.

LESSON GOAL: At the end of this lesson, you will be able to identify different types and calibers/gauges of ammunition and know how to inspect ammunition for defects and store ammunition properly.

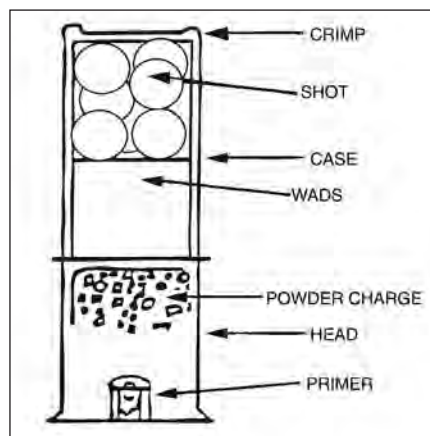
Cartridge Parts and Types

Please refer to the cartridge diagrams that follow. They illustrate the basic parts of ammunition for a revolver, a pistol, a shotgun, and a rifle/carbine. The definitions for these parts can also be found in the Glossary under “cartridge parts and types.”

- **case/casing**—the metal or plastic container that holds all parts of a round of ammunition: primer, powder charge, and bullet
- **rim**—the edge on the base of a cartridge case that stops the progress of the case into the chamber
- **crimp** (*shotgun only*)—the part of the case mouth that bends inward to grip the bullet; with shotgun shells, the term applies to the closure at the case mouth



Semiautomatic pistol cartridge Figure 3-1

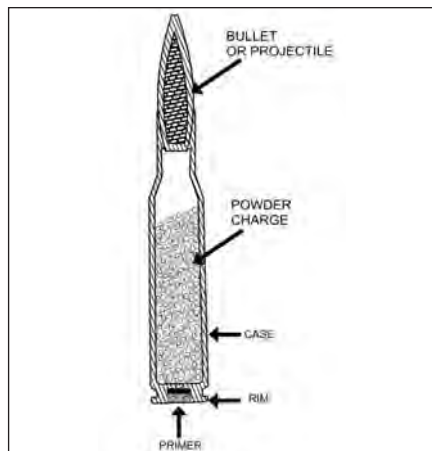


Shotgun cartridge

Figure 3-2

- **headstamp**—markings found on the head of ammunition that indicate caliber or gauge and identify manufacturer
- **shot** (*shotgun only*)—spherical pellets of various sizes, usually made of lead
- **primer**—mixture used to ignite the propellant or powder charge
- **powder**—propellant used in most firearms; it produces a large volume of gas when ignited

- **wad** (*shotgun only*)—the only part not found in any other center-fire cartridge; this is used to seal/confine gases; can be made of plastic or compressed cardboard
- **bullet**—portion of the cartridge that becomes a projectile when in flight
- **round**—complete ammunition cartridge that contains all parts of ammunition; a military term meaning one single cartridge



Rifle cartridge

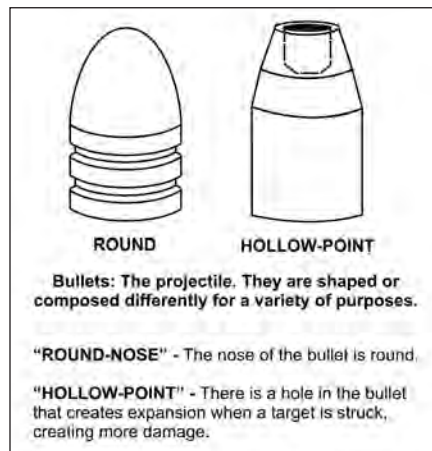


Figure 3-3 Bullet (projectile) design

Figure 3-4

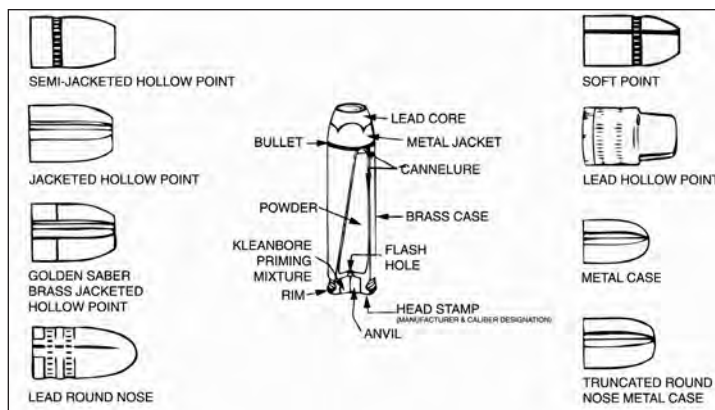
Ammunition can be identified by examining the caliber or gauge found on the cartridge's headstamp. **Caliber** is a measurement used to identify different cartridge (projectile) sizes. It is determined by measuring the diameter of the bore of the firearm. This helps identify the correct ammunition for a specific weapon. **Gauge** is a measurement of shotgun bores derived from the number of bore-sized balls of lead per pound. For example, 12 balls that fit the bore of a 12-gauge shotgun weigh one pound.

Law enforcement most often uses these caliber and gauge types:

- **semiautomatic pistol**—.40 caliber, .45 caliber, 9 mm, and 10 mm
 - **revolver**—.38 Special, the .357 Magnum
- Note:* You can safely use .38 caliber ammunition in a .357 revolver. However, you cannot use .357 ammunition in a .38 caliber revolver. A .357 cartridge casing is longer than a .38 cartridge and so does not fit into the chamber of a .38 revolver.
- **shotgun**—12 gauge
 - **rifle/carbine**—223 Remington, 9 mm, and 10 mm

Refer to the bullet (projectile) design, handgun bullet styles, and rifle bullet styles diagrams. Learn the definitions and ballistic characteristics of each ammunition type so that you can identify them:

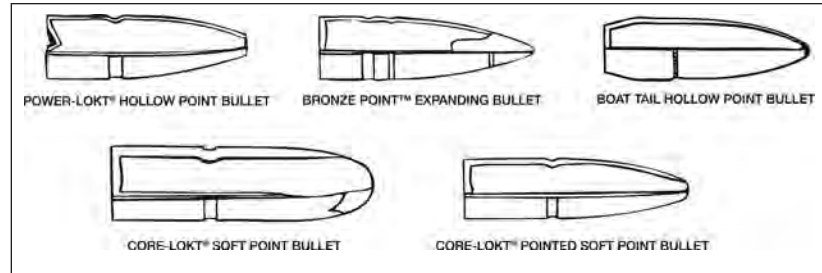
- **armor-piercing**—made of solid carbon or tungsten steel coated with bright green Teflon; it has a considerably sharper point than most manufactured rounds. The round can pierce protective body armor or steel. In Florida, its use or possession is illegal for anyone but law enforcement.



Handgun bullet styles

Figure 3-5

- **blank round**—a round designed for training or noise; the casing's cardboard material becomes a projectile when fired; the projectile cannot penetrate drywall or hollow-core doors. However, it can penetrate soft body tissue. When fired at close range, it can cause serious injury or death. Do not discharge in the direction of others. Use extreme caution.



Rifle bullet styles

Figure 3-6

- **frangible**—normally made of brass or copper dust held together with a resin material that disintegrates upon impact with steel or concrete; it can penetrate hollow-core doors, drywall, or thin wood material
- **full metal jacket**—a round-nose lead bullet completely covered with a copper jacket; sometimes called ball ammunition, it is normally of medium to high velocity. Used extensively by the military, it has low-expansion and high-penetration capabilities. The chance for ricochet is high.
- **hollow-point**—lead or copper-jacketed lead with a hollow cavity in the bullet's nose; as the bullet expands upon impact, it expends its kinetic energy. Since a hollow-point bullet expands quickly, it does not penetrate as deeply as a round-nose bullet. This design reduces ricochet. Usually of high velocity, it delivers maximum shock upon striking a surface of soft tissue.
- **jacketed soft point**—one-half to three-quarters of this lead bullet is jacketed with copper; the exposed lead on the flat nose allows for expansion upon impact. Usually of high velocity, this bullet is designed for antipersonnel use. The round easily penetrates interior walls and solid doors.
- **lead round nose**—a cartridge design that features a solid lead bullet with a round nose; this bullet has a medium velocity. By design, it easily penetrates interior walls or hollow-core doors and then ricochets.
- **tracer**—full metal jacketed with incendiary material in the casing of its base; when fired, the round can be visually tracked by the burning material. The bullet tip is normally painted red or orange. Having the same velocity as a full metal jacket, it is most often used by the military in fully automatic weapons.

Shotgun Ammunition

- **Birdshot** is normally used for bird hunting or practice; this shell has a load of small diameter lead or steel shot pellets. When fired at close range, these pellets can be dangerous and cause injury. Law enforcement uses birdshot for training purposes only.
- **00 buckshot (double-aught buckshot)**—The standard 2¾-inch shell contains nine .33 caliber lead pellets. The 3-inch magnum shell contains twelve .32 caliber pellets. The spread pattern from a 20-inch barrel is about 1-inch spread per yard. For example, at 20 yards, the spread pattern equals 20 inches. Because of the spread pattern, use extreme caution when shooting 00 buckshot in populated areas. You must be aware of what is around and behind the targeted area. Accurate maximum distance for law enforcement purposes is about 40 yards. The pellets penetrate solid wood doors, drywall, and wood walls at close range and can ricochet when they hit hard surfaces.

- A **rifled slug** is a single, hollow lead bullet that weighs from $\frac{7}{8}$ ounce to $1\frac{1}{8}$ ounces. It is .72 caliber and penetrates most materials but not solid steel. It has an effective range of about 100 yards.

Inspecting Ammunition for Possible Abnormalities or Defects

It is important to know how to inspect ammunition for functionality and dependability. Your ammunition may be the correct type, caliber, and gauge, but it must still be checked for damage or defects. This section covers the most common types of ammunition defects and how to inspect ammunition for those abnormalities or defects.

When inspecting ammunition, you may find these abnormalities and defects:

- **scrape**—indentation in the case that may weaken the case wall; a scrape makes a layer of the case wall metal look as if it has been scratched or torn away
- **dent**—dimple or depression in the case; the case looks like someone struck it with a hard object, crushing part of it inward
- **corrosion**—layering of the case with oxidation or foreign material, such as mold, fungi, congealed oil, and lubricants
- **puncture**—actual tear, detachment, or rip that looks like an opening in the case body

Inspecting ammunition before loading is important. Before going on duty, check your ammunition to make sure it operates properly. Identify and separate less than perfect rounds from service ammunition.

1. Make sure that the casing is free of defects. Look and feel for scrapes, dents, corrosion, and punctures.
2. Determine that the projectile is firmly seated in the casing. Feel both ends of the ammunition to make sure the projectile is not loose.
3. Make sure that the primer is seated properly and free of dents. Look at and feel the cartridge to see if the primer is flush with the rim.
4. Establish that the rim is free of defects. Look and feel for scrapes, dents, corrosion, and punctures.

Ammunition Storage

Properly storing and handling your ammunition also help prevent defects. When storing ammunition, following the manufacturer's recommendations is crucial. Respect the manufacturer's original design. Do not alter the ammunition.

Environmental conditions affect the ammunition's shelf and duty life expectancy and may cause malfunctions when you use the cartridges. Keep your ammunition in a cool place where moisture is minimal. Do not use cartridges that have been water soaked, as seeping water may affect the primers. Avoid keeping ammunition in locations where there is a lot of heat, such as inside a closed vehicle, or inside a box in a sunny location. Follow your agency's standard operating procedure for storing ammunition.

Duty life is the recommended time (normally expressed in months) for which you can expect ammunition to be reliable when used on duty. Ammunition used on duty is exposed to environmental elements, such as heat and humidity, which cause it to deteriorate more quickly. Its duty life is shorter than its shelf life. Replace ammunition annually.

SECTION VOCABULARY

00 buckshot (double-aught buckshot)

birdshot

bullet

caliber

case/casing

crimp

duty life

gauge

headstamp

powder

primer

rifled slug

rim

round

shelf life

shot

wad

Shelf life is the recommended time (normally expressed in years) for which you can expect ammunition to be reliable, from manufacture time to issue time. Duty life is factored into shelf life, which also depends on care and protection of the ammunition. Therefore, it is important to write on the box the date you received and stored the ammunition. That helps determine how long it stays on the shelf.

Handling Ammunition Safely

Proper maintenance of ammunition involves any care that helps provide the most safety when using and inspecting ammunition. Improperly maintained ammunition may cause a weapon to fail to fire or function. In a self-defense situation, serious injury or death may result.

Use only factory-loaded ammunition from a reputable manufacturer, and do not alter the manufacturer's original design. Do not drop or throw ammunition; it may discharge. Do not place ammunition in the radio holder of your patrol vehicle. Contact with an electrical impulse can cause ammunition to discharge.

Avoid using solvents and lubricants when handling ammunition. To prevent solvents on your hands from seeping into the primers, wash your hands before handling ammunition. Solvents and lubricants may cause a failure-to-fire malfunction.

Do not use reloads for duty ammunition. Reloads are cartridges that have been prepared using previously fired brass cases. They are not as reliable as new ammunition. Also, using reloaded ammunition may void the warranties of many firearms.

UNIT 3 | HANDGUN USE—SEMIAUTOMATIC PISTOL

LESSON 1 | Firearms Familiarization—Semiautomatic Pistol

LESSON GOAL: At the end of this lesson, you will know the semiautomatic pistol parts with correct nomenclature, the way the parts function, and the steps to safely handle a semiautomatic pistol.

All firearms have many of the same types of parts to achieve the same function. It is important to learn the nomenclature of the four weapons covered in this training and how their parts function together to make the weapons work. This knowledge allows safe weapons operation on the range and in the field. It also helps you to better communicate with the armorer and to testify in court in a clear and credible manner.

The term *handgun* refers to either the semiautomatic pistol or the revolver. This unit focuses on the semiautomatic pistol, which is the handgun that criminal justice officers predominantly carry. As handguns, the semiautomatic pistol and revolver share many of the same features. Many of the procedures you will learn for the semiautomatic pistol will also apply to the revolver.

Nomenclature of the Semiautomatic Pistol

Semiautomatic pistols may operate differently based upon who manufactured them. Make sure you are familiar with the part names, locations, and functions for the semiautomatic pistol you use. Refer to the semiautomatic pistol diagram to help you identify each part.

The following terms are associated with the use and function of a semiautomatic pistol:

- accessory rail—provides space for lighting and sighting devices
- back strap—portion of the grip that is placed in the palm of the shooting hand
- frame/receiver—holds the internal parts, as well as the slide assembly, and provides a way to grip the pistol
- front sight—located on the slide's front; used to bring the firearm into alignment for accuracy

OBJECTIVES

FA3.1.1. Identify semiautomatic pistol parts with the correct nomenclature.

FA3.1.2. Describe the function of semiautomatic pistol parts.

FA3.1.3. Identify the steps to safely handle a semiautomatic pistol.



Semiautomatic pistol

Figure 3-7

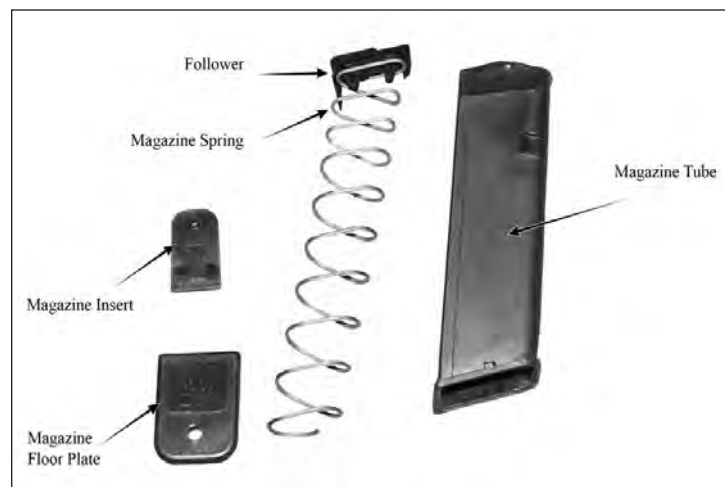
- front strap—portion of the grip that allows the fingers of the shooting hand to rest
- grip panel—made of polymer, designed to allow the shooter to easily grip and control the weapon
- magazine catch—releases the magazine from the frame (magazine well)
- magazine floor plate—base of the magazine
- muzzle/barrel—provides a path for the fired bullet and is chambered to hold the cartridge
- rear sight—located on the rear of the slide that aligns with the front sight to bring the firearm into alignment for accuracy
- slide—houses the firing pin, safety, drop safety, sights, and extractor
- slide cover plate—allows access of the firing pin assembly
- slide lock—device that allows quick and simple fieldstripping of the pistol
- slide stop lever—device that locks the slide in the open position
- thumb rest—place for the thumb to rest while gripping the pistol
- trigger—activates the pistol's operation
- trigger guard—part of the frame that protects the trigger
- trigger safety—allows the trigger to move when pressed

The magazine holds the ammunition. The magazine contains a spring and a follower that pushes each round up to be stripped off by the forward movement of the slide. The follower also activates the slide stop. The floor/butt plate holds the magazine spring and follower in the magazine. You can remove it to clean inside the magazine. When reassembling the magazine, make sure to replace the spring and follower correctly.

The magazine consists of five main parts:

1. follower
2. spring
3. magazine insert
4. floor/butt plate
5. magazine tube

Some additional parts of the semiautomatic pistol include the recoil guide, recoil spring, and slide. The recoil guide directs the recoil spring. It absorbs the recoil and returns the slide to the following position. The recoil spring pushes the slide forward.



Semiautomatic pistol magazine

Figure 3-8

Types of Semiautomatic Pistols

Semiautomatic pistols are categorized by their type of trigger mechanism. A *single-action* mechanism performs the single action of releasing the hammer or striker. Once the first round is fired, the automatic movement of the slide resets the mechanism for each subsequent shot.

When a pistol is *double action only*, every round fires double action with the hammer at rest against the rear of the slide. Every time the trigger is pulled to the rear, it manually cocks and releases the hammer to fire the pistol. As the slide cycles and goes forward, the hammer safety follows, coming to rest against the rear of the slide. The hammer never stays cocked. The weapon's trigger pull is the same each time.

In a *double/single* pistol, the hammer must be manually cocked, and the first round fires double action but the subsequent rounds fire single action. (The trigger being pulled to the rear manually cocks the hammer and releases it.) The second and subsequent rounds fire single action as the hammer remains cocked each time the slide cycles. After firing is complete, the hammer remains cocked. Before holstering the weapon, it must be decocked using the decocking lever.

The Glock action is sometimes referred to as a “striker fire action.” The federal Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) classifies the Glock as a double-action pistol. As the Glock trigger is pulled, the firing pin is pulled to the rear (first action) until released by the trigger bar (second action), which allows the firing pin to move forward and strike the primer.

The Glock manufacturer refers to their firearm as a “safe action pistol.”

How the Semiautomatic Pistol Works

A semiautomatic pistol functions by using the energy from the recoil of a single round of ammunition to extract and eject a fired cartridge from the pistol's chamber and load an unfired round from a magazine into the chamber for the next shot.

As you draw the trigger fully to the rear in double-action mode, the hammer moves back and then releases to strike the firing pin. Upon firing, the slide moves back, extracting and ejecting the spent cartridge case and pushing the hammer to the fully cocked position. As the slide moves to the rear, the recoil spring compresses. When all the energy has been used, the spring decompresses, pushing the slide forward. Then the slide returns forward, feeding the next cartridge from the magazine to the barrel chamber. The hammer remains cocked, and the trigger is in the rear position, so subsequent shots fire in single-action mode. This sequence repeats until the last round fires. Then the magazine follower exerts upward pressure on the slide stop, causing it to engage and hold the slide in the open position. (This example describes a double-action/single-action pistol.)

Cycle of Operation (Open Action)

- loading—inserting a loaded magazine into the magazine well
- feeding/chambering—moving the round from the magazine to the chamber by releasing the slide, picking up the round from the magazine and seating the round into the chamber
- locking—the breech or back end of the barrel locks into the slide
- firing—ignition of the primer and firing the cartridge

- unlocking—unseating the breech end of the barrel from the slide
- extraction—pulling the spent cartridge from the chamber
- ejecting—pushing the spent cartridge out of the ejection port
- cocking—returning the firing mechanism to the fire position

Performing a Function Check

A function check ensures that the weapon functions properly. It is usually performed after fieldstripping or cleaning and reassembling the pistol. To perform a function check, follow these steps:

Glock:

1. Visually and physically check the firearm to make sure it is unloaded.
2. Press the trigger and hold it to the rear.
3. Release or cycle the slide with the support hand and slowly release the pressure of the trigger until the trigger resets; you should hear a click and feel the reset on the trigger.

Other types of semiautomatic pistols:

1. Visually and physically check the firearm to make sure it is unloaded.
2. Operate the slide several times to make sure that it operates freely.
3. If the firearm has a magazine disconnect (that is, the magazine is not properly seated in the weapon), follow the manufacturer's instructions to perform a function check.
4. Put the manual decocking/safety lever in the "off" position.
5. Pull the trigger. The weapon should function properly.
6. If the weapon has an external hammer, then manually cock the hammer and pull the trigger. The weapon should function properly. If the weapon has a decocking lever, operate the slide and depress the lever. The pistol's hammer should decock.
7. Lock the slide to the rear.
8. Insert an empty magazine into the magazine well until the magazine engages.
9. Depress the magazine release. The magazine should fall free.
10. Depress the slide release or pull the slide to the rear and then release. The slide should function properly.

Handing the Semiautomatic Pistol to Another Person

To hand a semiautomatic pistol to another person, do the following:

1. Locate the manual safety on the semiautomatic pistol (if applicable). Put the safety in the “on” position.
2. Press the magazine release button and remove the magazine from the magazine well.
3. Secure the magazine.
4. Point the weapon in a safe direction, and pull the slide to the rear to extract and eject the live round from the chamber.
5. Lock the slide to the rear using the slide stop on the weapon’s frame.
6. Visually and physically inspect the chamber and magazine well to make sure they are empty.
7. With the slide locked to the rear and the magazine well empty, hand the semiautomatic pistol to the other person, grip first.

The person receiving the firearm should physically and visually check to make sure the firearm is unloaded.

SECTION VOCABULARY

double action only

double/single

handgun

single action

UNIT 3 | HANDGUN USE—SEMIAUTOMATIC PISTOL

LESSON 2 | Drawing and Holstering—Semiautomatic Pistol

OBJECTIVES

- FA3.2.1.** Disengage the holster retention device(s) for a holstered semiautomatic pistol.
- FA3.2.2.** Draw the semiautomatic pistol upward from a holster with the retention devices unfastened.
- FA3.2.3.** Acquire a proper grip on a holstered semiautomatic pistol.
- FA3.2.4.** Secure the semiautomatic pistol in the holster using retention device(s).
- FA3.2.5.** Use the thumb of the shooting hand on the rear of the slide to prevent cocking the semiautomatic pistol.

LESSON GOAL: At the end of this lesson, you will know how to draw and holster a semiautomatic pistol.

Drawing a Semiautomatic Pistol

To draw a semiautomatic pistol properly, start in the shooting stance, hands near waist level, away from your weapon. On command, disengage the safety device and establish a proper grip.

To attain the proper grip, perform the following steps:

1. Keep your hand high on the backstrap.
 2. Wrap your fingers around the grip.
 3. Draw the semiautomatic pistol in an upward motion, keeping your trigger finger outside the trigger guard and off the trigger.
 4. Lift the pistol upward so its muzzle clears the top of your holster. (Remember to keep your trigger finger outside the trigger guard.)
5. Thrust the muzzle straight toward the target as the support hand joins the shooting hand and firearm to form the proper two-handed shooting grip. If no threat is present, keep the muzzle pointed in a safe direction.

The drawing procedures are the same for all handguns—semiautomatic pistols as well as revolvers.

Holstering a Semiautomatic Pistol

To holster a semiautomatic pistol, do the following:

1. Maintain a proper grip and keep your finger off the trigger and outside the trigger guard.
2. In the reverse order from drawing, smoothly return the semiautomatic pistol to your holster until you seat it properly.
3. Align the retention device components, and secure them together until locked.

Note: It is recommended for the semiautomatic pistol to use the thumb of your shooting hand on the rear of the slide to prevent the slide from moving to the rear while holstering.

The holstering procedures are the same for all handguns—semiautomatic pistols as well as revolvers.

UNIT 3 | HANDGUN USE—SEMIAUTOMATIC PISTOL

LESSON 3 | Fundamentals of Marksmanship—Semiautomatic Pistol

LESSON GOAL: At the end of this lesson, you will know the fundamentals of marksmanship and the general principles of using a flashlight when shooting a semiautomatic pistol.

Accurate shooting results from knowing and correctly applying these fundamentals of marksmanship: grip, sight alignment, sight picture, trigger control and follow-through, and proper stances and shooting positions. Breath control and concentration are also essentials for accuracy. The fundamentals of marksmanship are the same for all handguns—semiautomatic pistols and revolvers.

Shooting Stances for a Semiautomatic Pistol

Stance is the posture a shooter assumes while firing a shot. Proper stance is important when using firearms tactically or defensively. It gives the shooter more stability. From a steady and efficient shooting stance or stable shooting position, a shooter has the ability to move and engage targets properly.

You can fire a handgun in a number of stances (Isosceles, Weaver, Modified Weaver, hip, and tactical ready) from a number of positions (standing, two-hand high point, kneeling, prone, and barricade).

Standing Position

To shoot a semiautomatic pistol from the standing position:

1. Stand with your feet approximately shoulder-width apart.
2. Keep your weight on the balls of your feet.
3. Bend your knees slightly so you can move in any direction.
4. Move the foot on your weapon (shooting) side back slightly.

OBJECTIVES

FA3.3.1. Identify shooting stances to use when shooting a semiautomatic pistol.

FA3.3.2. Define cover.

FA3.3.3. Assume an appropriate shooting position with the semiautomatic pistol from behind cover.

FA3.3.4. Acquire a proper grip with a semiautomatic pistol.

FA3.3.5. Obtain sight alignment with a semiautomatic pistol.

FA3.3.6. Obtain sight picture with a semiautomatic pistol.

FA3.3.7. Pull/squeeze the trigger until the semiautomatic pistol discharges (trigger control).

FA3.3.8. Release pressure on the trigger until the trigger on the semiautomatic pistol reengages (trigger reset).

FA3.3.9. Follow through after the cartridge in the semiautomatic pistol is fired.

FA3.3.10. Shoot a semiautomatic pistol while using a flashlight.

FA3.3.11. Identify techniques for shooting a semiautomatic pistol while using a flashlight.

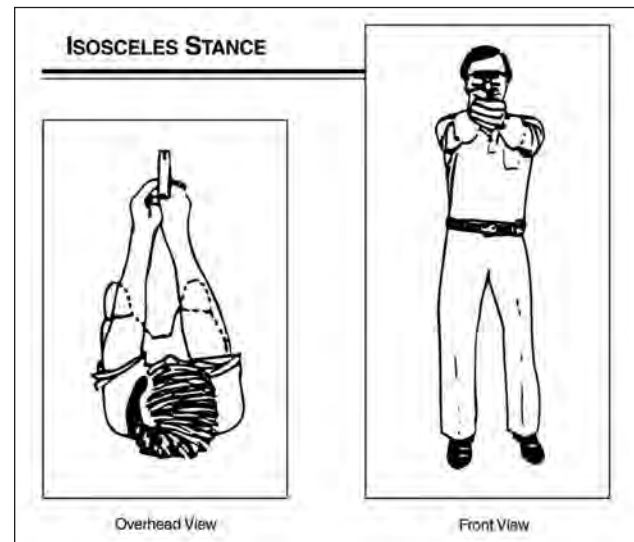
5. Square your head and shoulders to the target. Keep your back straight and head erect (unless you are using the Modified Weaver stance.)
6. Draw your weapon, raising it to eye level. Do not bend your head down to the weapon's level.
7. After you fire the weapon, continue to cover your target and scan for additional threats.

Isosceles Stance

The Isosceles stance most closely represents the instinctive response to a threat. This stance minimizes the exposed areas of the body not covered by armor.

To shoot a semiautomatic pistol from the Isosceles stance:

1. Stand with your feet about shoulder-width apart. Keep your weight on the balls of your feet.
2. Bend your knees slightly so you can move in any direction.
3. Square your head and shoulders to the target, body weight forward.
4. Lock your arms straight out in front, and bring the handgun to eye level.



Isosceles stance

Figure 3-9

Weaver Stance

To fire the semiautomatic pistol from the Weaver stance:

1. Stand at a 45° angle to the target, with your feet shoulder-width apart. Your weapon-side foot is to the rear.
2. Bend your knees slightly so your weight is on the balls of your feet. Keep your shoulders at a 45° angle to the target.
3. Extend the weapon arm almost fully while bending your support arm at the elbow. The elbows should be fairly close together not allowing them to flare out.
4. Push forward with your shooting hand and pull back with your support hand to create isometric tension, where the tension of the muscle changes, not the length.
5. Bring your weapon to eye level and keep your head erect.

Modified Weaver Stance

The Modified Weaver stance is similar to the Weaver stance except the weapon arm is locked out straight. Other elements, such as foot position, may be modified because of a person's physical characteristics.

Hip Shooting Stance

When you are within arm's reach (3–4 feet away) of a subject, use the hip shooting stance. If you extend your arms to prepare to shoot your firearm, the subject would be close enough to grab your firearm or knock your hand and firearm to the side.

To fire the semiautomatic pistol from a hip shooting stance, you have two options:

Option 1—Shoot your semiautomatic pistol from the one-handed hip stance:

1. Assume the interview stance:
 - a. Stand with head, hips, and feet aligned.
 - b. Stand with your feet about shoulder-width apart with knees slightly bent.
 - c. Angle your body to the subject with the weapon side away.
 - d. Keep your hands above your waist.
2. Draw your firearm.
3. Place the elbow of your weapon arm against the side of your body above the holster.
4. Keep your forearm, hand, and firearm against the side of your body above the holster.
5. Put your support hand in a defensive position in front of your body. Keep it close to your chest to guard against attack, should you not draw your firearm quickly enough.

Option 2 (less preferable than Option 1)—Shoot your semiautomatic pistol from the two-handed hip stance:

1. Assume the interview stance.
2. Draw the weapon and keep your weapon-side elbow at a 90° angle (in an L shape). Keep your elbow against the body, slightly above the holster.
 - a. Keep your forearm and wrist and the barrel of your handgun parallel to the ground and pointed at the subject.
 - b. Grip the handgun a little more tightly than normal. This helps you keep your wrist straight and makes it more difficult for a subject to take your weapon.
3. Bring your support and shooting hands together in a normal two-handed grip.
 - a. Hold your weapon at waist level and both elbows tightly against your body above your gun belt.
 - b. Keep your forearm, hand, and weapon horizontal to the ground.
4. With both eyes open and looking at the subject, eye and hand coordination normally adjusts the weapon to the proper aim.

Tactical Ready Stance

At times, you must cover a subject who is ready to take aggressive and perhaps deadly action. In the tactical ready stance, you can see a subject's hands. To take the tactical ready stance, you should assume the standing position described earlier, and then, lock your arms below your line of sight. In this stance, you will be able to observe the subject's hands/waistline.

You may also assume the tactical ready stance by bending your elbows while pulling the handgun straight back and holding it close to your body. In this position, you should maintain a proper grip while pointing the firearm in a safe direction or toward the threat. This variation of tactical ready stance is most commonly used in close-quarter situations or when the location of the threat is not immediately known.

Two-Handed, High Point Position

In the two-handed, high point position, you are in the standing or kneeling firing position with your sights on the target.

Kneeling Position

To fire a semiautomatic pistol from the kneeling position:

1. Begin in the standing position.
2. Draw your weapon and step forward with your opposite foot.
3. Drop your shooting side knee to the ground, keeping the muzzle of your weapon pointed downrange. Keep your finger off the trigger.
4. As you drop your knee, bring your arms up, raising your weapon to eye level. Keep your head erect and your back straight.

From the waist up, the kneeling and standing positions do not differ. From the waist down, the kneeling position differs only in that your shooting side knee is on the ground and your support knee is up.

Prone Position

To fire a semiautomatic pistol from the prone position:

1. Kneel on both knees.
2. Draw the firearm and point it toward the target.
3. Lie on your stomach, face down, using your support hand for stability.
4. Assume a two-handed grip.

To return to a standing position from a prone position:

1. Keeping the firearm pointed in a safe position, use your support hand to rise to a kneeling position.
2. Return the firearm to the holster.
3. Safely stand.

Barricade Position

A ***barricade position*** is a position behind cover.

Cover is any object or obstacle that creates a bullet-resistant barrier between you and a threat. It includes, but is not limited to, such things as a solid concrete wall, a vehicle's engine block, or a concrete telephone pole.

To fire a semiautomatic pistol from the standing barricade position:

1. Start away from the cover's outside edge.
2. Upon target stimulus or command, draw your firearm and move to the cover.
3. Outstretch and lock your arms.
4. Assume a stable standing position.
5. Lean to your weapon side.
 - a. Expose the necessary portion of your shoulder and head.
 - b. Keep your firearm's muzzle away from and behind the cover.
 - c. Do not let your firearm or hands rest on or touch the cover. Keep them behind the lateral line of the cover.

To fire the semiautomatic pistol from the kneeling barricade position:

1. Start away from the cover's outside edge.
2. Upon target stimulus or command, draw your firearm and move to the cover.
3. Point your firearm downrange, and keep your finger off the trigger.
4. Assume a stable kneeling position behind the cover.
5. Lean to your weapon side.
 - a. Expose the necessary portion of your shoulder and head.
 - b. Keep your firearm's muzzle away from and behind the cover.
 - c. Do not let your firearm or hands rest on or touch the cover. Keep them behind the lateral line of the cover.

Grip

One Hand

Follow these steps to grip the semiautomatic pistol properly with one hand.

1. Place the semiautomatic pistol in your shooting hand so that its barrel points in the desired direction. Place the webbing of the shooting hand around the handgun's backstrap.
2. Center the weapon between your thumb and forefinger. It should fit directly into the V of the web of your hand between your thumb and forefinger. Your forearm, hand, and weapon should form a straight line.
3. Apply a firm, uniform grip to the firearm. Use the same firmness you would in a handshake. Gripping too tightly can cause the hand and arm to shake; muscle spasms may begin after a short time. Gripping too loosely does not give you the necessary control of the weapon or its recoil.
4. Rest the thumb of your shooting hand along the frame. Keep the trigger finger (index finger of the shooting hand) outside the trigger guard until on target and ready to fire.

Two Hands

The two-handed grip lets you steady your shooting hand with your support hand. It provides maximum support while firing.

Follow these steps to grip the handgun properly with two hands.

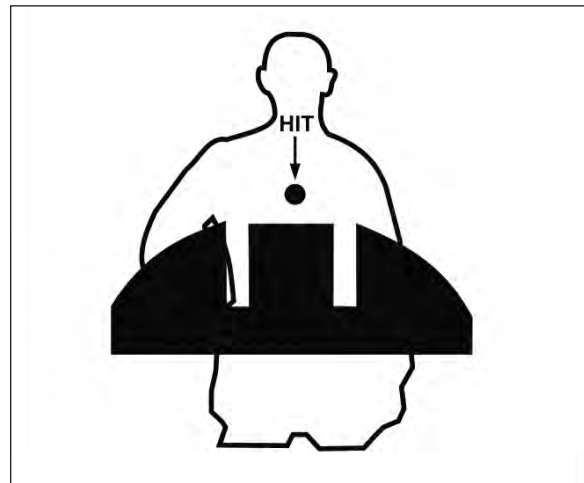
1. Follow the steps for the one-handed grip.
2. With your thumb and index finger in proper grip positions along the frame, wrap the fingers of your support hand tightly around the fingers of your shooting hand.
3. Place your support hand's thumb on or just below the thumb of your shooting hand, holding the weapon firmly. Do not place the thumb of your support hand over the back of or in the web of your shooting hand.

Sight Alignment and Sight Picture

Sight alignment is the relationship of the front sight and rear sight with the shooter's eye(s). It occurs when the top of the front sight is level with the rear sight's top edge and centered in the rear sight aperture or notch. Keep your eye(s) centered behind the rear and front sights. This is the most important aspect of aiming.

For proper sight alignment:

1. Look along the top of the weapon's sight plane.



Sight alignment and sight picture

Figure 3-10

2. Center the top of the front sight on a line along the top of the rear sight.
3. Center the top of the front sight horizontally and vertically in the rear aperture or notch.

This is the most natural method of sight alignment. Your eye instinctively accomplishes this task with little training. This method also causes the least inconsistency from shot to shot.

Sight picture is the relationship between the eye, front sight, rear sight, and target. Follow these steps:

1. Look through the notch of the rear sight.
2. Align the top of the front sight with the top of the rear sight with equal space on each side.
3. Place the sights on the target.
4. Focus on the front sight. (The target will be blurry.)
5. Use your dominant eye to align sights.

Although it is recommended that you keep both eyes open during firing, this practice may take time to get used to. Keeping both eyes open during firing has been known to improve the focus of your dominant eye and sight picture, as well as improve your accuracy, while providing increased peripheral vision.

The act of firing without disturbing sight alignment and the muzzle is a fundamental of marksmanship. Failure to control the trigger will result in improper sight alignment and motion in the muzzle when the hammer falls.

Note: Controlling the trigger is a mental process; pulling the trigger is a physical process.

Breath Control

Breath control is important in the aiming process. If you breathe while trying to aim, the rise and fall of your chest moves the handgun vertically.

To hold your breath properly, inhale, exhale normally, and stop at the moment when you pause between breaths. The extended pause between breaths (**respiratory pause**) is the best time to fire the shot(s).

Trigger Control and Follow-Through

Trigger control results when the trigger finger pulls the trigger straight back with increasing yet constant and steady pressure until the firearm discharges. Trigger control, the most difficult handgun fundamental to master, often determines a shot's success.

To control the trigger properly:

1. The preferred method is to contact the trigger with your index finger. Be careful not to touch the firearm elsewhere with your trigger finger. After you place your trigger finger on the trigger, keep it there until you fire.

2. When controlling the trigger, make sure to move your trigger finger straight back. This will release the hammer and discharge the handgun.
3. Control the trigger reset after the weapon discharges. Release pressure on the trigger until the trigger reengages. Dry drills help you improve your ability to reset the trigger without disturbing sight alignment or your muzzle.

Improper trigger control causes more misses than any other action in the firing process. If you put even slightly off-center pressure on the trigger, the pressure can cause the firearm to move and disturb your sight alignment and muzzle. No one can hold a firearm completely motionless. Jerking the trigger disturbs your aim before the bullet leaves the barrel. Flinching—a reflex caused by anticipating the firearm’s recoil—also disturbs your aim, but a steady, controlled squeeze of the trigger will yield the best result.

Control the trigger during the shot while keeping the sight alignment and sight picture correct. When the sight picture settles, the pressure remains steady until the handgun fires. Focus on perfect aim as you apply trigger control. A firm handgrip is essential for good trigger control. Apply pressure on the trigger with the trigger finger only and without disturbing sight picture or sight alignment. Use the same grip for each shot. By placing your trigger finger in the same position on the trigger each time, you can move the trigger straight to the rear with the same results each time.

Follow-through involves maintaining sight alignment before, during, and after firing a round. You must maintain proper stance, grip, and finger placement on the trigger. You must also acquire sight picture, reestablishing it each time you fire a weapon. Do not try to force a handgun down at the time of discharge (anticipating recoil), but keep your body and weapon in a controlled position during discharge.

Concentration

Concentration on the fundamentals is key to accurate and consistent shooting. For improved proficiency, you should apply all the fundamentals at the same time.

General Flashlight Principles

The flashlight’s main function is illumination. This includes illumination for movement, navigation, and searching, as well as for identifying and engaging a threat. You may also use the flashlight to control someone if the light is bright enough. If you see an unknown person or a suspect approaching you, the light may disorient them. Design and ergonomics are critical to proper and safe use of a flashlight. Firearm and hand sizes are two important factors in choosing an appropriate flashlight. Some firearms have the option to attach a weapon-mounted flashlight on the pistol frame (or weapon) for tactical lighting. This allows you to turn your flashlight on and off while aiming at a target.

Generally, using a flashlight lets you make a smooth transition from search to firing mode. The positioning between the flashlight and the bore of the firearm may offer some recoil control so you can place shots efficiently. In reduced light, you can execute all the fundamentals you practiced. Always positively identify a threat before using deadly force.

Varying amounts of light in the confrontation area can work for or against you. When you move quickly from a lighted area to a reduced-light area, your vision may be affected for a period of time. When you move from a dark area to a lighted area, your silhouette may present you as a target.

Whenever possible, consider the options of illumination for movement, navigation, and searching, and to identify and control suspects.

Types of Flashlight Grips

If you do not have a weapon-mounted flashlight on your firearm, you can hold your firearm in your shooting hand while holding a handheld flashlight in the support hand. Use one of the following flashlight grips:

“Watchman” grip—The flashlight is held in the support hand with the illuminating end projecting from the index finger side of the hand. The thumb controls the on/off switch with a side-mounted switch near the front of the flashlight; the little or ring finger controls it with a side-mounted switch near the back of the flashlight.

“Law enforcement” or “tactical” grip—The flashlight is held in the support hand, with the illuminating end projecting from the little finger on the side of the hand. The thumb controls a rear-mounted switch; the index finger controls a side-mounted switch near the back of the flashlight; the little or ring finger controls a side-mounted switch near the back of the flashlight.

“Syringe” grip—This grip is used with a small (4–6 inch) flashlight with a rear switch and a ring around the grip to give the index and middle fingers a hold. The flashlight is held in the support hand between the index and middle fingers. The switch is pulled back against the base of the hand or the knuckles of the shooting hand, depending on the technique used.

Flashlight: Firearm Techniques

Firing a handgun at night hinders sight alignment (if the weapon has no night sights), the ability to obtain a sight picture, and the ability to identify threats or targets.

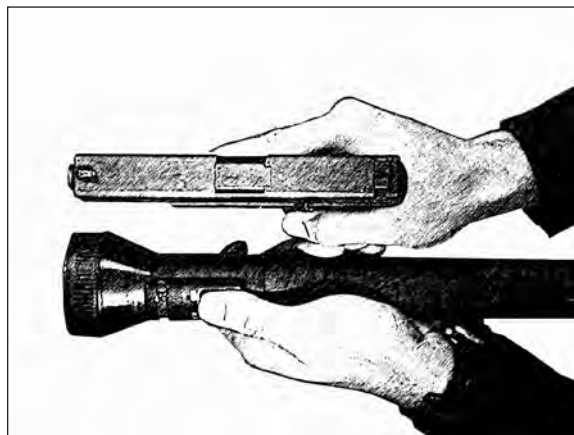
You must be able to identify a target or threat before engaging it with your handgun. Ideally, you should fire in reduced light (at night) only at close proximity because of the risk involved in identifying targets and threats. Focus on your weapon’s front sight if you can see it. If you cannot, you must use the point-shooting technique.

Point shooting is the technique used when you cannot use the sights on your weapon or you have no time to align the sight properly. The handgun becomes an extension of your arm and hand. You use this “extension” to point to the target or threat and fire. Most flashlight-assisted shooting requires point-shooting skills, because point shooting can be very effective when the target is in silhouette. Also, flashlight-assisted conditions may alter how you see or use your sights. Again, you should use this method only if you are close to the target or threat. At more than 7 yards, seek cover, and evaluate your options.

The following are techniques for shooting a handgun while using a flashlight.

Ayoob technique—This technique is thumb-to-thumb; it uses the watchman grip. It provides some support for firearm control and good illumination in relationship to the weapon.

To use this handgun/flashlight method, hold the handgun in your shooting hand and the flashlight in your support hand. Then, hold your hands out in front of you with your arms extended and hands pressed together at your thumbs.



Ayoob technique

Figure 3-11

SECTION VOCABULARY*barricade position**breath control**cover**follow-through**point shooting**respiratory pause**sight alignment**sight picture**stance**trigger control*

The light and handgun are side by side, so the light beam and handgun are parallel and point to the same place. You can quickly assume this position and easily identify a target. This method also helps illuminate the handgun sight.

Harries technique—To perform the Harries technique, hold the flashlight in your support hand and the handgun in your shooting hand. Then, put the backs of your hands together. With your hands braced together, you have more control over the handgun.

It is important to remember that using a flashlight at any time will give away your position. Also, the Harries technique is not a natural position to take, and requires practice. The key to the Harries technique is properly using the law enforcement or tactical grip. The Harries technique illuminates the sights fairly well.



Harries technique

Figure 3-12

UNIT 3 | HANDGUN USE—SEMIAUTOMATIC PISTOL

LESSON 4 | Loading and Unloading—Semiautomatic Pistol

LESSON GOAL: At the end of this lesson, you will know how to load and unload a semiautomatic pistol.

Loading a Semiautomatic Pistol

Select and adjust a gun belt to fit your waist. The belt should include a holster, belt keepers, and a magazine pouch. Carry the magazine pouch on the support side in a vertical position. When placing magazines in the pouch, face the front of the magazine toward the center of your body.

To load a magazine, perform the following steps:

1. Inspect ammunition for proper caliber and defects.
2. Hold the magazine with the follower facing up.
3. Pick up the ammunition and place the cartridge on the follower so its rim faces the back of the magazine and sits in front of the magazine lips.
4. With your thumb, push the cartridge down to depress the follower into the magazine. Continue pressing down until the cartridge is under the magazine lips.
5. Continue filling until the magazine is full. Place only the correct number of rounds in the magazine. Do not add extra rounds.
6. Tap the back of the magazine on your palm to ensure that the cartridges are seated.
7. Properly store the magazine in its pouch.

To load a semiautomatic pistol, use your shooting hand to draw the pistol from your holster. While doing so, always keep the barrel pointed in a safe direction.

1. Open the magazine pouch with your support hand, and remove a magazine.
2. While pulling up on the magazine, place your index finger along the front of the magazine.
3. Holding the weapon in your shooting hand, bring it close to your body and angle the magazine well slightly inward.
4. Use your index finger to guide the magazine into the magazine well.
5. Push the magazine into the magazine well with enough force to lock the magazine into place.

OBJECTIVES

FA3.4.1. Load the magazine for the semiautomatic pistol.

FA3.4.2. Point the muzzle of the semiautomatic pistol in a safe direction.

FA3.4.3. Insert a loaded magazine into the magazine well of the semiautomatic pistol.

FA3.4.4. Chamber a cartridge with the semiautomatic pistol.

FA3.4.5. Remove the magazine from the semiautomatic pistol.

FA3.4.6. Eject the cartridge from the chamber of the semiautomatic pistol.

6. Chamber a round by pulling the slide all the way to the rear and releasing, letting the slide travel forward on its own (known as slingshotting; do not ride the slide forward).
7. Decock/disengage if applicable.

The process of decocking varies, depending on the semiautomatic pistol's type. For Smith and Wesson, Beretta, and Ruger pistols, push the decock/safety lever down and then up with the thumb of your support hand. For a pistol with a spring-loaded decock/safety lever, push the lever down with your shooting hand's thumb and release. For Sig Sauer and HK pistols, push the decock lever down with your shooting hand and release.

To unload an equipped semiautomatic pistol, you should first engage the safety, and then remove the magazine, holding the pistol in your shooting hand with the trigger finger outside the trigger guard. Press the magazine release button with your shooting hand thumb. Let the magazine fall to the ground. Do not attempt to catch it.

To eject the round from the chamber, use your support hand's thumb and index finger to grab the slide and pull it to the rear several times. As you pull the slide back for the last time, push the slide stop up with your shooting hand thumb until the slide locks to the rear in the open position. Keep the muzzle pointed in a safe direction at all times. Make sure that your hand or fingers do not cover the pistol's ejection port. With the slide locked back, tilt the weapon and physically and visually inspect to make sure the chamber and magazine well are empty.

Empty Gun Reload

When the slide locks back because the gun is empty, you must reload. Remove your finger from the trigger. Press the magazine release, which allows the empty magazine to fall to the ground.

1. Open the magazine pouch with your support hand, and remove a magazine.
2. While pulling up on the magazine, place your index finger along the front of the magazine.
3. Holding the weapon in your shooting hand, bring it close to your body and angle the magazine well slightly inward.
4. Use your index finger to guide the magazine into the magazine well.
5. Push the magazine into the magazine well with enough force to lock the magazine into place.
6. Chamber a round by pulling the slide all the way to the rear and releasing, letting the slide travel forward on its own (known as slingshotting; do not ride the slide forward).
7. Decock/disengage if applicable.

UNIT 3 | HANDGUN USE—SEMIAUTOMATIC PISTOL

LESSON 5 | Weapons Malfunctions—Semiautomatic Pistol

LESSON GOAL: At the end of this lesson, you will know malfunctions that may occur when using a semiautomatic pistol and how to correct them.

This section identifies types of malfunctions that may occur as you fire your weapon and teaches you how to correct them. Knowing how to correct problems with your firearm may save your life. You can usually prevent malfunctions caused by ammunition if you inspect the ammunition for defects before use.

A **malfunction** is a condition that prevents a weapon from operating properly. Before trying to correct a malfunction on the weapons covered in this chapter, remember to perform the following steps:

1. Keep the barrel pointed in a safe direction.
2. Remove your finger from the trigger.
3. Identify the kind of malfunction and the proper technique for correcting it.

Semiautomatic pistol malfunctions include a squib load, a failure to fire, a failure to feed, a failure to eject, a double feed, or a failure to extract. The leading cause of malfunctions in semiautomatic weapons is the failure to properly seat the magazine.

Squib Load

A **squib load** is a malfunction that occurs when the primer ignites and there is no burn or partial burn of the powder charge. Squib loads can cause a bullet to fail to exit the muzzle and become lodged in the bore.

THIS IS A MAJOR SAFETY HAZARD.

A distinct sound is associated with a squib load. It is not as loud or forceful as the sound of a regular round firing. You hear a pop instead of a bang and feel much less recoil.

If a squib load malfunction occurs during training, do the following:

1. Stop firing.
2. Keep your weapon pointed downrange.

OBJECTIVES

FA3.5.1. Keep the barrel of a semiautomatic pistol with a malfunction pointed in a safe direction.

FA3.5.2. Remove your finger from the trigger of a semiautomatic pistol with a malfunction.

FA3.5.3. Identify the types of semiautomatic pistol malfunctions that may occur.

FA3.5.4. Identify a squib load in a semiautomatic pistol.

FA3.5.5. Switch to a secondary weapon when a squib load occurs in a semiautomatic pistol. (*Note:* This will be cleared by the instructor only.)

FA3.5.6. Correct the semiautomatic pistol malfunction using the proper techniques.

3. Raise your support hand.
4. Wait for an instructor to take the weapon.

Instructors are responsible for clearing this malfunction. This description of a squib load and the procedure for handling a squib load apply to any weapon.

During a deadly force encounter, be prepared to go to a secondary weapon if it is necessary and if a secondary weapon is available. Retreat and move to cover.

You can clear most malfunctions from the pistol (excluding a squib round) using two clearance methods. If available, move to cover to clear a malfunction in an actual armed confrontation.

Phase 1 Clearance: Immediate Action Drill

Use Phase 1 clearance to fix failure to feed, failure to fire, stovepipe, and failure to extract malfunctions. These types of semiautomatic pistol malfunctions will be explained later in Phase 2. For now, you need to learn the proper techniques to clear a weapon malfunction. The easiest way to remember this method is to learn the phrase Tap, Rack, Ready, Fire (if necessary).

When a malfunction occurs, perform the following steps:

1. Use your support hand to tap (**Tap**) the bottom of the magazine into the magazine well. If the magazine is not fully seated, tapping will seat it.
2. Reach up to the slide with your support hand, pull the slide to the rear, and then release it. This is the same action you use when loading your weapon (**Rack**). It extracts and ejects a bad round (if necessary), and chambers a new round.
3. **Ready**—In an actual armed confrontation, you must assess the situation. You either reengage the subject if they remain a threat, or issue commands if the subject surrendered during the clearance drill.
4. **Fire** if necessary.

Phase 2 Clearance: Immediate Action Drill

If Phase 1 clearance does not clear the malfunction or the malfunction is a double feed, use Phase 2 clearance. A Phase 2 clearance is more detailed and time-consuming.

1. Lock the slide to the rear to release pressure on the recoil guide/spring and magazine.
2. Depress the magazine release; forcibly strip the magazine from the magazine well with the support hand.
3. Rotate the pistol toward the ejection port side and with your support hand, work the slide back and forth until you clear the barrel and chamber of any rounds or obstructions.
4. Place a new magazine in the magazine well, and use a sharp upward motion to seat the magazine.
5. Reach up to the slide with your support hand, pull the slide to the rear, and then release it (slingshotting). This chambers a round.

6. Ready—Assess the situation. Reengage the subject if they are still a threat, or issue verbal commands.
7. Fire if necessary.

Be careful of a squib load, which can be extremely hazardous.

A **failure to fire** occurs when the trigger is pulled, but the round fails to detonate. The following conditions cause a failure to fire:

- The safety is engaged. Disengage the safety.
- There was a failure to chamber a round. Correct this malfunction with the Phase 1 Clearance method—Tap, Rack, and Ready.
- The magazine is not seated in the magazine well. Correct this malfunction by tapping the magazine into the magazine well.
- The primer fails to fire after the firing pin or striker hits it. The result is a misfire and a dead round. Correct this malfunction with the Phase 1 Clearance method—Tap, Rack, and Ready.

In a **failure to feed**, the cartridge fails to feed into the chamber. This occurs when the magazine is not fully seated. Use the Phase 1 clearance method—Tap, Rack, and Ready—to correct this malfunction, or insert a new magazine.

Failure to eject, often called a **stovepipe**, occurs when a fired cartridge case does not completely eject. The most common causes are a weak powder charge (bad ammunition), a dry weapon (not enough lubrication), and, if while firing, the shooter does not provide enough resistance for the slide to operate (limp wrist). Use the Phase 1 clearance method—Tap, Rack, and Ready—to correct this malfunction.

A **double feed (handgun)** is a failure to extract the round in the chamber and a new round being fed from the magazine. Causes include damaged or poorly fitting magazine lips or a faulty cartridge interrupter (in weapons with tubular magazines).



Stovepipe

Figure 3-13

To clear a double feed, you must use the Phase 2 clearance method:

1. Lock the slide to the rear.
2. Depress the magazine release and forcefully strip the magazine from the magazine well.
3. Rotate the pistol toward the ejection port side and with your support hand, work the slide back and forth until you clear the barrel and chamber of any rounds or obstructions.
4. Reinsert a magazine and make sure it is fully seated.
5. Pull back on the slide, and release it to chamber a round (slingshot).
6. Assess the situation.
7. Fire if necessary.

SECTION VOCABULARY

double feed (handgun)

failure to eject (stovepipe)

failure to extract

failure to feed

failure to fire

malfunction

squib load

Failure to extract occurs when the pistol fails to extract a spent casing from its chamber. The causes of this malfunction include a weak powder charge, dirt behind the extractor, a dirty chamber, a broken extractor, a damaged or worn rim on the case, or an over-expanded or cracked case.

To clear this malfunction, use the Phase 1 clearance method. If you do not succeed, try the Phase 2 clearance method. If the extractor is worn or broken, a certified armorer must repair the weapon. If the weapon is dirty, it must be cleaned.

During qualification, you must clear weapon malfunctions and continue firing. If you cannot return your weapon to firing condition after performing an immediate action drill, call for an instructor.

UNIT 3 | HANDGUN USE—SEMIAUTOMATIC PISTOL

LESSON 6 | Weapons Cleaning—Semiautomatic Pistol

LESSON GOAL: At the end of this lesson, you will be able to identify the necessary supplies and tools to clean a semiautomatic pistol and know how to clean and lubricate it.

Cleaning your weapon is important. A clean weapon functions properly when you need it. Fieldstripping and cleaning are routine maintenance for all weapons. Before cleaning your weapon, gather the supplies and tools you need, select a well-ventilated location for cleaning, and fieldstrip the weapon.

While fieldstripping and cleaning your semiautomatic pistol, remember these important steps:

1. Safety check the weapon.
2. Remove live ammunition from the cleaning area.
3. Remove the magazine by pressing the magazine release and letting the magazine slide out of the magazine well, or by stripping the magazine with your support hand. Place the magazine away from the weapon.
4. To lock the slide to the rear, pull on it and engage the slide stop or catch.
5. Visually/physically inspect the chamber, magazine well, and barrel. Look for ammunition casings and obstructions.
6. Remove the ammunition from the magazine.
7. Place the ammunition in a secure area away from the weapon.

It is recommended that you observe the manufacturer's guidelines for cleaning your semiautomatic pistol. Make sure the tools you use do not invalidate the manufacturer's warranty or conflict with the manufacturer's recommendations.

The weapon cleaning kit could include a bore brush, solvent, gun-cleaning patches (cotton patches absorb more), nylon cleaning brush, Bore Snake®, cleaning pad, gun oil/lubricant (non-penetrating), rags, pipe cleaners, and cotton swabs.

- cleaning tools—Cleaning tools are caliber specific. Use the tools designated for the specific caliber of your weapon. A larger caliber cleaning brush or patch tip does not fit in a small weapon and may cause damage. A small tool may not completely clean a large firearm.

OBJECTIVES

FA3.6.1. Fieldstrip a semiautomatic pistol based on make and model of weapon.

FA3.6.2. Identify the proper supplies and tools to use when cleaning a semiautomatic pistol.

FA3.6.3. Clean a semiautomatic pistol, removing all lead, powder, debris, and dirt.

FA3.6.4. Lubricate a semiautomatic pistol using lubricant and cloth/patches.

FA3.6.5. Reassemble a cleaned semiautomatic pistol.

FA3.6.6. Function check a cleaned, reassembled semiautomatic pistol.

FA3.6.7. Return a cleaned semiautomatic pistol to safe storage or securely re-holster the weapon.

- solvent and lubricant—Several types and brands of cleaners and solvents are available. Use solvent and lubricant specifically designed for firearms maintenance.
- patches and swabs—Consider the weapon bore when choosing gun-cleaning patches. Different materials have different absorption qualities.

Cleaning and Lubricating a Semiautomatic Pistol

Remove all lead, powder, debris, and dirt. These substances can cause a malfunction if they build up. Use the following processes:

1. Brush properly—Use a back and forth brushing motion to remove loose objects, loosen other substances, and help solvents and cleaners work better.
 - Brush all surfaces of your firearm.
 - Make sure that the bore brush clears the bore completely after each stroke.
 - Make sure to use a soft, non-marring brush on the firearm's outer finished surface. Do not use a brass brush on the firearm's exterior; it can damage the surface.
2. Brush with solvent—Solvents are designed to dissolve and loosen lead, powder, debris, dirt, and substances that brushing does not clean.
3. Wipe all parts repeatedly to remove all of the solvent and debris until your weapon is clean. Use new clean, dry patches when necessary.

Pay special attention to the following areas of the semiautomatic pistol:

- magazines—Clean magazines thoroughly and wipe dry. If magazines do not function properly, the firearm can malfunction.
- bore—As the projectile travels down the bore, it leaves behind small amounts of the material it is made of. To thoroughly clean the bore, you should insert the cleaning brush into the bore's breech end, push the cleaning brush through until it clears the muzzle, and then pull it all the way out. Repeat this process until the bore of the barrel is clean.
- recoil spring and guide—Clean thoroughly; dirt and debris hinder the weapon's blowback and cycle function.
- slide—Clean the entire slide, outside and inside. Pay special attention to the slide rails. You can use cotton swabs.
- extractor—Clean the extractor thoroughly. It must be able to catch the rim of a fired cartridge as the weapon cycles. If not, the next round cannot feed properly and a malfunction results.
- firing pin hole—Make sure the firing pin hole is free of all debris.

Lubricating your weapon is very important. Check your weapon regularly to ensure it is properly lubricated, and check the manufacturer's recommended lubrication points and amounts.

1. Lubricate the frame or slide rails to reduce drag or friction between surfaces when the weapon cycles.
2. Lubricate any other points recommended by the manufacturer.
3. Remove excess lubrication. A little lubrication goes a long way. Excess lubrication can harm ammunition. Wipe it off using a clean, dry cloth. Heavy lubrication or solvents may destroy the primer and powder of loaded cartridges. Wipe the inside of the magazine dry; leave no lubricant.

When you finish cleaning and lubricating your pistol:

1. Reassemble the semiautomatic pistol and its magazines.
2. Perform a function check of the pistol for proper operation.
3. Return the pistol to safe storage, or holster and secure it.
4. Properly dispose of all cleaning supplies.
5. Wash your hands with soap and water.

UNIT 4 | HANDGUN USE—REVOLVER

LESSON 1 | Firearms Familiarization—Revolver

OBJECTIVES

- FA4.1.1.** Identify revolver parts with the correct nomenclature.
- FA4.1.2.** Describe the function of revolver parts.
- FA4.1.3.** Identify the steps to safely handle a revolver.

LESSON GOAL: At the end of this lesson, you will know the parts of a revolver, how the parts function, and how to safely handle a revolver.

Nomenclature of the Revolver

Revolvers may operate differently depending on the manufacturer. Make sure you are familiar with the nomenclature, and each part's location and function for the revolver that you use. Refer to the double-action revolver diagram to help you identify each part.

These terms are associated with the use and function of a revolver:

- backstrap—the portion of the grip that is placed in the palm of the shooting hand
- barrel—the long tubular part of a firearm that provides an exit path for discharging the bullet. The barrel provides direction and velocity to the bullet.
- center pin (internal part)—on a Smith & Wesson revolver, this is the spring-loaded part that holds the cylinder closed
- crane (internal part)—attaches the cylinder to the frame so the cylinder can swing in and out of the frame opening; Colt uses the term crane; Smith & Wesson uses the term yoke
- cylinder—houses the extractor rod and contains the chambers that hold the cartridges
- cylinder release latch—disengages the cylinder from the frame
- cylinder stop (in front of the cylinder)—locks the cylinder
- extractor (internal part)—star-shaped device attached to the extractor rod that fits inside the cylinder that the rounds rest on
- extractor rod—when depressed, it causes the extractor to push the cartridge from the cylinder



Double-action revolver

Figure 3-14

- frame—structure that holds the parts of the revolver and provides a way of gripping the firearm
- front sight—located on the end of the barrel near the muzzle; it is designed for the swift location of the target and for bringing the firearm into alignment for accuracy
- grip—made of wood, plastic, or rubber; designed to allow the shooter to grip the firearm easily for control
- hammer—when the trigger is pulled, this part falls forward to activate the primer. The primer is a small, metal cup containing the detonating mixture used to ignite the propellant or powder charge
- hammer nose (internal part) —pin or firing pin—part of the hammer or frame that protrudes through the frame and strikes the primer
- hammer spur—part of the hammer used for cocking the weapon to single-action mode
- hand (internal part)—part of a revolver that turns the cylinder as the gun is cocked, thus aligning a cartridge with the hammer or firing pin
- rear sight—located on the rear of the frame; it can be adjustable or fixed
- top strap—part of the frame that houses the rear sight, positioned over the cylinder
- trigger—activates the revolver's operation in both single and double action
- trigger guard—part of the frame that protects the trigger

How the Revolver Works

When the trigger is squeezed, the cylinder unlocks and rotates, placing a live cartridge in line with the firing pin. When the hammer falls, the hammer nose or firing pin strikes the primer and ignites the powder charge. The burning powder creates a gas, which builds up pressure. This pressure sends the projectile (bullet) down and out of the barrel. The trigger releases forward, resetting the mechanism.

The direction of the cylinder rotation depends upon the manufacturer. A Smith & Wesson revolver rotates counterclockwise and the cylinder release latch pushes forward to release the cylinder. Ruger's revolver rotates counterclockwise; the cylinder release latch is depressed into the frame. A Colt revolver rotates clockwise. The cylinder release latch is pulled rearward to release the cylinder.

Cycle of Operation

- loading—placing live rounds into the open cylinder and closing the cylinder into the frame
- locking—locking the cylinder into the frame
- unlocking/feeding/locking—releasing the locked cylinder by squeezing the trigger so the cylinder can rotate and place a live round in front of the barrel in line with the firing pin; the cylinder then locks, allowing the firing pin to strike the live round that has been locked in place. The cylinder repeats this process with each pull of the trigger until all cartridges have been fired.

- firing—ignition of the primer and firing the cartridge
- extraction/ejecting—pushing or pulling the cylinder release latch; this rotates the cylinder out of the frame. Pushing the extractor rod ejects all cartridges.

Handing a Revolver to Another Person

As an officer, you will handle many firearms. In the course of your duties, you will hand over your firearm or a confiscated firearm. Safely handling the firearm is essential to protect you and ensure the safety of others.

To hand a revolver to another person, follow these steps:

1. With the barrel pointed in a safe direction, open the cylinder.
2. Visually and physically inspect the cylinder to make sure it is not loaded. If it is loaded, unload the revolver and ensure that all rounds have been removed.
3. With two or three fingers through the top strap, hand the revolver to the other person, grip first.

The person receiving the firearm should physically and visually check to make sure that the firearm is unloaded.

UNIT 4 | HANDGUN USE—REVOLVER

LESSON 2 | Drawing and Holstering—Revolver

LESSON GOAL: At the end of this lesson, you will know how to draw and holster a revolver.

You will recall that the term “handgun” refers to either the semiautomatic pistol or the revolver. As handguns, they share many operational features, such as the procedures for drawing and holstering. You will draw and holster a revolver in the same way as for the semiautomatic pistol. Please refer to the information in Unit 3, Lesson 2 for a description of the proper way to draw and holster a revolver.

OBJECTIVES

- FA4.2.1.** Disengage the holster retention devices for a holstered revolver.
- FA4.2.2.** Draw the revolver upward from a holster with the retention devices unfastened.
- FA4.2.3.** Acquire a proper grip on a holstered revolver.
- FA4.2.4.** Secure the revolver in the holster using retention devices.

UNIT 4 | HANDGUN USE—REVOLVER

LESSON 3 | Fundamentals of Marksmanship—Revolver

OBJECTIVES

- FA4.3.1.** Identify shooting stances to use when shooting a revolver.
- FA4.3.2.** Assume an appropriate shooting position with the revolver from behind cover.
- FA4.3.3.** Acquire a proper grip with a revolver.
- FA4.3.4.** Obtain sight alignment with a revolver.
- FA4.3.5.** Obtain sight picture with a revolver.
- FA4.3.6.** Pull/squeeze the trigger until the revolver discharges (trigger control).
- FA4.3.7.** Release pressure on the revolver trigger until the trigger reengages (trigger reset).
- FA4.3.8.** Follow through after the cartridge in the revolver is fired.

LESSON GOAL: At the end of this lesson, you will know the fundamentals of marksmanship when shooting a revolver.

The principles of marksmanship for a revolver are the same as those for a semiautomatic pistol. Please refer to the information in Unit 3, Lesson 3 on proper stances and shooting positions, and grip, sight alignment, sight picture, trigger control and follow-through, when practicing marksmanship with a revolver. Remember that sight alignment, trigger control, and concentration are essential for accuracy.

UNIT 4 | HANDGUN USE—REVOLVER

LESSON 4 | Loading and Unloading—Revolver

LESSON GOAL: At the end of this lesson, you will know how to load and unload a revolver.

Loading a Revolver

Select and adjust a gun belt to fit your waist. The belt should include a holster, belt keepers, speed loaders, and speed loader case. A speed loader is a device that helps you load a gun faster. Carry your speed loader case between your belt buckle and holster on your weapon side. For training and qualification, carry your extra ammunition in your shooting-side pants pocket.

Perform the following steps to fill a speed loader:

1. Inspect ammunition for proper caliber and defects.
2. Hold the speed loader in the fingers of your support hand so the charge holes face upward.
3. Unlock the speed loader.
4. With your shooting hand, place cartridges rim down in the charge holes.
5. Lock the cartridges in the speed loader.
6. Properly store the speed loader in the speed loader pouch.

To load a revolver, follow these steps:

1. Keep your finger outside the trigger guard.
2. Always keep the muzzle pointed in a safe direction.
3. Open the cylinder.
4. Locate and operate the cylinder release latch.
5. Place the revolver frame in your support hand, and then push/press the cylinder out of the frame with the ring and middle fingers of your support hand.
6. Cradle the revolver in your support hand, just above your waistline, close to your body.

OBJECTIVES

FA4.4.1. Insert ammunition into a speed loader for a revolver.

FA4.4.2. Point the muzzle of the revolver in a safe direction.

FA4.4.3. Disengage the revolver's cylinder release latch.

FA4.4.4. Push/press the revolver's cylinder out of frame alignment.

FA4.4.5. Insert ammunition into the revolver's cylinder by hand.

FA4.4.6. Insert the ammunition into the revolver's cylinder using a speed loader.

FA4.4.7. Extract the spent revolver cartridge casings.

FA4.4.8. Inspect the cylinder chambers to ensure that all spent cartridge casings have been extracted.

Hand Loading

1. With your two center fingers holding the cylinder open and your pinkie and index fingers controlling the frame, position the revolver so its muzzle points at the ground.
2. Hold one cartridge between the thumb and index finger of your shooting hand.
3. Push the cartridge into a chamber of the cylinder.
4. With your thumb and fingers on the cylinder and barrel pointed toward the ground, rotate the cylinder and continue inserting cartridges until the cylinder chambers are full.
5. When you have loaded all chambers, push the cylinder closed with your support hand thumb.
6. As you remove your two center fingers, rotate the cylinder until it locks in place.

Partial Hand Loading

When loading less than six rounds, place each round together, leaving no space between rounds. For revolvers where the cylinder rotates counterclockwise, place the first round to the right of the top strap so the cylinder can rotate and place a live round in front of the barrel in line with the firing pin. For revolvers where the cylinder rotates clockwise, place the first round to the left of the top strap so the cylinder can rotate and place a live round in front of the barrel in line with the firing pin. As you close the cylinder, it should be positioned so that the rounds fire in succession.

Speed Loading

1. Grasp the loader's turn or push knob with the first three fingers of your shooting hand.
2. Align the cartridges protruding from the speed loader with the chambers in the cylinder.
3. Insert the cartridges as a unit into the chambers.
4. Turn or push the release knob so all the cartridges fall into the cylinder.
5. Allow the speed loader to drop to the ground.



Partial load

Figure 3-15



Cylinder placement with partial load

Figure 3-16

6. Push the cylinder closed with your support hand thumb.
7. Use your support hand's thumb and forefinger to rotate the cylinder until it locks into place.

Unloading a Revolver

1. Hold the revolver in your shooting hand, and point it in a safe direction.
2. Locate and operate the cylinder release latch.
3. Open the cylinder by pushing it from the frame.
4. With your support hand under the trigger guard, use the two center fingers of your support hand to push open the cylinder and your index and pinkie fingers to control the frame. (Place your index finger over the top strap and your pinkie finger over the hammer.)
5. To unload the empty casings, cradle the revolver in your support hand. Then, hold the revolver vertically with its muzzle pointed up and push down on or strike the ejector rod using your thumb or the open palm of your shooting hand to eject the casings. Let the casings fall directly to the ground. Do not catch them. After unloading the revolver, visually inspect the cylinder chambers to ensure they are all empty.

UNIT 4 | HANDGUN USE—REVOLVER

LESSON 5 | Weapons Malfunctions—Revolver

OBJECTIVES

- FA4.5.1.** Keep the barrel of a revolver with a malfunction pointed in a safe direction.
- FA4.5.2.** Remove your finger from the trigger of a revolver with a malfunction.
- FA4.5.3.** Identify the types of revolver malfunctions that may occur.
- FA4.5.4.** Identify a squib load in a revolver.
- FA4.5.5.** Switch to a secondary weapon when a squib load occurs in a loaded revolver. (Note: This will be cleared by the instructor only.)
- FA4.5.6.** Correct the revolver malfunction using the proper technique.

LESSON GOAL: At the end of this lesson, you will know malfunctions that may occur when using a revolver and how to correct them.

Revolver Malfunctions

Revolver malfunctions include failure to fire, misfire, a squib load, a casing caught under the extractor, or a frozen or improperly closed cylinder. It is particularly important to watch for a squib load. Recall that a squib load causes a bullet to become lodged in the bore of the weapon, and that you can recognize it by the distinct sound that it makes.

Clearing Revolver Malfunctions

Suppose you pull the trigger and the hammer falls, but the round fails to detonate. You are experiencing a failure to fire. The following conditions cause a failure to fire:

- The revolver is not loaded. To fix this, load the revolver.
 - A bad primer causes a misfire; that is, the primer fails to fire after the hammer nose or firing pin strikes it. The result is a dead round. To fix this, you must unload and clean the weapon.
 - Dirt and debris may cause a malfunction. To fix this, you must unload and clean the weapon.
 - The rebound spring has been altered to make the trigger easier to pull, resulting in a light hammer fall. Only a certified armorer can fix this problem.
 - The strain screw has been backed out, cut, loosened, or altered to make the trigger easier to pull. The result is a light hammer fall. Only a certified armorer can fix this problem.
- No student should alter a weapon. All weapons should meet factory standards.*
- The firing pin or hammer nose breaks. Only a certified armorer can fix this problem.

If the firing pin breaks during training, keep the weapon pointed in a safe direction, and raise your support hand to summon the range instructor. If this happens during a deadly force encounter, go to your secondary weapon if a secondary weapon is available. Retreat and move to cover.

If a misfire occurs in training, keep the weapon pointed in a safe direction, pause momentarily, and then pull the trigger again. When you empty the cylinder, you will see an indentation on the primer of the round that caused the misfire. The projectile is still attached to the casing.

SECTION VOCABULARY

frozen cylinder

If a misfire occurs during a deadly force encounter, immediately pull the trigger again. If the weapon still fails to fire, use your secondary weapon (if available), and then retreat and move to cover.

Unloading the revolver sideways or failing to fully depress the extractor rod when unloading it may cause a casing to be caught under the extractor. You can prevent this malfunction by making sure to point the muzzle straight up when unloading the revolver. If it does occur, press and hold the extractor rod completely to the rear, with the cylinder open. Then, dislodge the casing from the cylinder using your finger.

A *frozen cylinder* is one that does not rotate. Causes can include dirt or debris under the extractor that locks the cylinder so it cannot rotate. To solve this problem, clean under the extractor. Bad ammunition (high primer) can also cause a frozen cylinder. The primer on the cartridge protrudes above the headstamp. This situation can be dangerous; opening the cylinder roughly can ignite the primer. To prevent this problem, check your ammunition before loading.

If the cylinder freezes or a loose extractor rod has backed out in the frame during training, you should keep your weapon pointed in a safe direction and raise your support hand to summon an instructor. The instructor will take the revolver and clear the ammunition.

Checking your revolver and ammunition before loading, as well as keeping your weapon clean, can prevent most malfunctions.

UNIT 4 | HANDGUN USE—REVOLVER

LESSON 6 | Weapons Cleaning—Revolver

OBJECTIVES

- FA4.6.1.** Identify the proper supplies and tools to use when cleaning the revolver.
- FA4.6.2.** Clean the revolver, removing all lead, powder, debris, and dirt.
- FA4.6.3.** Lightly lubricate the revolver.
- FA4.6.4.** Reassemble the cleaned revolver depending on the make and model of the weapon.
- FA4.6.5.** Function check the cleaned revolver.
- FA4.6.6.** Return the revolver to safe storage or securely re-holster the weapon.

LESSON GOAL: At the end of this lesson, you will be able to identify the necessary supplies and tools to clean a revolver, and will know how to clean and lubricate a revolver.

While fieldstripping and cleaning your revolver, remember to take these important steps:

1. Safety check the weapon.
2. Remove live ammunition from the cleaning area.
3. Release the cylinder catch and open the cylinder.
4. Visually and physically inspect the barrel and chambers for obstructions and ammunition.

The weapon cleaning kit could include the following items: bore brush, solvent, gun-cleaning patches (cotton patches absorb more), nylon cleaning brush, Bore Snake®, cleaning pad, gun oil/lubricant (non-penetrating), rags, pipe cleaners, and cotton swabs.

- cleaning tools—Cleaning tools are caliber specific. Use the tools designated for the specific caliber of your weapon. A larger caliber cleaning brush or patch tip does not fit in a small weapon and may cause damage. A small tool may not completely clean your firearm. It is recommended that you observe the manufacturer's guidelines.
- solvent and lubricant—Several types and brands of cleaners and solvents are available. Use solvent and lubricant specifically designed for firearms maintenance.
- patches and swabs—Consider the weapon bore when choosing gun-cleaning patches. Different materials have different absorption qualities.

Cleaning and Lubricating a Revolver

1. Brush properly—Use a back and forth brushing motion to remove loose objects, loosen other substances, and help solvents and cleaners work better.
 - Brush all surfaces of your firearm.
 - Make sure that the bore brush clears the bore completely after each stroke.

- Make sure to use a soft, non-marring brush on the firearm's outer finished surface. Do not use a brass brush on the firearm's exterior; it can damage the surface.
2. Push the brush all the way in, then bring it all the way out.
 3. Brush with solvent—Solvents are designed to dissolve and loosen lead, powder, debris, dirt, and substances that brushing does not clean.

Pay special attention to the following areas on the revolver:

- cylinder—When the firearm discharges, it may blow powder and lead back over the cylinder's outer surface.
- cylinder chambers—The chambers may contain unburned powder and lead.
 1. Insert the cleaning brush in each chamber.
 2. Slide it back and forth several times.
- bore—As the projectile travels down the bore, it leaves behind small amounts of material. If the projectile is lead, it leaves lead behind. If its jacket is brass, the projectile may leave some brass behind.
 1. Insert the cleaning brush in the barrel.
 2. Slide the cleaning brush back and forth several times.
 3. Push the brush all the way through, then pull it all the way out.
- area below the top strap—Lead and powder residue are deposited in this area when gases from fired rounds escape around the forcing cone.
- firing pin hole—Check the firing pin hole to ensure that it is free of all debris.
- ejector rod—Clean the area around and under the ejector rod.
- extractor—Clean the area around and under the extractor. If the extractor does not work, you cannot empty or load the weapon.

After brushing these parts, wipe them with a clean patch and a small amount of cleaning solvent.

With a clean, dry patch, wipe all parts again to remove the solvent and debris. You may need to repeat this process until the revolver is clean.

Lubricating your weapon is very important. Check your weapon at regular intervals to ensure it is properly lubricated, and check the manufacturer's recommended lubrication points and amounts. A little lubricant goes a long way. Excess lubrication can harm ammunition. Wipe it off using a clean, dry cloth.

When you finish cleaning and lubricating your revolver, follow these steps:

1. Reassemble the revolver.
2. Perform a function check of the revolver for proper operation.
3. Return the revolver to safe storage or holster and secure it.
4. Properly dispose of all cleaning supplies.
5. Wash your hands with soap and water.

UNIT 5 | LONG GUN USE—SHOTGUN

LESSON 1 | Firearms Familiarization—Shotgun

LESSON GOAL: At the end of this lesson, you will know the shotgun parts with correct nomenclature, the way the parts function, and how to safely handle a shotgun.

A shotgun is a smooth bore gun with a smooth interior surface, designed for firing at short distances. This weapon's general specifications are as follows:

- gauge—12 gauge (ga) most common; chamber 2 ¾ or 3 inches
- magazine tube capacity—see manufacturer's specifications
- length—overall 38 inches with an 18-inch barrel (standard)
- weight—see manufacturer's specifications
- sights—rifle or bead
- choke—full, modified, improved cylinder
- stock—see manufacturer's specifications
- barrel—18-, 20-, and 22-inch barrels most commonly used
- safety—see manufacturer's specifications

Nomenclature of the Shotgun

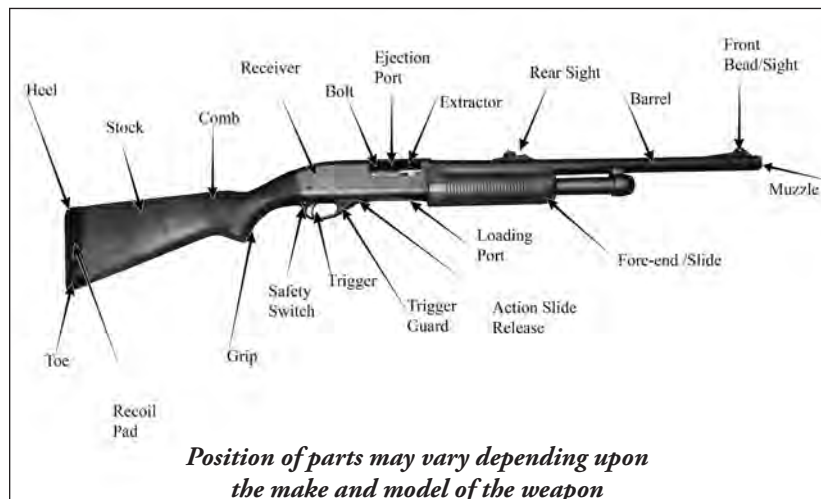
Make sure you are familiar with the part locations and functions for the shotgun you are using. Part names and locations, and some part designs, vary from model to model. Refer to the shotgun diagram to help you identify each part.

The following terms are associated with the use and function of a shotgun:

- action slide release—mechanical device that, when activated, releases the slide

OBJECTIVES

- FA5.1.1.** Identify shotgun parts with the correct nomenclature.
- FA5.1.2.** Describe the function of shotgun parts.
- FA5.1.3.** Identify the steps to safely handle a shotgun.



Shotgun

Figure 3-17

- barrel—long cylinder-shaped tube through which the projectile travels from the chamber
- bolt—cylindrical steel part containing the firing pin and extractor, which closes the breech end of the barrel for firing
- bolt carrier—flat steel part that fits onto the action bars and on which the bolt sits
- ejection port—opening on the side or bottom of the receiver; spent casings are ejected from it and live rounds are loaded into this port
- ejector—piece of spring steel mounted on the inside left of the receiver; when the action pulls a shell to the rear, it compresses and then releases the ejector as the bolt goes past it. A small extension stops the shell from going farther and assists in ejecting the shell from the receiver.
- extractor—metal hook-shaped part mounted on the bolt; the hook engages the rim of the cartridge, so that when the action is brought to the rear, the extractor removes the shell from the chamber.
- fore-end or slide—wooden or polymer grip near the magazine
- front bead/sight or post—bead or raised post on the front of the barrel used to bring the firearm into alignment for accuracy
- loading port—bottom opening on the receiver where live rounds are fed into or removed from the magazine tube
- magazine cap—located on the magazine tube's end and keeps the barrel in place
- magazine tube—located under the barrel and holds rounds
- muzzle—barrel's front end
- rear sight—secondary aligning device located on the receiver or barrel that aligns with the front sight bead or post to bring the shotgun into alignment for accuracy
- receiver—holds the trigger group and bolt assembly
- safety—mechanical device that prevents a shooter from pulling the trigger and discharging the shotgun
- shell carrier—slightly rounded steel part that blocks the loading port; catches rounds released from the magazine and raises them into alignment with the chamber
- shell latches (stops)—two pieces of steel mounted on each side of the inside of the receiver at the magazine's rear; they help hold the cartridges in the magazine and release them one at a time when the action operates. They are also used to manually unload the shotgun.
- stock—part of the weapon attached to the receiver; a shooter places the stock on his or her shoulder when firing. Nomenclature of the stock includes the following:
 - butt—rear area of the stock that the shooter mounts against the shoulder for firing; normally covered with a metal or plastic butt plate or a recoil pad
 - comb—stock's top edge where the shooter's cheek rests

- grip—“small of the stock,” just behind the receiver; the shooter uses the grip and his or her shooting hand for control when firing or carrying it
- heel—top corner of the butt
- recoil pad—a butt plate, usually rubber, that reduces the effect of the shotgun’s recoil or “kick”
- toe—the bottom part of the butt
- trigger—when pulled, this releases the sear (a part that holds the hammer in the cocked position) and activates the firing pin
- trigger guard—part of the frame that protects the trigger

How the Shotgun Works

Cycle of Operation (Pump Action Shotgun)

- loading—placing live rounds in the magazine tube or open ejection port
- chambering—removing a round from the magazine tube and placing it in the barrel’s chamber by cycling the weapon, or after placing a round in the open ejection port, pushing the slide forward
- locking—closing the action to a locked position by moving the fore-end forward until it stops
- firing—discharging the weapon by depressing the trigger
- unlocking—weapon unlocks when fired
- extracting/ejecting—extractor’s removal of the empty casing from the chamber and pushing the empty casing out of the weapon through the ejection port by manually cycling the slide/fore-end grip to the rear

Performing a Function Check (Pump Action Shotgun)

1. With the safety in the “on” position and the shotgun pointed in a safe direction, cycle the action and leave it closed.
2. Depress the trigger; nothing should happen.
3. Release the trigger and move the safety to the “off” position. This means the trigger, sear (a mechanism holding the hammer), and hammer will work as they should.
4. Holding the trigger back, cycle the action of the shotgun. You should hear the bolt lock into position and nothing else.
5. Release the trigger. You should hear the disconnecter move into place. This tells you that the disconnecter is working.
6. Pull the trigger to the rear. You should hear the hammer fall and strike the firing pin.
7. Place the safety in the “on” position.
8. Open the action.

Handing the Shotgun to Another Person

To hand a shotgun to another person, follow these steps:

1. Place the safety in the “on,” or engaged, position.
2. Unload the shotgun.
3. Verify that no ammunition is in the magazine chamber and tube with a physical and visual check.
4. Make sure the fore-end is to the rear and the ejection port is open.
5. Hand the shotgun to the person in the port arms stance.

To assume the port arms stance:

- a. Hold the stock with your shooting hand and the fore-end with your support hand.
- b. Point the barrel in a safe direction.
- c. Put the safety in the “on” position, the fore-end to the rear, and the ejection port open, facing the person receiving the weapon.

The person receiving the firearm should physically and visually check the firearm to make sure it is unloaded.

UNIT 5 | LONG GUN USE—SHOTGUN

LESSON 2 | Fundamentals of Marksmanship—Shotgun

LESSON GOAL: At the end of this lesson, you will know the fundamentals of marksmanship when shooting a shotgun.

Officers can improve their proficiency with a shotgun by applying the fundamentals of marksmanship, which include grip, stance, sight alignment, sight picture, trigger control, breath control, follow-through, and concentration.

Shouldering the Shotgun

When shouldering a shotgun, your support elbow will be bent and your shooting-side elbow will be raised to create a pocket. You must grip the shotgun and place the recoil pad firmly into your shoulder pocket. Properly placing the recoil pad reduces the effect of recoil, helps steady the shotgun, and prevents the shotgun recoil pad from slipping.

To properly shoulder the shotgun, do the following:

1. Hold the stock just behind the trigger guard with your shooting hand by placing your thumb on top of the stock and wrapping your middle, ring, and pinkie fingers on the bottom of the stock just behind the trigger guard.
2. Place your trigger finger on the receiver just above the trigger guard.
3. With your support hand, grasp the fore-end from underneath with your thumb on one side and remaining fingers on the other side.
4. Raise the shotgun and place the recoil pad into your shooting shoulder pocket. To seat the shotgun in your shoulder, pull back with your shooting hand.

Cheek Weld

The cheek weld provides firm contact between your cheek and the comb of the stock. To form a cheek weld, raise the stock to your cheek; do not lower your cheek to the stock. Tightly hold the flesh against the cheekbone so it acts as a buffer. The firm contact between the head, hand, and shotgun enables your head and weapon to recoil as one unit. This aids in rapid recovery between rounds. The cheek weld lets you maintain the same distance behind the receiver, further assisting in correct sight alignment.

OBJECTIVES

FA5.2.1. Identify shooting stances to use when shooting a shotgun.

FA5.2.2. Assume an appropriate shooting stance with the shotgun from behind cover.

FA5.2.3. Obtain sight alignment using a shotgun.

FA5.2.4. Obtain sight picture with a shotgun.

FA5.2.5. Pull/squeeze the trigger until the shotgun discharges (trigger control).

FA5.2.6. Release pressure on the shotgun trigger until the trigger reengages (trigger reset).

FA5.2.7. Follow through after the shotgun shell is fired.

Shooting Positions for the Shotgun

This section teaches you to fire a shotgun from the standing, kneeling, low ready, and barricade positions.

Standing Position

To shoot a shotgun from the standing position, follow these steps:

1. Stand with your feet about shoulder-width apart and keep your weight on the balls of your feet.
2. Place your weapon-side foot slightly behind your support foot or stand with your head and shoulders square to the target, body weight forward. Keep your weight slightly forward on the balls of your feet. Bend your knees slightly to allow for movement.
3. With your shooting hand, grip the stock with your trigger finger alongside the receiver, and grip the fore-end with your support hand.
4. Shoulder the shotgun by placing the top of the stock between the shoulder and the collar bone so that your cheek naturally touches the comb of the stock.
5. To maintain proper sight alignment, press your cheek firmly against the comb of the stock.

Kneeling Position

To assume the kneeling position, keeping the firearm pointed in a safe direction, you should perform the following steps:

1. Kneel on your strong knee.
2. Extend your support leg toward the target with your foot flat on the ground.
3. Keep your ankle straight and the toe of your shoe in contact with the ground, curled forward by your body weight.
4. Hold the shotgun as you do in the standing position.

Low Ready Position

The low ready position is a position of readiness that allows you to immediately begin firing the shotgun or to take appropriate action; you can use this in the standing or kneeling positions.

To assume a low ready position, hold the shotgun's butt in the curve of your shoulder and point the barrel toward the ground at an angle of about 45°. This helps you use your peripheral vision and quickly react to a threat. You will prepare to get into the low ready standing or kneeling positions from the port arms stance with your weapon across your chest—muzzle pointed in a safe direction, a stance normally used when you move from one safe position to another.

Barricade Position

To assume the barricade position, follow these steps:

1. Stand in the open, next to the barricade, with your shotgun in a ready position.
2. Upon target stimulus/command, step behind the barricade and assume a standing or kneeling position.
3. Remove the safety and fire the prescribed number of rounds.

Do not let your weapon touch the barricade's surface. The barricade is cover, not a resting place.

Stand or kneel a safe distance away from the barricade and use the roll-out technique to gain maximum protection from behind cover. Positioning your weapon-side leg to the rear makes you a smaller, harder-to-hit target.

Sight Alignment and Sight Picture

Sight alignment is the relationship of the front sight and rear sight with the shooter's eye. It occurs when the top of the front sight is level with the rear sight's top edge and centered in the rear sight. Keep your eye centered behind the rear and front sights.

Modern shotguns use two types of sighting systems: rifle sights and bead sights. Rifle-sighted shotguns have a front and rear sight. To use these sights properly, you must align the front sight with the rear sight. Bead-sighted shotguns have no rear sight. You must focus on the bead, and the barrel should not be visible.

Sight picture is the relationship between the eye, front sight, rear sight, and target. Follow these steps:

1. Align the top of the front sight with the top of the rear sight with equal space on each side.
2. Place the sights on the target.
3. Focus on the front sight. (The target will be slightly blurry.)
4. Use your dominant eye to align sights. This may be altered if you are cross-eye dominant.

For bead sights, align your eye with the top of the receiver. Locate and focus on the bead, placing it on the center mass of the target.

Breath Control

Breath control is important in the aiming process. If you breathe while trying to aim, the rise and fall of your chest moves the shotgun vertically.

To hold your breath properly, inhale, exhale normally, and stop at the moment when you pause between breaths. The extended pause between breaths (respiratory pause) is the optimum time to fire.

Trigger Control and Follow-Through

Trigger control is the steady pressure applied directly to the rear until the hammer falls. The trigger of a shotgun is called a single-action trigger, because the hammer is cocked each time the weapon is cycled. The trigger moves only a short distance before the sear trips and the hammer releases. The pressure needed to trip the sear is between 4 and 8 pounds. Control the trigger until the shotgun discharges.

As the weapon cycles, you must allow the trigger to return to its forward position (reset). Failure to do so prevents the weapon from firing until you release and control the trigger again.

Proper follow-through involves maintaining sight alignment before, during, and after firing a round. You must maintain proper grip, stance, and finger placement on the trigger. You must also acquire a sight picture each time you fire the shotgun.

After firing a pump shotgun, you must bring the slide to the rear to extract the spent casing and return it to the forward position to chamber a new round.

Concentration

Concentration on the fundamentals is key to accurate and consistent shooting. For improved proficiency, you should apply all the fundamentals simultaneously.

UNIT 5 | LONG GUN USE—SHOTGUN

LESSON 3 | Loading and Unloading—Shotgun

LESSON GOAL: At the end of this lesson, you will know how to load and unload a shotgun.

Perform these steps to load a shotgun:

1. Grip the shotgun by the stock with your shooting hand.
2. Make sure the safety is engaged.
3. While gripping the shotgun, keep your trigger finger alongside the frame and keep the barrel pointed in a safe direction.
4. With your support hand, grasp the fore-end/slide and move it forward forcefully until the action locks into place.

You are now ready to load the ammunition:

1. Point the muzzle in a safe direction.
2. Choose the proper ammunition for your shotgun by finding the gauge on the headstamp.
3. Hold the shell in your support hand, and insert it into the magazine tube through the bottom of the receiver, crimped end first and brass to the rear.
4. Use your thumb to push the shell until it locks or clicks into the magazine tube.
5. Repeat Steps 1 through 3 until your magazine tube is full.

To chamber a round:

1. Hold the shotgun stock in your shooting hand, with its barrel pointed in a safe direction.
2. Depress the fore-end/slide release with your shooting hand index finger.
3. With your support hand, grip the fore-end/slide from underneath and pull it all the way to the rear. This moves a shell from the magazine tube onto the carrier.
4. Push the fore-end/slide forward forcefully until it locks in place. This closes the action and chambers a shell.

OBJECTIVES

- FA5.3.1.** Hold the shotgun by the stock when loading.
- FA5.3.2.** Engage/move the safety on the shotgun.
- FA5.3.3.** When loading the shotgun, point the barrel in a safe direction.
- FA5.3.4.** Move the fore-end/slide forward, away from the receiver.
- FA5.3.5.** Insert shotgun shells into the magazine tube.
- FA5.3.6.** Chamber a shell when shells are inserted into the magazine tube of the shotgun.
- FA5.3.7.** Hold the loaded shotgun by the grip.
- FA5.3.8.** Engage the action/slide release of the loaded shotgun.
- FA5.3.9.** Remove any chambered shell through the ejection port of the shotgun.
- FA5.3.10.** Remove the shells from the magazine tube of the shotgun.
- FA5.3.11.** Inspect the chamber and magazine tube of the unloaded shotgun to ensure that no shell remains.

SECTION VOCABULARY***tactical load***

Make sure that none of your fingers are between the rear of the fore-end and the receiver. This can cause injury.

To unload your shotgun:

1. Engage the safety.
2. Hold your shotgun by the grip with your shooting hand, and point the muzzle in a safe direction.
3. With a round in the chamber, depress the action/slide release with your trigger finger.
4. Grip the fore-end/slide with your support hand.
5. Slowly pull the fore-end/slide to the rear until you expose the shell.
6. With your support hand, reach over the top and remove the chambered shell.
7. With the fore-end/slide two-thirds to the rear, push the shell carrier up into the receiver.
8. Place your support hand on the rear of the fore-end/slide, covering the loading port as you pull the slide to the rear and catch the shell from the magazine loading port.

To remove the remaining shells from the magazine tube, place your support hand's thumb and index finger inside the receiver through the loading port and press the shell latch/stop against the receiver. This releases a round from the magazine tube. When you clear all rounds from the magazine tube, visually and physically inspect the chamber and magazine tube to make sure there are no shells in the chamber.

Tactical Loading

A ***tactical load*** is a technique used to reload in a tactical situation. (Tactical loading is the preferred method.)

1. Point your shotgun's barrel in a safe direction or at your target.
2. While gripping your shotgun, keep your trigger finger alongside the frame. Pull the fore-end/slide to the rear to open the ejection port.
3. Wrap your support hand under your weapon, holding one round just below the ejection port opening, brass end toward the rear.
4. Roll the live round into the weapon through the open ejection port.
5. Close the action by pushing the fore-end/slide forward with your support hand, chambering the round.
6. With your support hand, load the other rounds into your weapon through the loading port into the magazine tube.

UNIT 5 | LONG GUN USE—SHOTGUN

LESSON 4 | Weapons Malfunctions—Shotgun

LESSON GOAL: At the end of this lesson, you will know malfunctions that may occur when using a shotgun and how to correct them.

Shotgun malfunctions include the following: the shell fails to load from the magazine tube, the fore-end/slide fails to close fully, a failure to feed, a double feed, a stacked feed, a failure to fire, a failure to extract, a failure to open, a failure to eject, a failure to close, and a stovepipe.

Clearing Shotgun Malfunctions

The way you clear shotgun malfunctions depends on the type of malfunction.

Shells fail to load into the magazine tube when a bent carrier prevents the shell from aligning with the magazine tube opening, the wrong ammunition is used, or the shell stop is defective. To correct this malfunction, raise your support hand, keep your weapon pointed downrange, and summon the instructor to assist you.

The fore-end/slide may fail to close fully. This malfunction results from a bent action bar, a jammed or bent shell stop, a foreign object or broken part in the action, or the shooter's failure to push the fore-end/slide completely forward. If one of the first three reasons caused the malfunction, raise your support hand, keep your weapon pointed downrange, and wait for an instructor to assist you. If you did not push the fore-end/slide completely forward, forcefully push the fore-end/slide forward, then lock it into place.

If the slide is cycled but the round does not feed, there is a failure to feed. The following conditions may cause a failure to feed:

- The shell stop is holding back the shell.
- The magazine follower is sticking in the magazine tube.
- An improperly operating carrier prevents alignment of the shell.
- Ammunition is inverted.
- The fore-end or slide is not cycled completely.
- The weapon is not loaded.

If one of the first four reasons caused the failure to feed, raise your support hand, keep your weapon pointed downrange, and ask an instructor to assist you. If either of the last two reasons caused the malfunction, completely cycle the slide, then load the weapon.

OBJECTIVES

FA5.4.1. Identify shotgun malfunctions.

FA5.4.2. Correct the shotgun malfunction using the proper technique(s).

A ***double feed (shotgun)*** occurs when the shell stop fails to retain a shell in the magazine tube after one has been moved onto the carrier. The action will not close. To correct this malfunction, press down on the nose of the shell on the carrier to expose the base of the shell still partially in the magazine tube. With your finger, push that shell back into the magazine tube until it locks in place. You must do this through the ejection port.

A ***stacked feed*** occurs when a round is in the chamber and the action is closed. The shell latch fails to keep a round in the magazine tube. Instead, it moves the round onto the carrier. The weapon still operates, but you cannot load rounds until you remove the one in the chamber. You can correct this in two ways:

1. Fire the chambered round and cycle the slide.
2. If you cannot fire the round, engage the safety and remove your finger from the trigger guard. Depress the slide release and apply sufficient force to pull the fore-end/slide to the rear.

If the trigger is pulled but the round fails to fire, this is a failure to fire. The following conditions cause a failure to fire: the safety is on, the chamber is empty, the round is bad, or the firing pin is broken. If a broken firing pin is the problem, a certified armorer must repair it.

To correct a failure to fire:

1. If the safety is on, disengage it.
2. If the weapon is empty, load it.
3. If the weapon misfires, immediately cycle the weapon and fire, if appropriate, or assume the ready position on the target.
4. If taking these steps fails to correct the problem, raise your support hand, keep your weapon pointed downrange, and ask an instructor to assist you.

A failure to extract occurs when the shotgun fails to extract a spent casing from its chamber at the same time it tries to feed a new round into the chamber. The causes of this malfunction include a broken extractor or a worn extractor hook. To correct this malfunction, raise your support hand, keep your weapon pointed downrange, and ask for help from an instructor. A certified armorer must repair a broken extractor or worn extractor hook.

A failure to open occurs when the shotgun's fore-end/slide will not cycle and the shotgun will not open. Causes include not firing a round to release the fore-end/slide, failing to depress the fore-end/slide release, or an improperly maintained weapon. If this malfunction results from improper maintenance, engage the safety and place your finger outside the trigger guard, then raise your support hand, keep your weapon pointed in a safe direction, and ask for the instructor to help you. If the malfunction occurs for the two other reasons, you can usually correct it by properly cycling the fore-end/slide.

A failure to eject occurs when an ejector is missing or broken, the shell is swollen and will not extract, or an ejector is bent or improperly positioned. To correct this malfunction, engage the safety by placing the finger outside the trigger guard, then raise your support hand, keep your weapon pointed in a safe direction, and ask an instructor to assist you.

When the bolt and ejection port trap a partially ejected shell, a stovepipe occurs. You could cause this problem if you do not cycle the action properly. To correct it, pull the slide all the way to the rear, and free the shell by using your hand. Then, cycle the slide forward to load the chamber.

If your shotgun malfunctions in the field, you should immediately switch to your handgun.

SECTION VOCABULARY

double feed (shotgun)

stacked feed

UNIT 5 | LONG GUN USE—SHOTGUN

LESSON 5 | Weapons Cleaning—Shotgun

OBJECTIVES

- FA5.5.1.** Fieldstrip the shotgun based on the make and model.
- FA5.5.2.** Identify the proper supplies and tools to use when cleaning the shotgun.
- FA5.5.3.** Clean the shotgun, removing all lead, powder, debris, and dirt.
- FA5.5.4.** Lubricate the shotgun.
- FA5.5.5.** Properly reassemble the shotgun.
- FA5.5.6.** Function check the cleaned, reassembled shotgun.
- FA5.5.7.** Return the cleaned shotgun to safe storage or securely re-case the weapon.

LESSON GOAL: At the end of this lesson, you will be able to identify the necessary supplies and tools to clean a shotgun and will know how to correctly clean and lubricate a shotgun.

While fieldstripping and cleaning your shotgun, remember to take these important steps:

1. Safety check the weapon.
2. Remove live ammunition from the cleaning area.
3. Point the weapon in a safe direction, remembering the safety rules.
4. Verify that the safety is in the “on” position and the magazine tube or chamber contains no ammunition.
5. Ensure the slide is at the rear and the ejection port is open.

It is recommended that you observe the manufacturer’s guidelines for cleaning your shotgun. Make sure the tools you use do not invalidate the manufacturer’s warranty or conflict with the manufacturer’s recommendations.

The shotgun cleaning kit could include a bore brush, gun-cleaning patches, lubricant, Bore Snake®, cleaning rod, gun solvent, and cloth.

- cleaning tools—Cleaning tools are gauge specific. Use the tools designated for the specific gauge of your weapon. A larger-gauge cleaning brush or patch tip does not fit into a smaller one and may cause damage. A smaller tool may not completely clean a larger firearm.
- solvent and lubricant—Several types and brands of cleaners and solvents are available. Use solvent and lubricant specifically designed for firearms maintenance.
- patches and swabs—Consider the weapon bore when choosing gun-cleaning patches. Different materials have different absorption qualities. Follow the manufacturer’s recommendations.

Cleaning and Lubricating the Shotgun

To remove all lead, powder, debris, and dirt from the shotgun:

1. Take the barrel off the weapon, if possible.
2. With a bore brush and cleaning rod, clean and brush the bore and chamber of the barrel. Repeatedly push the bore brush completely through the barrel until it appears at the opposite end.
3. Use a nonmetallic brush with solvent to clean areas contaminated with powder residue.
4. Use a patch, cleaning rod, and solvent to clean the bore, replacing the patch as needed.
5. Run a clean patch through the barrel to remove excess solvent and dirt. Repeatedly push the patch through the barrel until it appears at the opposite end.
6. Clean every part of the shotgun, and wipe the parts dry with a clean patch.
7. Lightly lubricate all parts including the bore of the barrel. Too much lubricant may damage a shotgun. Lubricant acts as a magnet, attracting dirt, dust, packing debris, and unburned powder.

When you finish cleaning and lubricating your shotgun:

1. Reassemble the shotgun.
2. Perform a function check of the shotgun.
3. Return the shotgun to safe storage or securely re-case it.
4. Properly dispose of all cleaning supplies.
5. Wash your hands with soap and water.

UNIT 6 | LONG GUN USE—SEMIAUTOMATIC RIFLE/CARBINE

LESSON 1 | Firearms Familiarization—Semiautomatic Rifle/Carbine

OBJECTIVES

FA6.1.1. Identify semiautomatic rifle/carbine parts with correct nomenclature.

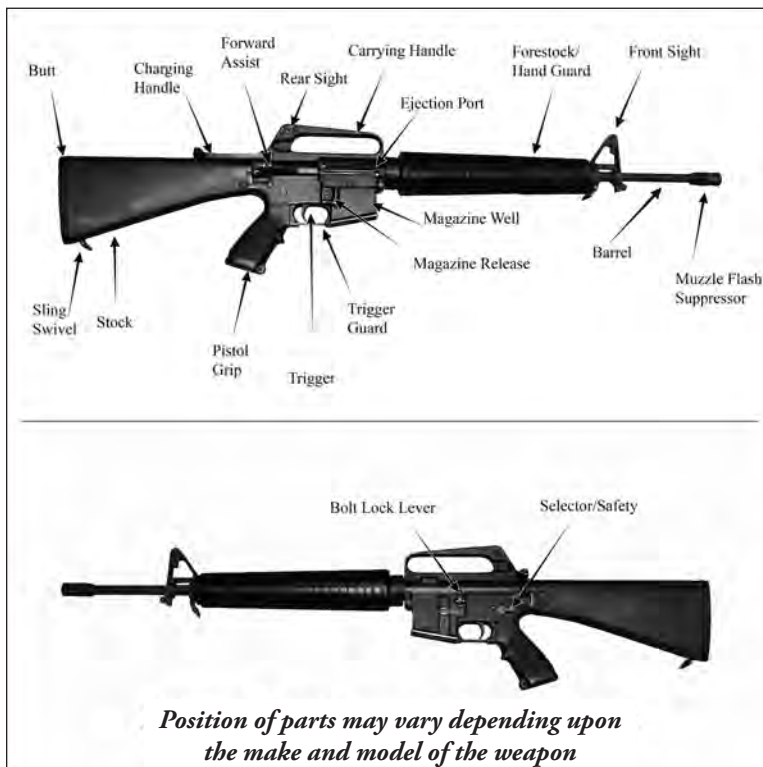
FA6.1.2. Describe the function of semiautomatic rifle/carbine parts.

FA6.1.3. Identify the steps to safely handle a semiautomatic rifle/carbine.

LESSON GOAL: At the end of this lesson, you will know the semiautomatic rifle/carbine parts with correct nomenclature, the way the parts function, and the way to safely handle a semiautomatic rifle/carbine.

Nomenclature of the Semiautomatic Rifle/Carbine (AR-15 Style, Gas-Operated System)

The part names, locations, and some part designs of the semiautomatic rifle/carbine may vary, depending on the specific make and model. Make sure you are familiar with the part names, locations, and functions for the weapon that you use. Refer to the semiautomatic rifle diagram to help you identify the parts.



Semiautomatic rifle

Figure 3-18

The following terms are associated with a semiautomatic rifle/carbine:

- barrel—provides a path for the fired bullet; its chamber holds the cartridge
- bolt (internal part)—contains the firing pin, spring, and extractor
- bolt lock lever—holds the bolt to the rear when the charging handle is pulled to the rear and the lower portion is depressed; releases the bolt when the upper portion is depressed
- buffer/buffer spring (internal part)—enables the bolt to return after firing
- butt—the end of the stock
- chamber (internal part)—supports the cartridge at rest and during firing
- charging handle—enables manipulation of the bolt to chamber a round

- ejection port (internal part)—opening that permits the shell to exit the weapon
- ejector—expels the shell from the ejection port (internal part of the bolt)
- extractor—grips and pulls the shell from the chamber
- forestock/hand guard—used to support the rifle with the support hand; acts as a heat shield from the barrel
- forward assist—a button ensuring that the bolt is locked
- lower receiver group—contains the magazine release, magazine well, trigger housing, and trigger components
- magazine—contains ammunition ready to be chambered
- magazine release—permits removal of the magazine from the firearm
- magazine well (internal part)—housing for the magazine
- muzzle flash suppressor—attachment on the barrel’s forward end that reduces the flash as burning powder escapes when the bullet exits the barrel
- safety—blocks the hammer from striking the firing pin; prevents firing (located on the left side of the weapon)
- sights (front and rear)—used to align the firearm to the bullet’s point of impact
- sling swivels—metal loops affixed to the rifle/carbine to which a carrying strap attaches
- stock—part that enables shoulder support during firing
- takedown pins—enables separation of the upper receiver from the lower receiver and allows for fieldstripping and cleaning
- trigger—enables the firearm to fire when pulled
- trigger group—section consisting of the trigger, trigger springs, safety, and all firing mechanism parts
- trigger guard—part of the frame that protects the trigger
- upper receiver group—houses the bolt assembly group

How the Semiautomatic Rifle/Carbine Works

A semiautomatic gas-operated AR-15 style rifle functions by using the pressurized gas from a fired cartridge tapped from the barrel as the bullet moves past a gas port located under the rifle’s front sight base. The gas rushes into the port and down a gas tube that extends into the AR-15’s upper receiver. This forces the bolt assembly group rearward resulting in the extraction and ejection of a fired casing from the rifle’s chamber. This action also re-cocks the hammer. The bolt assembly group is then forced forward by the buffer spring causing a live round to be picked up from the magazine and seated into the chamber for the next shot.

Cycle of Operation

- loading—seating a loaded magazine into the magazine well
- feeding/chambering—moving the round from the magazine to the chamber by releasing the bolt, picking up the round from the magazine and seating the round into the chamber
- locking—the face of the bolt locks with the breech end of the barrel
- firing—ignition of the primer and firing the cartridge
- unlocking—unseating the bolt from the breech end of the barrel
- extracting—pulling the spent cartridge case from the chamber
- ejecting—pushing the spent cartridge case out of the ejection port
- cocking—returning the firing mechanism to the fire position

Performing a Function Check

1. Operate the bolt several times to make sure it moves freely.
2. Close the bolt and put the safety on.
3. Pull the trigger. The weapon should not work.
4. Move the safety to the fire position.
5. Pull the trigger to the rear, and hold it there. The hammer should fall as you pull the trigger.
6. Keeping the trigger to the rear, pull back the bolt. Allow the bolt to move slowly forward. You should hear a click as the hammer resets.
7. Release and pull the trigger again. The weapon should function properly.
8. Lock the bolt carrier assembly to the rear.
9. Insert an empty magazine into the magazine well until the magazine engages.
10. Depress the magazine release. The magazine should fall free.

Handing the Semiautomatic Rifle/Carbine to Another Person

To hand a rifle/carbine to another person, follow these steps:

1. Ensure the safety is in the “on,” or engaged, position.
2. Remove the magazine.
3. Lock the bolt assembly group to the rear; physically and visually inspect the chamber to ensure it is unloaded.
4. Hand the semiautomatic rifle/carbine to the person with the muzzle pointed in a safe direction.

The person receiving the firearm should physically and visually inspect the firearm to make sure it is not loaded.

UNIT 6 | LONG GUN USE—SEMIAUTOMATIC RIFLE/CARBINE

LESSON 2 | Fundamentals of Marksmanship—Semiautomatic Rifle/Carbine

OBJECTIVES

- FA6.2.1.** Shoulder the semiautomatic rifle/carbine.
- FA6.2.2.** Obtain the cheek weld with the semiautomatic rifle/carbine.
- FA6.2.3.** Identify shooting stances to use when shooting a semiautomatic rifle/carbine.
- FA6.2.4.** Assume an appropriate shooting stance with the semiautomatic rifle/carbine from behind cover.
- FA6.2.5.** Acquire the proper grip with the semiautomatic rifle/carbine.
- FA6.2.6.** Obtain sight alignment with the semiautomatic rifle/carbine.
- FA6.2.7.** Obtain sight picture with the semiautomatic rifle/carbine.
- FA6.2.8.** Control the trigger until the semiautomatic rifle/carbine discharges.
- FA6.2.9.** Release pressure on the trigger until the trigger on the semiautomatic rifle/carbine resets.
- FA6.2.10.** Follow through after the cartridge is fired.

LESSON GOAL: At the end of this lesson, you will know the fundamentals of marksmanship when shooting a semiautomatic rifle/carbine.

Accurately shooting a rifle/carbine requires learning the fundamentals of marksmanship. These fundamentals include grip, stance, sight alignment, sight picture, trigger control, follow-through, breath control, and concentration.

Shouldering the Semiautomatic Rifle/Carbine

To shoulder the semiautomatic rifle/carbine, you must place the rifle butt firmly into your shoulder pocket. Properly placing the butt reduces the effect of recoil, helps steady the rifle, and prevents the rifle butt from slipping into the shoulder.

To properly shoulder the rifle, do the following:

1. Hold the stock just behind the trigger guard with your shooting hand by placing your thumb on top of the stock and wrapping your middle, ring, and pinkie fingers on the bottom of the stock just behind the trigger guard.
2. Place your trigger finger on the outside of the stock just above the trigger guard.
3. With your support hand, grasp the forward portion of the stock from underneath with your thumb on one side and remaining fingers on the other side.
4. Raise the rifle and place the butt of the stock into your shooting shoulder pocket. Your support elbow will be bent and your shooting-side elbow will be raised to create a pocket. To seat the rifle in your shoulder, pull back with your shooting hand.

Cheek Weld

The cheek weld provides firm contact between your cheek and the stock. To form a cheek weld, place your cheek firmly on the stock. The firm contact between your cheek and rifle enables your head and weapon to recoil as one unit. This aids in rapid recovery between rounds.

Shooting Stances for Semiautomatic Rifle/Carbine

Semiautomatic rifles/carbines are fired from several positions: standing, kneeling, low kneeling, prone, low ready, and barricade.

Standing Position

To shoot a semiautomatic rifle/carbine from the standing position:

1. Stand with your feet about shoulder-width apart.
2. Keep your weight on the balls of your feet.
3. Bend your knees slightly so you can move in any direction.
4. Move your weapon-side foot back slightly, or stand with your head and shoulders square to the target, body weight forward.
5. With your shooting hand, grip the pistol grip with your trigger finger alongside the receiver.
6. Place the rifle/carbine butt high against your shoulder so that its sights are at eye level.
7. Place your support hand under the front of the stock/fore-end in a position that best helps you support and steady the rifle/carbine.
8. Lean slightly forward from the waist.
9. Place the butt of the stock between the shoulder and the collar bone so that your cheek naturally touches the top of the stock.

Kneeling Position

To shoot a semiautomatic rifle/carbine from the kneeling position, point the firearm in a safe direction and follow these steps:

1. Kneel on your strong knee.
 - a. Keep the rifle's muzzle pointed toward the target.
 - b. Keep your finger off the trigger.
2. Extend your support leg toward the target with your foot flat on the ground.
3. Hold the rifle as you do in the standing position.

To assume the low kneeling position:

1. From the kneeling position, lower your weight onto your weapon-side leg.
2. Turn down your ankle.
3. Sit on the inside of your ankle. (Do not sit back too far; doing so causes poor balance.)
4. Hold the semiautomatic rifle/carbine as you do in the standing position.

For all these positions, perform the following:

1. Extend your support leg toward the target with your foot flat on the ground.
2. For maximum support, point your toes toward the target.
3. To prevent side movement, turn your support toes slightly inward by pivoting on your heel. When in position, you may push your support foot forward or pull it back slightly to lower or raise the muzzle.
4. Position the lower part of your support leg to provide maximum support for controlling the semiautomatic rifle/carbine. From a front view, the lower support leg appears nearly vertical. In this position, your support leg supports your body weight.
5. Place the back of the triceps of your support arm against the forward part of your knee.
6. Do not rest your elbow on your knee.

Prone Position

To shoot a semiautomatic rifle/carbine from the prone position:

1. Stand facing the target, and place your support hand on the stock/pistol grip in front of the trigger guard.
2. Grasp the grip portion of the stock/pistol with your shooting hand.
3. Spread your feet, shifting your weight slightly to the rear.
4. Kneel on both knees.
5. Lean forward and use your support hand to ease your body to the ground.
6. Place your support elbow on the ground.
7. Gripping the stock/pistol grip with your shooting hand, place the semiautomatic rifle/carbine's butt into your shooting shoulder pocket.
8. Grasp the small of the stock/pistol grip with your shooting hand.
9. Lower your weapon-side elbow to the ground so that your shoulders are about level.
10. Place your cheek on the stock in a position where you can obtain proper sight alignment.

11. Do not rest the magazine on your arm or let it touch the ground.
12. Position your body behind the rifle to absorb recoil.

The prone position is steadier than standing and kneeling positions, easier to assume, and presents a lower profile. You can easily adapt it to the use of cover and support.

Low Ready Position

Use the low ready position only in the standing or kneeling positions. It is a position of readiness to begin firing the semiautomatic rifle/carbine or take appropriate action.

1. Hold the semiautomatic rifle/carbine's butt in your shoulder pocket.
2. Point the barrel at an angle of about 45° with the ground. This helps you use your peripheral vision and quickly react to a threat.

You may also begin from the port arms position, normally used when moving from one safe position to another. Hold your weapon across your chest. Keep the muzzle pointed in a safe direction.

Barricade Position

To assume the barricade position, you should stand in the open, next to the barricade, with your rifle/carbine in a ready position. Upon target stimulus/command, step back behind the barricade and assume a standing or kneeling position. Finally, remove the safety and fire the prescribed number of rounds.

Do not let your weapon touch the barricade's surface. The barricade is cover, not a resting place.

Stand or kneel a safe distance away from the barricade, and use the roll-out technique to gain maximum protection from behind cover. Positioning your weapon-side leg to the rear makes you a smaller, harder-to-hit target.

Sight Alignment and Sight Picture

Sight alignment is the relationship of the front and rear sights on a weapon. Sight picture is the relationship between the eye, front sight, rear sight, and the target.

For proper sight alignment and sight picture, you may try the following steps:

1. Look through the rear sight aperture (hole or peep).
2. Align the top of the front sight in the center of the rear sight aperture.
3. Use your dominant eye to focus on the front sight. This may be altered if you are cross-eye dominant.
4. Align the sights on the center mass of the target (the target will be blurry).

Breath Control

Breath control is important in the aiming process. If you breathe while trying to aim, the rise and fall of your chest moves the semiautomatic rifle/carbine vertically.

To hold your breath properly, inhale, exhale normally, and stop at the moment when you pause between breaths. The extended pause between breaths (respiratory pause) is the best time to fire.

Trigger Control and Follow-Through

Trigger control is the steady pressure applied directly to the rear until the weapon discharges. Place your trigger finger on the trigger. After you place your trigger finger on the trigger, keep it there until you fire. After the round discharges, allow the trigger to reset forward quickly. Your trigger finger should not lose contact with the trigger.

Follow-through involves maintaining sight alignment before, during, and after firing a round. You must maintain proper grip, shooting stance, and finger placement on the trigger. You must also acquire a sight picture each time you fire the rifle/carbine.

Concentration

Concentration on the fundamentals is key to accurate and consistent shooting. For improved proficiency, you should apply all the fundamentals at the same time.

UNIT 6 | LONG GUN USE—SEMIAUTOMATIC RIFLE/CARBINE

LESSON 3 | Loading and Unloading—Semiautomatic Rifle/Carbine

LESSON GOAL: At the end of this lesson, you will know how to load and unload a semiautomatic rifle/carbine.

To load a semiautomatic rifle/carbine, follow these steps:

1. Load the magazine.
2. As you prepare the rifle/carbine, keep it pointed in a safe direction. Tap the back of the magazine to ensure that you seat the rounds properly.
3. Hold the rifle/carbine by its pistol grip with your shooting hand. Make sure to keep your trigger finger alongside the frame.
4. Engage the safety.
5. With the magazine properly aligned with the magazine well, push the magazine into the magazine well until the magazine locks into place.
6. To make sure the magazine is locked in place, try to pull it out.
7. Keeping the weapon pointed in a safe direction, pull the charging handle fully to the rear and release it. This allows the bolt to go forward, feeding a round into the chamber.

To unload the semiautomatic rifle/carbine, keep the firearm pointed in a safe direction and perform the following steps:

1. Engage the safety.
2. Grip the rifle/carbine firmly and steadily so you do not lose control or drop the weapon as you unload.
3. Remove the magazine by depressing the magazine release button. Let the magazine drop to the ground.
4. To extract the cartridge from the chamber, grip the charging handle and pull the charging handle fully to the rear and release. These actions should eject any round in the chamber. Do not attempt to catch the ejected cartridge.

OBJECTIVES

FA6.3.1. Insert a loaded magazine into the magazine well of the semiautomatic rifle/carbine.

FA6.3.2. Chamber a cartridge in the semiautomatic rifle/carbine.

FA6.3.3. Remove the magazine from the semiautomatic rifle/carbine.

FA6.3.4. Extract the cartridge from the chamber from a semiautomatic rifle/carbine with the magazine removed.

FA6.3.5. Lock the action in the “open” position on an unloaded semiautomatic rifle/carbine.

FA6.3.6. Inspect the unloaded semiautomatic rifle/carbine for any cartridges with the action locked in the “open” position.

5. If the specific weapon you are using does not automatically lock the bolt back, pull the charging handle to hold the bolt to the rear. While holding the charging handle to the rear, depress the lower portion of the bolt lock lever. (Reset the charging handle back into the upper receiver.) This locks the action in the open position.
6. With the bolt locked back and the chamber open and fully visible, physically and visually inspect the chamber and magazine well to make sure that no rounds remain in the chamber.

UNIT 6 | LONG GUN USE—SEMIAUTOMATIC RIFLE/CARBINE

LESSON 4 | Weapons Malfunctions—Semiautomatic Rifle/ Carbine

LESSON GOAL: At the end of this lesson, you will know malfunctions that can occur when using a semiautomatic rifle/carbine and how to correct them.

Semiautomatic rifle/carbine malfunctions include a squib load, a failure to fire, a failure to feed, a failure to extract (double feed), or a failure to eject (stovepipe).

Most malfunctions from a rifle/carbine (excluding a squib round) can be cleared using two techniques:

Phase 1 Clearance: Immediate Action Drill

Use Phase 1 clearance to fix failure to feed, a failure to fire, a stovepipe, and failure to extract malfunctions. The easiest way to remember this method is to learn the phrase Tap, Rack, Ready, Fire if necessary. In an actual armed confrontation, you should transition to a secondary weapon and clear the malfunction when safe to do so.

When a malfunction occurs, do the following:

1. Use your support hand to tap (Tap) the bottom of the magazine into the magazine well. If the magazine is not fully seated, tapping will seat it.
2. Remain in your stance with your weapon still pointed at the target.
3. Reach up to the charging handle with your support hand, pull it to the rear, and release (slingshot).

This is the same action you use when loading the weapon (Rack). It extracts and ejects a bad round (if necessary), and/or chambers a new round.

1. Ready—In an actual armed confrontation, you must assess the situation. You should either reengage the threat or issue commands if the suspect surrenders during the clearance drill.
2. Fire if necessary.

OBJECTIVES

FA6.4.1. Identify the semiautomatic rifle/carbine malfunctions.

FA6.4.2. Identify a squib load in a semiautomatic rifle/carbine.

FA6.4.3. Transition to a secondary means of defense when a squib load occurs in a semiautomatic rifle/carbine.

FA6.4.4. Correct the malfunction of the semiautomatic rifle/carbine using the proper technique(s).

Phase 2 Clearance: Immediate Action Drill

If Phase 1 clearance does not clear the malfunction or the malfunction is a double feed, use Phase 2 clearance.

1. Lock the bolt to the rear to release pressure on the magazine.
2. Depress the magazine release; forcibly strip the magazine from the magazine well.
3. Remain in your stance with your weapon still pointed at the target.
4. With your support hand, work the charging handle back and forth until you clear the rounds or obstructions from the barrel and chamber.
5. Place a new magazine in the magazine well, and use a sharp upward motion to seat the magazine.
6. Reach up to the charging handle with your support hand, pull it to the rear, and release (slingshot). This chambers a round.
7. Ready—Assess the situation. Reengage the threat, or issue verbal commands.
8. Fire if necessary.

A malfunction can also be due to a squib load. (See the information on squib load in the Revolver Malfunctions lesson section.)

In a training situation, an instructor will take the firearm. Instructors are responsible for clearing this malfunction.

During a deadly force encounter, you should switch to a secondary weapon or retreat. Immediately move to cover, if available. If your rifle malfunctions, immediately switch to a handgun, if available.

If the trigger is pulled but the round fails to fire, this malfunction is a failure to fire. The following conditions cause a failure to fire:

- The safety is engaged and you cannot pull the trigger. Disengage the safety.
- Failure to chamber a round. Correct this malfunction with the Phase 1 clearance method—Tap, Rack, Ready.
- The primer fails to ignite after the firing pin strikes it. The result is a misfire and a dead round. Correct this malfunction with the Phase 1 clearance method—Tap, Rack, Ready.

Imagine that you insert the magazine, release the bolt forward, and disengage the safety. Then you pull or squeeze the trigger, and nothing happens. You are experiencing a failure to feed. This occurs when the magazine is not fully seated in the magazine well, the magazine is empty, the magazine spring is broken, or the magazine is not loaded properly.

Take these steps immediately:

1. Tap the bottom of the magazine upward to ensure proper seating.
2. Pull the charging handle completely to the rear, and release it. This chambers a round.
3. If the magazine well is empty, insert a new magazine.

4. Ready—Assess the situation. Reengage the subject if they remain a threat, or issue commands if the subject surrendered.
5. Fire if necessary.

A failure to extract round (double feed) occurs when a spent casing remains in the chamber, blocking a new round from feeding into the chamber.

To clear a double feed:

1. Lock the bolt to the rear.
2. Remove the magazine.
3. Work the charging handle back and forth until you empty the chamber.
4. Reinsert the magazine.
5. Pull the charging handle completely to the rear, and release it to chamber a round.
6. Ready—Assess the situation.
7. Fire if necessary.

A stovepipe occurs when an empty casing fails to completely eject. Causes include a weak powder charge or a dry weapon (not enough lubrication).

Use the Phase 1 clearance method to clear the caught casing:

1. Tap the bottom of the magazine upward to ensure proper seating.
2. Pull the charging handle completely to the rear while turning the ejection port toward the ground, and release the charging handle/lever. This ejects the caught round and chambers a new round.
3. Ready—Assess the situation.
4. Fire if necessary.

UNIT 6 | LONG GUN USE—SEMIAUTOMATIC RIFLE/CARBINE

LESSON 5 | Weapons Cleaning—Semiautomatic Rifle/Carbine

OBJECTIVES

- FA6.5.1.** Fieldstrip the semiautomatic rifle/carbine based on the make and model of the weapon.
- FA6.5.2.** Identify the proper supplies/tools to use when cleaning the semiautomatic rifle/carbine.
- FA6.5.3.** Clean the semiautomatic rifle/carbine, removing all lead, powder, debris, and dirt.
- FA6.5.4.** Lubricate the semiautomatic rifle/carbine using lubricant and cloth/patches.
- FA6.5.5.** Reassemble the cleaned semiautomatic rifle/carbine dependent upon the make and model of the weapon.
- FA6.5.6.** Function check the clean, reassembled semiautomatic rifle/carbine.
- FA6.5.7.** Return the cleaned semiautomatic rifle/carbine to safe storage and/or securely re-case the weapon.

LESSON GOAL: At the end of this lesson, you will be able to identify the necessary supplies and tools to clean a semiautomatic rifle/carbine and will know how to correctly clean and lubricate a semiautomatic rifle/carbine.

While fieldstripping and cleaning your rifle/carbine, remember these important points:

1. Safety check the weapon.
2. Remove live ammunition from the cleaning area.
3. Remove the magazine and secure it away from the weapon.
4. Verify that the chamber or magazine contains no ammunition.
5. Ensure the bolt is locked to the rear and the ejection port is open.

It is recommended that you observe the manufacturer's guidelines for cleaning your semiautomatic rifle/carbine. Make sure the tools you use do not invalidate the manufacturer's warranty or conflict with the manufacturer's recommendations.

A rifle/carbine cleaning kit could include swabs, a cleaning rod, lubricant, Bore Snake®, bore brush, cleaning solvent (non-penetrating), and cloth/patches.

- cleaning tools—Cleaning tools are caliber specific. Use the tools designated for the specific caliber of your weapon. A larger caliber cleaning brush or patch tip does not fit in a smaller weapon and may cause damage. A small tool may not completely clean a large firearm.
- solvent and lubricant—Several types and brands of cleaners and solvents are available. Use solvent and lubricant specifically designed for firearms maintenance.
- patches and swabs—Consider the weapon bore when choosing gun-cleaning patches. Different materials have different absorption qualities.

Cleaning and Lubricating the Rifle/Carbine

To remove all lead, powder, debris, and dirt from the rifle/carbine:

1. With a bore brush and cleaning rod, clean and brush the bore and chamber of the barrel from the chamber end. Repeatedly push the bore brush completely through the barrel until it appears at the opposite end.
2. Use a non-metallic brush with solvent to clean areas contaminated with powder residue.
3. Use a patch, cleaning rod, and cleaning solvent to clean the bore, replacing the patch as needed.
4. Run a clean patch through the barrel from the chamber end to remove solvent and dirt. Repeatedly push the patch through the barrel until it appears at the opposite end.
5. Clean every part of the rifle/carbine and wipe the exterior parts dry with a clean patch.
6. Lightly lubricate all parts and the bore.

Cleaning the Magazine

1. Fieldstrip the magazine and clean all parts with a patch and solvent.
2. Wipe parts with a clean patch when done.
3. Wipe the exterior parts of the magazine with a lightly lubricated cloth or patch.
4. Clean the inside of the magazine with a dry cloth or patch.
5. Make sure the inside of the magazine is entirely dry.

When you finish cleaning and lubricating your semiautomatic rifle/carbine:

1. Reassemble the firearm.
2. Function check the firearm to ensure that all parts operate. Ensure that the bolt moves freely and spring tension is good, the safety works in both the “on” and “off” positions, the magazine feeds into the magazine well and releases freely, and all metal parts are clean and lightly coated with lubricant or oil, except for the inside of the magazine(s).
3. Return the rifle/carbine to safe storage or securely re-case it.
4. Properly dispose of all cleaning supplies.
5. Wash your hands with soap and water.

UNIT 7 | USE OF COVER AND CONCEALMENT WITH A FIREARM

LESSON 1 | Use of Cover and Concealment

OBJECTIVES

- FA7.1.1.** Define concealment.
- FA7.1.2.** Identify tactical considerations in the use of cover and concealment.
- FA7.1.3.** Identify factors to consider before moving.
- FA7.1.4.** Use cover properly when given a threat.
- FA7.1.5.** Demonstrate appropriate shooting stances from behind cover.

LESSON GOAL: At the end of this lesson, you will be able to identify and know the difference between cover and concealment and be able to apply proper firearms techniques when using cover and concealment.

Using cover and concealment can be critical to an officer winning a confrontation. Remember that using cover may save your life by creating a bullet-resistant barrier between you and a threat. Examples of cover include a solid concrete wall, a vehicle's engine block, or a concrete telephone pole.

Concealment is any object or group of objects that creates a visual barrier between you and a threat but may not stop a projectile. Examples include bushes, trees, and cars. The purpose of concealment is to hide your exact location. Cover can be concealment, but concealment is not necessarily cover.

Cover should be chosen for its bullet-stopping capabilities, not its size. Walls and doors made of materials that bullets can penetrate may serve as concealment. Do not consider them cover, however. The objective of cover is to save your life by stopping or deflecting bullets and to provide a safer environment while you evaluate a situation.

Tactical considerations in using cover include using cover whenever possible, and reloading behind cover whenever possible while observing the threat.

Consider the following factors to determine appropriate cover:

- **size**—Ideally, the object should be large enough to fully conceal your body, for example, a vehicle or concrete wall. However, any cover is better than no cover.
- **density**—The cover should be capable of stopping a projectile.
- **location**—The cover should be tactically sound and should position you to engage a threat.
- **versatility**—The cover should give you the most options, such as cover that allows you to use your shooting hand rather than your support hand or cover that enables you to change heights or shooting stances.

There are several factors to consider before moving to cover. Never change your cover just for the sake of change. Select your next position before you move. Move closer only to gain a tactical advantage. Move using concealment—cars, trees, bushes—if available. You may need to run, crawl, or “duck walk” to reach cover. Move if you need to reach a safer location. Reload your firearm behind cover, when possible.

When moving to cover, scan the area first. Your weapon should be in a ready position. You should be ready to engage the threat at any time, even while moving. Keep your finger off the trigger, outside the trigger guard. Be aware of foot placement. Move quickly and decisively; use concealment if available. Always be aware of alternative options. Don't lock yourself into a bad position. To properly use cover, keep your body and your firearm behind cover. Do not expose your body unnecessarily. Do not let the muzzle of your firearm extend beyond the cover object.

Exploit distance and angles. Do not "crowd" your cover. You do not have to be right behind your cover to use it effectively. Remember to judge your position of cover from your adversary's angle or viewpoint and keep your firearm and body off the cover. Leaning on your cover decreases your mobility, and it increases your chance of being hit by direct fire or a ricochet, or by scattered debris when projectiles impact your cover. Remember that ricochet or debris may disable your firearm. Alter your shooting position from behind cover whenever possible. Muzzle flash may reveal your location, especially at night.

Stances From Behind Cover: Handgun

Barricade Standing (Roll-Out Method)

Follow this procedure for firing your handgun from the standing barricade position:

1. Start away from cover in your basic stance.
2. Draw your firearm from your holster, keeping your finger off the trigger; move to cover and identify your target.
3. Stay completely behind the barricade using it for cover.
4. Use your basic shooting position.
5. Roll out to your shooting-hand side. Expose only a small portion of your shoulder and head. Keep your firearm away from and behind the barricade. Do not let your firearm or hands rest on or touch the barricade.

Kneeling Barricade (Roll-Out Method)

Use this procedure for firing your handgun from the kneeling barricade position:

1. Start away from cover in your basic stance.
2. Draw your firearm from your holster, keeping your finger off the trigger; move to cover and identify your target.
3. Stay completely behind the barricade and use it for cover.
4. Use a kneeling position behind cover.
5. Roll to your shooting-hand side. Remember to expose only a small portion of your shoulder and head and keep your firearm away from and behind the barricade. Also, do not let your firearm or hands rest on or touch the barricade.

SECTION VOCABULARY*concealment***Positions From Behind Cover: Shotgun and Rifle/Carbine*****Barricade Standing (Roll-Out Method)***

Use this procedure to fire a shotgun or rifle/carbine from the standing barricade position.

1. Start away from cover in your basic stance.
2. Keeping your finger off the trigger, move to cover and identify your target.
3. Stay completely behind the barricade using it for cover.
4. Roll out to your shooting-hand side. Remember to expose only a small portion of your shoulder and head and keep your firearm away from and behind the barricade. Also, do not let your firearm or hands rest on or touch the barricade.

Kneeling Barricade (Roll-Out Method)

Use this procedure for firing your shotgun or rifle/carbine from the kneeling barricade position.

1. Start away from cover in your basic stance.
2. Keeping your finger off the trigger, move to cover, take a kneeling position, and identify your target.
3. Stay completely behind the barricade, using it for cover.
4. Roll to your shooting-hand side. Remember to expose only a small portion of your shoulder and head and keep your firearm away from and behind the barricade. Also, do not let your firearm or hands rest on or touch the barricade.

UNIT 8 | SURVIVAL SHOOTING—HANDGUN

LESSON 1 | Drawing, Loading/Reloading, and Live Fire

LESSON GOAL: At the end of this lesson, you will be able to demonstrate drawing with the support hand, loading/reloading, and firing with one hand only.

OBJECTIVES

FA8.1.1. Disengage the holster retention devices with your support hand.

FA8.1.2. Unload the handgun using one hand.

FA8.1.3. Load a handgun using one hand.

Drawing: Support Hand Only

To draw your handgun using your support hand, do the following:

1. Reach across the front or back of your body, and use the fingers of your support hand to find the retention devices for your holster.
2. With the fingers of your support hand, disengage the retention devices.
3. Grip the handgun.
4. Safely draw the handgun from its holster.
5. Safely bring the handgun across your body, watching the muzzle and ensuring your finger is outside the trigger guard, and point it at the target.

Reload Handgun With One Hand Only

Although reloading your handgun with two hands is preferable, some circumstances, such as an emergency or injury, dictate that you reload with only one hand.

Unload/Reload a Revolver Using the Right Hand

To unload a revolver using only your right hand, do the following:

1. Grip the revolver firmly with your right hand, while keeping the muzzle pointed in a safe direction and keeping your finger off the trigger.
2. Maintaining control of your revolver, open the cylinder. Use the technique appropriate for the model of your revolver.
3. Push the cylinder open with your index finger.
4. Place your thumb through the opening in the frame, under the top strap and over the cylinder.

5. Point the muzzle straight up.
6. Depress the extractor rod with your index finger, and extract empty shell casings from the cylinder.

To reload a revolver using only your right hand, do the following:

1. Place the grip of the weapon against your stomach.
2. Grab the top strap with the fingers of your right hand.
3. Place the barrel behind the gun belt inside the front of your pants with its cylinder facing out.
4. With your right hand, remove a speed loader from the pouch and insert the cartridges into the cylinder.
5. Hold the front of the cylinder with your pinkie and ring fingers.
6. Apply pressure on the cylinder to hold it in place.
7. With your thumb and forefinger, turn the knob on the speed loader to release the cartridges.
8. Grip the revolver with the “shooting grip,” removing it from your waistband.
9. Close the cylinder using your right thumb.

Unload/Reload a Revolver Using the Left Hand

To unload a revolver using only your left hand, do the following:

1. Grip the revolver firmly with your left hand, keep the muzzle pointed in a safe direction, and keep your finger off the trigger.
2. Maintaining control of your revolver, open the cylinder. Use the technique appropriate for the model of your revolver.
3. Open the cylinder by tapping the side of the cylinder against your holster.
4. Place your thumb on the top strap and your little finger over the hammer.
5. Move your thumb inside the frame, and put your index finger on the extractor rod.
6. Point the muzzle straight up.
7. Depress the extractor rod with your thumb or index finger, and remove empty shell casings from the cylinder.

To reload a revolver using only your left hand, do the following:

1. Place the barrel behind the gun belt inside the front of your pants with its cylinder facing out.
2. With your support hand, remove the speed loader from the pouch and insert the cartridges into the cylinder.
3. Use your index, middle, and ring fingers to control the cylinder, before releasing the cartridges.

4. With the thumb and index finger, turn the knob on the speed loader to release the cartridges.
5. Grip your revolver firmly, and remove it from your waistband.
6. Close the cylinder with your trigger finger.

UNIT 8 | SURVIVAL SHOOTING—HANDGUN

LESSON 2 | Discretionary Shooting

OBJECTIVES

FA8.2.1. Scan surroundings for possible threats.

FA8.2.2. Identify various methods of moving to cover and/or concealment.

LESSON GOAL: At the end of this lesson, you will be able to identify and differentiate between threats, scan the environment, use proper movement/techniques to locate and move to a position of cover, and engage the proper threat(s).

Officers must be able to identify deadly threats to themselves or others and then respond using only the amount of force necessary. If a threat demands deadly force, an officer must be able to identify that threat, innocent bystanders, field of fire, and what lies beyond the field of fire; determine if cover is available; decide that deadly force is the only course of action; and respond as quickly as possible. You must use all of your faculties to make the right decision.

Threat Assessment

Upon arriving at the scene, scan the area for possible problems, including additional threats. The ability to assess a situation or subject depends largely on your observation skills, including the ability to recognize hazardous areas and potential weapons and identify areas that provide cover or concealment.

Your senses of sight, sound, smell, and touch increase your awareness of your surroundings. As you become more familiar with the normal conditions of those surroundings, you will also be more aware of and able to identify people, occurrences, and conditions that are out of place.

Movement

After you identify the threat, you may need to move to cover. To move effectively during an armed confrontation, you must be aware of many factors and be able to use different types of movement. Appropriate cover is any object big enough to hide your body and strong enough to stop bullets.

As you move from cover to cover, you must move quickly, safely, and without hesitation. You must be aware of your surroundings and of the condition of your weapon, whether it's loaded and how many rounds you have. You must also know what suffices for cover, decide where to move, know if the location you choose allows you to see the area where the threat originates, and know when to move.

Basic movement techniques and tactics follow, but they are not the only methods officers use. Always be open to new ideas and tactics that may give you options to help you survive an armed confrontation.

Lateral Slide-Step Movement (Crab Walk)

1. Stand square to the target with your legs apart and your body balanced.
2. Shift your weight to the balls of your feet to allow movement. Be careful not to cross your feet.
3. Keep your back straight and your knees slightly bent.
4. Hold your firearm in a tactical ready stance.
5. When you know what direction you are going, lead with the foot in that direction. For example, if you are going right, move your right foot first.
6. Keep your feet low to the ground, feeling for objects that may cause you to trip or block your movement. Stepping low also helps with balance.
7. Look toward the area where the threat is.

Discretionary Shooting Skills

Remember these steps:

Threat Recognition—Distinguish a deadly threat from a nondeadly threat.

Reaction Time—React and take appropriate action. You must take some type of appropriate action to neutralize a deadly threat, for example, firing a round at the target.

Verbal Commands—Use verbal commands to identify yourself and direct the subject. Give loud, clear, and concise commands, saying, for example, “Police! Don’t move!”

Reloading—Take proper cover and reload.

Use of Cover—Move to cover.

Weapon Status—Follow all safety rules when handling the weapon. Show awareness of the weapon’s status, and respond to weapon malfunctions.

Engagement of Nondeadly Threat—Identify the nondeadly threat and respond with proper verbal commands.

Neutralized Target—Neutralize all deadly threats.

CHAPTER 4

Criminal Justice Defensive Tactics

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The public often focuses attention on the decisions and methods that criminal justice officers practice in use of force situations. Whether meeting resistance on the street or in a correctional facility, officers must be prepared to respond appropriately to control a situation where the officers and the public are in danger. The defensive tactics curriculum offers criminal justice basic recruits effective, tactically sound, and legally defensible training in defensive tactics and control techniques. This course teaches recruits to select and properly execute techniques that are reasonable and necessary, given the circumstances and factors of a situation.

UNIT 1 | INTRODUCTION

LESSON 1 | Overview of Defensive Tactics Program

OBJECTIVE

DT411.1. Define defensive tactics.

LESSON GOAL: At the end of this lesson, you will understand the structure and goals of the defensive tactics training program.

SECTION VOCABULARY

defensive tactics

Defensive tactics is a system of controlled defensive and offensive body movements that criminal justice officers use to respond to a subject's aggression or resistance. These techniques are based on a combination of martial arts, wrestling, and boxing. The physical skills in defensive tactics require practice and repetition. Fitness, strength, agility, balance, and flexibility are vital to developing these skills.

The role of defensive tactics is to assist the officer in restraining or arresting a person. Depending on the situation, officers will use various levels of force in applying defensive tactics techniques. Any defensive weapon or technique has the potential to cause injury, great bodily harm, or death.

This course provides basic recruits with training in the physical skills necessary for the use of force in controlling subjects and for self-defense. Although there is some classroom instruction, most of this course is physical training.

Some instructions for techniques indicate using a specific side (for example, left hand or right foot). These are used for the sake of clarity. Any of these techniques can be reversed by switching left to right or vice versa.

UNIT 1 | INTRODUCTION

LESSON 2 | Preparation for Defensive Tactics Training

LESSON GOAL: At the end of this lesson, you will be prepared to participate in the defensive tactics training program and demonstrate stretching exercises, falling techniques, and recovery techniques.

Because defensive tactics training is a physical endeavor, prepare for the activities required in this course by looking at your daily habits. You should eat healthy food, get enough rest, and drink plenty of fluids to get the most out of this training. Making these changes will enhance physical performance and minimize the risk of injury.

Defensive tactics skills require physical fitness, strength, agility, balance, and flexibility. Because flexibility reduces the risk of injuries, you should do stretching exercises every day.

Warm-up and Cooldown Exercises

Begin and end each session with stretching exercises. A warm-up session raises the heart rate and increases blood circulation to the muscles, saturating them with oxygen. This helps your body prepare itself for physical activity. A cooldown after exercise redistributes blood flow, causing the metabolic rate to decrease. This process helps the muscles relax and prevents the tightening of muscles, which is vital for the body to recover.

Stretching usually begins with a warm-up, such as running in place, jumping jacks, push-ups, or any calisthenics exercises that last for 15–30 minutes to warm up the muscles, and increase heart rate, respiration, and perspiration. The following examples of stretching exercises and techniques are suitable to prepare for defensive tactics training. Incorporating the techniques listed below into your warm-up session can be beneficial since it readies recruits for training while also letting them practice fundamental techniques.

Recommended Warm-up Stretches

Lunge and Twist

Stand with feet about shoulder-width apart. Hold both arms in front of you with elbows bent at 90° horizontally. Step forward with your left foot into a lunge position. Be sure to keep your knee over your left foot; don't twist at the knee. From your torso, twist your upper body to the left, then to the right. Maintain a slow and controlled movement throughout the exercise. Slowly move your arms to center and step forward with the opposite foot and twist to the other side. Perform 10 repetitions per side.

OBJECTIVES

DT412.1. Apply strategies for optimal physical performance during a defensive tactics training program.

DT412.2. Demonstrate falling techniques.

DT412.3. Demonstrate recovery techniques.

Knee Raises

Stand with feet about shoulder-width apart. Bend your left knee and raise it up as high as you can toward the left side of your chest. At the same time, bend your left elbow and lower it to meet your left knee. Repeat this sequence with your right knee. Do 10 repetitions per leg.

High Kicks

Stand tall with your feet shoulder-width apart or closer. Raise your arms straight in front of you at shoulder height. Lift one leg up as high as possible. Keep the leg straight. Then lower the leg back down. Do the same with the other leg. Keep alternating legs. Arms stay stationary throughout the exercise. Do 10 repetitions per leg.

Arm Swings

While standing, hold both arms out to your side horizontally, making a “T.” Swing both arms in and cross them in front of your chest, then swing them back out to the side. Repeat this movement for 30 seconds.

Arm Rotations

While standing, hold both arms out to your side horizontally, making a “T.” Rotate arms in a circle. Do 10–15 repetitions clockwise and 10–15 repetitions counterclockwise.

Arm Cross

While standing, bring your right arm across your chest with the palm up. Keep your arm straight. Grasp your upper arm above the elbow with your left hand and slowly pull in toward and across your chest. Hold for 10–20 seconds and repeat with the left arm.

Jump Squats

Stand with your feet shoulder-width apart. Start by doing a regular squat, then tighten your core and jump up explosively. When you land, lower your body back into the squat position to complete one repetition. Land as quietly as possible, which requires control. Do 10–15 repetitions.

Stationary Sprints

Begin in a standing position. Raise and lower one knee at a time as if running in place. Alternate legs as quickly as possible. Do three sets of 10–15 second intervals.

Wrist Rotations

From a standing, kneeling, or sitting position, extend both arms out in front, then slowly rotate one wrist in a clockwise direction and the other wrist in a counterclockwise direction. Do two to three sets of 10–15 second intervals in each direction.

Falling Techniques

Falling techniques are useful if a subject attacks, pushes, or hits you with enough force to send you to the ground, or if you trip over an obstacle.

Falling properly reduces the potential for injury and minimizes the stunning effect associated with falling, so you can assume an effective defensive position. Returning to a defensive stance puts you in a position to defend against further attack or control the subject.

Front Fall

Use loud, clear verbal commands throughout the application of the technique.

Extend your bent arms slightly in front of your chest as in a natural bracing position.

Fall forward to a **prone position** (lying on the stomach, face down) contacting the ground with the palms, forearms, and feet, turning your head to the side, and exhaling on impact. If falling with an unholstered weapon, make contact with the ground with just one palm.

Follow up with appropriate action(s). (See Figure 4-1)



1
Front fall



2



3



4

Figure 4-1

Rear Fall

Use loud, clear verbal commands throughout the application of the technique.

Tuck your chin to your chest.

Squat and roll backward.

As your back makes contact with the ground, pull your arms in tightly, or you may swing both of your arms out at a 45° angle and strike the ground with the palms of both hands while exhaling.

Follow up with appropriate action(s). (See Figure 4-2)



1
Rear fall



2

Figure 4-2

Side Fall

Use loud, clear verbal commands throughout the application of the technique.

Tuck your chin to your chest.

Squat and roll to the rear quarter and to one side.

Relax your body as you fall.

Don't land flat. Reduce the shock by rolling after hitting the ground.

As your body makes contact with the ground, you may swing the same side arm and strike the ground with the palm to minimize impact.

Exhale to relax your body and to prevent having the wind knocked out of you.

Follow up with appropriate action(s). (See Figure 4-3)



1



2



3

Side fall

4

Figure 4-3

Foundation

This position allows you to be ready to engage the subject on the ground or to recover to a standing position.

From lying on the back:

Use loud, clear verbal commands throughout the application of the technique.

Using an extended arm, prop the upper body off the ground (posting). *Posting* is supporting the balance of the body using a limb.

Bend the knees with feet on the ground.

Keep your free hand up in a defensive position to protect vital areas.

Follow up with appropriate action(s). (See Figure 4-4)



1
Foundation



2

Figure 4-4

Recover to the Standing Position

Your ability to get up safely from a ground encounter is critical. This technique prepares you to get back on your feet while protecting your face, head, body, and weapon from an aggressive subject.

Use this technique to gain time and distance between you and the aggressive subject. If you do not gain distance, the subject may get on top of you or strike you while try to get up and get away.

From the foundation position:

Use loud, clear verbal commands throughout the application of the technique.

Stand up from the ground establishing a strong base.

Use an appropriate technique to gain distance and protect your vital areas.

Maintain an appropriate stance.

Follow up with appropriate action(s). (See Figures 4-5 and 4-6)



1



2



3



4



5



6

Recover to the standing position–A

Figure 4-5



1



2



3



4

Recover to the standing position–B

Figure 4-6

Hip Escapes

Hip escapes allow you to move from side to side to avoid or defend against an attack. The movement in a hip escape is also known as *shrimping*. You can use shrimping to escape from certain ground positions, such as side control and full mount, which are discussed later in the lesson on Ground Control.

Use loud, clear verbal commands throughout the application of the technique.

From the foundation, tuck the chin to the chest to protect your neck and back of your head.

Push off with one foot, force your hips up, and push out toward the opposite side. Your hands will imitate a pushing motion, as if pushing the subject away.

Follow up with appropriate action(s). (See Figure 4-7)



1



2



3



4



5

4
Hip escapes

Figure 4-7

Sprawl

A sprawl is usually used to defend against a subject who shoots in for a takedown.

Use loud, clear verbal commands throughout the application of the technique.

Shoot legs backwards, driving one hip down, which stops the subject's forward momentum.

Your chest will make contact with the subject's shoulder blades and drive the subject down. (See Figure 4-8)



3
Sprawl

4
Figure 4-8

Recommended Cooldown Stretches

Neck Stretch

While standing, lean your left ear to your left shoulder for a count of 10 seconds. Repeat on the opposite side. Stretch chin to chest and head to rear. Perform two to three sets in each direction.

Straight Arm Behind Back Stretch

While standing, place both arms behind your hips. With interlocking hands, slowly raise your arms behind your back for a count of 10–20 seconds. Keep your head upright and neck relaxed.

Behind Neck Triceps Stretch

While standing, raise your right arm above your head and bend your right arm. Your elbow will be above your head. Using the opposite hand, grasp your elbow and slowly pull toward the midline of your back, moving your hand in between your shoulder blades. Hold the stretch for 10–20 seconds, and repeat on the left side.

Arm Crossed in Front of Chest

While standing, bring your right arm across your chest with the palm up. Keep your arm straight. Grasp your upper arm above the elbow with your left hand and slowly pull in toward and across your chest. Hold for 10–20 seconds, and repeat with the left arm.

Both Arms up Above Head Stretch

While standing, raise both arms above your head. Keep your arms straight and interlock your fingers with the palms facing up. Reach upward slowly while reaching slightly backward. Hold for 10–20 seconds.

Both Arms in Front of Chest Stretch

While standing with your feet shoulder-width apart, bring your arms from an overhead position slowly toward the front of your body, while rounding the back and stretching the shoulder blades apart. Hold for 10–20 seconds.

Butterfly Stretch

While seated on the floor, bend your legs so that the soles of your shoes touch. Your legs should be relaxed and knees should be flat on the floor, if possible. (If you lack flexibility, your knees might not rest on the floor.) Lean forward from the waist with a straight back. Bring your head as close to your feet as possible. Hold for 10–20 seconds.

Spinal Twist

Sitting on the floor with your legs extended straight, bend your right leg and bring your right foot to the outside of your left leg next to the knee. Place your right hand behind your hips for support. Push your right knee to the left with your left elbow while turning your upper body to the right and rotating your shoulders as far as possible. Hold for 10–20 seconds, and repeat on the opposite side.

Supine Knee Flex Stretch

Lie on your back with your legs straight. Bring your right knee toward your chest, placing both hands below the knee while continually pulling the knee toward your chest. Hold the stretch for 10–20 seconds, and repeat on the opposite side.

Seated Bent Knee Stretch

While seated on the floor with both legs bent, bring your right ankle to your left knee. Support your upper body by placing your palms on the floor with fingers pointing away from your body. Bring both legs toward your chest. Hold the stretch for 10–20 seconds, and repeat on the opposite side.

Modified Hurdler's Stretch

While seated on the floor, extend your right leg straight in front of your body. Bend your left leg and bring the sole of your left shoe to the inside of your straight leg. Lean forward from the waist and grasp the toes of your right foot while moving your chest as close to your straightened leg as possible. Hold the stretch for 10–20 seconds, and repeat on the opposite side.

Straddle Stretch

Sit on the floor with your legs straight out and spread your legs as far as possible. Grasp the toes of your right foot while leaning from the waist. Keep your buttocks on the floor and your back straight. Your chest should be directly over your right knee. Facing your right knee and keeping your back straight, lean your upper body forward toward the ground with your hands grasped as close to the right toes as possible. Hold the stretch for 10–20 seconds, and repeat on the opposite side.

Drills

Pummeling Drill

Pummeling is a grappling technique used to gain the double underhook position, which is a dominant control position that can be used in a variety of takedowns and grappling techniques (for example, front takedown). An overhook is when your arm is over the subject's arm and controlling that arm. An underhook is when your arm is under the subject's arm and controlling the subject's upper body.

Start with a partner. You each have an overhook with your right arm and an underhook with your left arm.

You both move your overhook arm to an underhook position at the same time.

Continue this process and switch from overhook to underhook alternating sides each time.

Gradually increase resistance while both students attempt to gain the double underhook position. (See Figure 4-9)

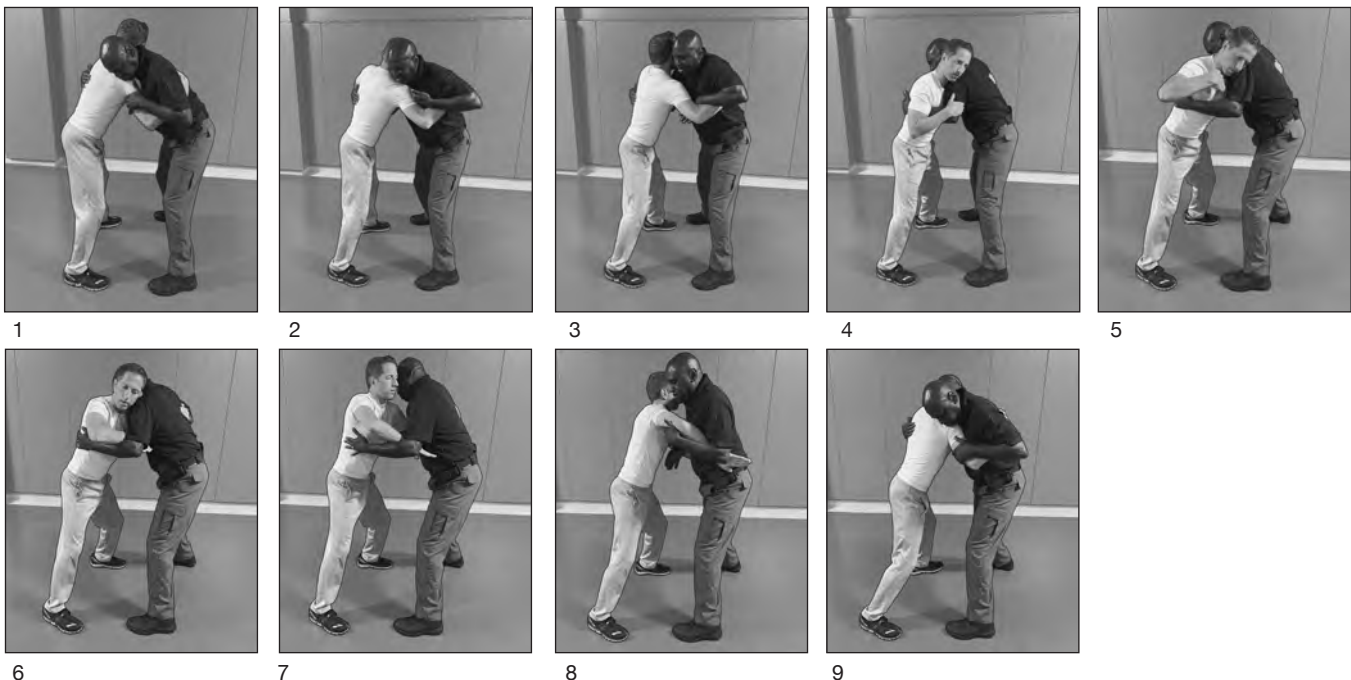


Figure 4-9

Arm Drag Drill

The arm drag is a technique where you pull the subject's arm across your body to gain a dominant position. You can use the arm drag to set up a variety of grappling and takedown techniques (for example, escort position or rear takedown, discussed later in this chapter).

While facing the subject block and grab the subject's right arm with your left arm and bring the subject's arm across your centerline.

Use your right hand to reach across the subject's body and grasp the back of their right arm just above the elbow.

Continue the drill in the same manner and alternate the target arm. (See Figure 4-10)



4 Arm drag

6 Figure 4-10

Cardiovascular Conditioning

Cardiovascular training is any exercise that elevates the heart rate to a range of 60% to 85% of the maximum rate. When the heart rate is in that range, you are training in a cardiovascular or aerobic state. Cardiovascular training has many health benefits. In addition to burning calories and eliminating body fat, it strengthens the heart and lungs. Having a healthy heart can protect you from heart disease, which is the leading cause of premature death for men and women. Examples of cardiovascular exercises include walking, jogging, running, jumping rope, bicycling, swimming, and step aerobics.

SECTION VOCABULARY

cardiovascular training

posting

prone position

shrimping

Rest

Make sure you get enough rest and sleep to get the most out of your physical training.

Nutrition

A healthy diet and drinking enough water will also help you get the most out of your defensive tactics training.

Essential Nutrients in Food		
Nutrient	Function	Sources
protein	provides energy; builds and repairs body cells; is part of various enzymes, hormones, and antibodies	meat, poultry, fish, eggs, legumes (such as lentils), milk and milk products, vegetables, nuts, seeds, seafood, and grains
carbohydrate	provides energy needed by the brain, nervous system, red blood cells, and other cells	bread, cereal grains, pasta, rice, fruit, vegetables, milk, and sugar
fat	provides energy and essential fatty acids; carries other fat-soluble nutrients (vitamins); is part of cell membranes, membranes around nerves, hormones, and bile (for fat digestion)	meat, poultry, fish, milk and milk products, nuts and seeds, oils, butter, margarine, and salad dressing

UNIT 2 | USE OF FORCE

LESSON 1 | Force Guidelines

OBJECTIVES

- DT421.1.** Identify elements of the Florida Statutes related to the use of force by criminal justice officers.
- DT421.2.** Explain the provisions of chapters 944 and 945, F.S., related to the use of force by state correctional and correctional probation officers.
- DT421.3.** Explain the concept of objective reasonableness.
- DT421.4.** Explain that subject resistance and officer response may change rapidly.
- DT421.5.** Apply the legal authority for an officer's response to a subject's resistance.
- DT421.6.** Explain escalation, de-escalation, and disengagement.
- DT421.7.** Explain how the injury potential to an officer may affect their response.
- DT421.8.** Define passive resistance.
- DT421.9.** Define active resistance.
- DT421.10.** Define aggressive resistance.
- DT421.11.** Define deadly force resistance.
- DT421.12.** Demonstrate officer presence.
- DT421.13.** Define physical control.
- DT421.14.** Define nonlethal weapon.
- DT421.15.** Discuss deadly force in relation to defensive tactics.

LESSON GOAL: At the end of this lesson, you will understand using reasonable and necessary force when taking a suspect into custody, when working in a correctional environment, or when defending yourself or others.

Chapter 776, F.S., governs all use of force by criminal justice officers. Even though the statutes refer to law enforcement officers, the legal guidelines regarding use of force apply equally to corrections and correctional probation officers. The statutes identify two general areas where an officer's use of force is justified: to apprehend and arrest a subject, or to defend self or others.

Section 776.05, F.S., addresses the issue of an officer using force to make an arrest:

A law enforcement officer, or any person whom the officer has summoned or directed to assist him or her, need not retreat or desist from efforts to make a lawful arrest because of resistance or threatened resistance to the arrest. The officer is justified in the use of any force:

- (1) Which he or she reasonably believes to be necessary to defend himself or herself or another from bodily harm while making the arrest;
- (2) When necessarily committed in retaking felons who have escaped; or
- (3) When necessarily committed in arresting felons fleeing from justice. However, this subsection does not constitute a defense in any civil action for damages brought for the wrongful use of deadly force unless the use of deadly force was necessary to prevent the arrest from being defeated by such flight and, when feasible, some warning had been given, and:
 - (a) The officer reasonably believes that the fleeing felon poses a threat of death or serious physical harm to the officer or others; or
 - (b) The officer reasonably believes that the fleeing felon has committed a crime involving the infliction or threatened infliction of serious physical harm to another person.

While chapter 776, F.S., applies in general to all criminal justice officers, chapter 944, F.S., addresses the use of force specifically by state correctional and correctional probation officers. Chapter 945, F.S., establishes that the Department of Corrections has jurisdiction over the supervisory and protective care, custody, and control of inmates and offenders.

Section 944.35, F.S., provides that:

- (1)(a) An employee of the department is authorized to apply physical force upon an inmate only when and to the extent that it reasonably appears necessary:
1. To defend himself or herself or another against such other imminent use of unlawful force;
 2. To prevent a person from escaping from a state correctional institution when the officer reasonably believes that person is lawfully detained in such institution;
 3. To prevent damage to property;
 4. To quell a disturbance;
 5. To overcome physical resistance to a lawful command; or
 6. To administer medical treatment only by or under the supervision of a physician or his or her designee and only:
 - a. When treatment is necessary to protect the health of other persons, as in the case of contagious or venereal diseases; or
 - b. When treatment is offered in satisfaction of a duty to protect the inmate against self-inflicted injury or death.

DT421.16. Identify what is needed to justify using deadly force.

DT421.17. Identify the subject's ability, opportunity, and intent as they relate to the officer's response to resistance.

DT421.18. Explain what totality of circumstances means.

DT421.19. Identify various situational factors that may influence the use of force.

Objective Reasonableness

The courts use *objective reasonableness* to decide whether an officer's use of force is an appropriate response to a subject's resistance. Appropriate force is the amount of force reasonably necessary to make an arrest. The U.S. Supreme Court said in *Graham v. Connor*, 490 U.S. 386 (1989), that the reasonableness of a particular use of force must be judged from the perspective of how a reasonable officer on the scene would respond, rather than from the 20/20 perspective of hindsight. To determine if an officer's actions were objectively reasonable, the courts look at the facts and circumstances the officer knew when the incident occurred. Courts recognize that criminal justice officers must make split-second judgments about the amount of force needed in a particular situation under circumstances that are tense, uncertain, and rapidly evolving.

The officer's reasons for using force must be consistent with constitutional and statutory law, as well as agency policies and training guidelines. The Supreme Court has made clear that use of force is a seizure under the Fourth Amendment. Correctional officers must also consider that use of force may violate the Eighth Amendment's prohibition against cruel and unusual punishment.

An officer's agency may establish the specific techniques, tactics, and applications that an officer may use in an encounter with a resistant subject.

Authority to Use Force

Much litigation against criminal justice officers is not about the amount of force used, but whether the use of force was permitted at all. Though the law grants criminal justice officers the right to use force, this right is conditioned on their official authority.

Correctional officers have full-time authority over inmates due to the inmates' sentence and loss of certain rights.

A law enforcement officer's authority to use force is established by the officer's reasonable belief that a crime has been, is being, or is about to be committed. Absent this belief, known as reasonable suspicion, a law enforcement officer has no authority over a subject, and thus no permission to use any amount of force at all.

Escalation, De-escalation, and Disengagement

Force decisions may escalate and de-escalate rapidly in relation to the perceived threat. An officer's goal is to achieve subject compliance. **Compliance** is the verbal or physical yielding to an officer's authority without apparent threat of resistance or violence.

Escalation, de-escalation, and disengagement are important concepts in making legally and tactically sound, reasonable responses to resistance. **Escalation** is increasing the use of force or resistance. **De-escalation** is decreasing the use of force or resistance. **Disengagement** is discontinuing a command or physical use of force, for example, by breaking away from a subject. Officers are legally permitted to escalate their use of force as the subject escalates their level of resistance. The officer's choices are determined by the subject's actions and the risk of physical harm posed to the officer or others. Once the officer gets control or compliance, they must de-escalate the use of force. Under certain circumstances, disengagement may be the best tactical option, for example, when the officer is waiting for backup, when the officer is injured or outnumbered, or when the suspect has superior firepower.

Structure of the Force Guidelines

The **Force Guidelines** provide a framework for making decisions involving the reasonable use of force by criminal justice officers. The structure of the Force Guidelines is based on constitutional considerations and case law and describes appropriate decision making in a fluid and dynamic situation. The Guidelines consider the relationship between subject resistance and various situational factors in determining the officer's response options.

Subject Resistance Levels

Passive resistance is a subject's verbal or physical refusal to comply with an officer's lawful direction, causing the officer to use physical techniques to establish control.

Some examples of passive resistance include:

- The subject refuses to move at the officer's direction.
- The subject refuses to leave the vehicle when arrested during a traffic stop.
- The subject refuses to take their hands out of their pockets or from behind their back.

Active resistance is a subject's use of physically evasive movements directed toward the officer such as bracing, tensing, pushing, or pulling to prevent the officer from establishing control over the subject.

Some examples of active resistance include:

- The subject physically hangs on to a person or object to keep from being removed.
- The subject braces or pulls away from the officer when the officer grips their arm.
- The subject tries to run when the officer touches or tries to grab the subject's arm or shoulder.

Aggressive resistance is hostile, attacking movements that may cause injury but are not likely to cause death or great bodily harm to the officer or others.

Some examples of aggressive resistance include:

- The subject balls up their fist and approaches the officer.
- The subject pushes the officer back as the officer tries to take them into custody.
- The subject grabs any part of the officer's body.

Deadly force resistance is hostile, attacking movements with or without a weapon that create a reasonable perception by the officer that the subject intends to cause and has the capability of causing death or great bodily harm to the officer or others.

Some examples of deadly force resistance include:

- The subject refuses to drop a knife when ordered to by the officer and moves toward the officer.
- The subject shoots or points a gun at an officer or other person.
- The subject uses a vehicle to try to run down an officer.

Officer Response Options

Try to resolve a situation with the least amount of force necessary. Command presence and verbal communication often will defuse many volatile situations. Sometimes, though, these are not enough, or you may not have a chance to use them. You may have to use physical force to gain control. Physical force includes physical control, using nonlethal weapons, and deadly force. You need not apply force in gradually increasing steps to justify physical control or even deadly force. Instead, you should respond with force that is reasonably necessary for the circumstances in each situation.

Officer presence is your ability to convey to subjects and onlookers that you are able and ready to take control. Subjects' and onlookers' reactions to you depend on their perceptions of how you present yourself.

Be aware of and interpret nonverbal communication. Some movements and gestures are clues to escalating aggression, such as clenched fists, shifting feet, or hidden hands. Subjects also observe your actions to determine your attitudes and intentions. Officer presence is your first response to any situation. By simply arriving on the scene, an officer affects a subject or situation.

Command presence is your demeanor and the way you exhibit confidence through personal appearance, erect posture, alertness, and attention to surroundings. It is how you carry yourself. Your presence can determine whether a subject's resistance escalates or de-escalates. A good command presence projects an image of confidence in your skills and abilities to perform the task at hand. Command presence includes personal appearance (your uniform and personal grooming).

Physical control is achieving compliance or custody through the use of empty-hand or leverage-enhanced techniques, such as pain compliance, transporters, restraint devices, takedowns, and striking techniques. These techniques will be discussed later in this chapter.

A **nonlethal weapon** is not fundamentally designed to cause death or great bodily harm. Some examples include electronic control devices (ECD), conducted electrical weapons (CEW), expandable batons, flashlights, and chemical agent sprays.

Recall from Chapter 3, Firearms, that deadly force is likely to cause death or great bodily harm. Some examples include using a firearm, eye gouges, empty-hand strikes to the throat, and impact-weapon strikes to the side of the neck.

Section 776.06, F.S., states:

- (1) The term “deadly force” means force that is likely to cause death or great bodily harm and includes, but is not limited to:
 - (a) The firing of a firearm in the direction of the person to be arrested, even though no intent exists to kill or inflict great bodily harm; and
 - (b) The firing of a firearm at a vehicle in which the person to be arrested is riding.

Section 776.07, F.S., states:

- (2) A correctional officer or other law enforcement officer is justified in the use of force, including deadly force, which he or she reasonably believes to be necessary to prevent the escape from a penal institution of a person whom the officer reasonably believes to be lawfully detained in such institution under sentence for an offense or awaiting trial or commitment for an offense.

Using deadly force may be an officer's first and only appropriate response to a perceived threat. Deadly force does not necessarily mean that someone died from the force used. It can cause great bodily harm or no harm at all. For example, striking the throat is deadly force even if the officer misses the target.

Base your decision to use deadly force as a defensive tactic on a clear, reasonable belief that you, a fellow officer, or another person faces imminent danger of death or great bodily harm.

Factors for Deciding to Use Deadly Force

Officers use three criteria for making deadly force decisions: ability, opportunity, and intent.

Ability refers to the subject's having the means to carry out their intent to cause death or great bodily harm. An officer must determine whether the subject has the necessary means to cause death or great bodily harm to the officer or others. A weapon is not required; a subject must have only the apparent ability to carry out the intent. If the subject seems physically able to cause death or great bodily harm, then they have the ability. For example, a 6'4", 250-pound muscular man threatening to do bodily harm to an officer does not necessarily need a weapon. By virtue of their size and physical condition, they have the apparent ability.

Opportunity means the subject is capable of acting on a plan to cause death or great bodily harm to the officer or others. The subject's weapon often determines opportunity. For example, a suspect armed with a knife is perhaps not an immediate threat to an officer standing far away. However, the same person standing closer or carrying a firearm certainly has the opportunity to carry out the intent to cause death or great bodily harm.

Intent is a subject's intention to voluntarily make the bodily movement that becomes the act to commit a criminal offense. This can be viewed as a reasonably perceived, imminent threat to an officer or others based on a person's actions, behaviors, words, or other indicators. It is a perception derived from the totality of the circumstances.

Officers should use the amount of force necessary and reasonable for the situation. If ability, opportunity, and intent are present and you cannot control the threat using lesser means, then deadly force is justified. When resistance de-escalates, so must your response.

Totality of Circumstances

The **totality of circumstances** test considers the overall facts of a situation to determine if you had the authority to detain someone for committing a crime or to perform a legal search. In reference to defensive tactics, this also is a term the court uses to refer to all facts and circumstances known to the officer at the time, or reasonably perceived by the officer at the time, as the basis for a use of force decision. The courts will look at the totality of circumstances in determining whether the decision was objectively reasonable and, therefore, legally justified. The totality of circumstances includes consideration of the subject's form of resistance, all reasonably perceived situational factors that may have had an effect on the situation, and the response options available to the officer.

Some situational factors may include:

- severity of the crime
- subject as an immediate threat
- subject's mental or psychiatric history, if known to the officer
- subject's violent history, if known to the officer
- subject's combative skills
- subject's access to weapons
- innocent bystanders who could be harmed
- number of subjects versus number of officers
- duration of confrontation
- subject's size, age, weight, and physical condition
- officer's size, age, weight, physical condition, and defensive tactics expertise
- environmental factors, such as physical terrain, weather conditions, and so on.

SECTION VOCABULARY

- ability*
- active resistance*
- aggressive resistance*
- command presence*
- compliance*
- deadly force resistance*
- de-escalation*
- disengagement*
- escalation*
- Force Guidelines*
- intent*
- nonlethal weapon*
- objective reasonableness*
- officer presence*
- opportunity*
- passive resistance*
- physical control*
- totality of circumstances*

The Force Guidelines recognize that officers make use of force decisions based on the totality of circumstances at the time of an incident. Circumstances are fluid and dynamic. Responding properly requires constant assessment as the situation changes.

Force Guidelines – The Decision-Making Process	
Subject Resistance →	Situational Factors
Is the subject verbally or physically resisting my lawful authority? Is the subject making attacking movements that are not likely to cause death or great bodily harm? Is the subject making attacking movements that are likely to cause death or great bodily harm?	What subject factors influence this situation? Weapon? Physical size? Demeanor? Others? What officer factors influence this situation? Training? Experience? Physical size? Others? What environmental factors influence this situation? Weather? Location? Presence of others?
Justification ←	Officer's Response
Were my actions reasonable based on the subject's resistance and the totality of the circumstances? Am I able to articulate the reasons for my actions? Was I in compliance with constitutional and state laws, agency policies, and training?	Can I physically control the subject? Could I use a nonlethal weapon not meant to cause death or great bodily harm? Is deadly force the appropriate option to prevent death or great bodily harm to myself or others?

Use of Force Reporting

Many agencies require an additional report any time an officer uses force to control a subject. To properly defend a use of force decision, you need to clearly articulate, or put into words, the basis for your decision to use force. You should include the factors that establish your perspective from the totality of circumstances at the time you decided to use force. For example, if you used deadly force, state exactly what you saw and felt, what actions and behaviors the subject exhibited, and any other relevant information that created your perception that the ability, opportunity, and intent to cause great bodily harm or death existed. Simply stating in a report "The suspect threatened me" is not a sufficient basis for justification.

Remember that the contents of a use of force incident report will be seen by supervisors, prosecutors, defense attorneys, judges, and the public. You should be thorough and include the factors used in any use of force decisions since information added later could be viewed with skepticism and could be inaccurate.

UNIT 2 | USE OF FORCE

LESSON 2 | Survival Stress Reaction

LESSON GOAL: At the end of this lesson, you will recognize the effects of survival stress on the body and mind during a critical incident.

A person's coping mechanisms govern their ability to manage stress. Generally, a person's perception of self-harm determines if they view a situation as a challenge or a threat. For example, one officer engaged in a verbal confrontation with a subject might consider this interaction a challenge. However, when the subject suddenly lunges at the officer with balled fists, the officer might consider this a threat. Another officer may view the initial verbal confrontation as a threat instead of a challenge.

Survival Stress

Survival stress is sometimes called fear-induced stress or combat stress. **Survival stress** is the body and mind's response to a perceived threat. The stronger you perceive the threat, the stronger your body and mind will react. This will increase your anxiety level.

Anxiety levels vary depending on the situation and your experience and training. As anxiety increases or decreases, it creates a psychological imbalance.

Depending on how you assess the threat, your physiological response may vary. This may cause many mind-body responses, including an elevated heart rate, increase in respiration, and the pausing of digestion. These effects may lead to intense changes in your physical ability and decision making.

You can react to survival stress in four ways: fight, flight, posture, and submit.

During an encounter, survival stress may occur in the subject, the officer, or both. Some subjects may fight or flee while others, given the same set of circumstances, may decide to submit. To **submit** is to completely relinquish control to another. Subjects might also become verbally and physically threatening, indicating they may resist by assuming a threatening posture.

Conversely, the officer might posture by displaying a show of force without actually using force. The officer might choose to disengage from an overwhelming threat or decide to engage and take control of the subject. Consider this example:

A man postures when an officer gives him a command. The man expands his chest and begins to speak loudly, shouting, "You're not taking me!" He strikes his chest with his open hands while stepping back and forth, side to side as he yells the same words over and over.

OBJECTIVES

- DT422.1.** Explain how survival stress affects confrontation between a subject and an officer.
- DT422.2.** Describe the four instinctual reactions when experiencing survival stress.
- DT422.3.** Describe the psychological changes that may occur while experiencing survival stress.
- DT422.4.** Describe the physiological changes that may occur while experiencing survival stress.
- DT422.5.** Describe the impact survival stress that may have on an officer's decision making.
- DT422.6.** Describe the changes that may occur in speech patterns while experiencing survival stress.
- DT422.7.** Identify the desired state of awareness or readiness an officer should maintain while on routine duty.
- DT422.8.** List techniques that may assist an officer in managing the effects of survival stress.

The officer can choose to display a higher level of force by elevating voice commands and drawing an intermediate weapon, such as a baton (posturing). The man may back down (submit) and follow the officer's verbal directions with no force used. However, if the man does not submit to the officer's authority, his posturing may indicate that he is about to fight or is preparing to run (flee).

When in a threatening situation, your body and mind adapt to help you react to threats by releasing stress hormones. Understanding these psychological and physiological changes will help you better manage them before, during, and after an encounter.

Physiological Changes Under Stress

When facing extreme anxiety, you may experience physical changes within your body. One or more of the following symptoms of survival stress may occur:

- increased heart rate and respiration
- diminished or amplified hearing
- distorted vision (for example, tunnel vision, inability to see close objects with detail, or fixating on one location and not seeing other details of the event)
- loss of bladder and bowel control
- increased reaction time
- motor performance changes
 - loss of ***fine motor skills*** (the muscle control required to make small, precise movements, such as unlocking handcuffs with a key)
 - heavier reliance on ***gross motor skills*** (movements of the large or major muscles of the body to do things like run, punch, or kick)
 - loss of ***complex motor skills*** (tasks that require a combination of fine and gross motor skills using hand-eye coordination timed to a single event, such as driving a vehicle)
 - complete breakdown of motor skills (freezing or submitting)
- occurrences seeming faster or slower than they are
- objects appearing closer or farther than they are

Decision Making Under Stress

Decision-making becomes more difficult in stressful situations. Instead of using a deliberate thoughtful analysis, you may rely on short, concise mental shortcuts. These mental shortcuts allow people to solve problems and make judgments quickly and efficiently. They shorten decision-making time and allow you to function without constantly stopping to think about the next decision or course of action.

These types of “short-cut decisions” are based on training and experience. The less time you have to make a decision, the more likely you are to make a mistake in judgement. You can offset this issue by increasing your training.

Speech Patterns Under Stress

Signs of stress often show up in vocal quality and speech pattern. High-stress situations can cause vocal cords to constrict and lead to a higher pitch in the voice and sometimes cracking or garbled sounds result. This can affect the clarity of radio communications.

An officer might speak emotionally or without thinking on the scene and after an incident. The officer may curse, brag, or boast.

This is due to being in a high state of stress both during and directly after an incident. At times, officers in this situation don’t remember or may even regret what they have said. This phenomenon is commonly referred to as “exhilaration speech,” a series of statements brought on by a euphoric feeling of accomplishment the officer can experience after a critical incident.

Officers may speak without stopping while in an anxious state. During an internal investigation, they may say things that are not helpful to the investigation and may make their account seem unreliable. In the presence of a suspect, this speech pattern can erode an officer’s command presence and give the appearance of not being in control.

Threat Awareness

The Threat Awareness Spectrum is a color-coded illustration of how survival stress may affect your reaction to a perceived challenge or threat. Your desired state of awareness while on routine duty is Condition Yellow. This is the optimum state of mind to remain focused while scanning for potential problems. From Condition Yellow, you can quickly move to Condition Orange or Condition Red, based on the situation. Condition White and Condition Black are not optimum states of readiness while on duty.

Threat Awareness Spectrum				
Condition White	Condition Yellow	Condition Orange	Condition Red	Condition Black
Unaware that a threat exists	General awareness of possible threats	Recognition that a threat exists	Specific threat identified and appropriate actions taken	Threat mismanaged due to panicked stress response
Attention is unfocused or preoccupied, and the officer is oblivious to potential danger in his or her environment.	Attention is focused, and the officer scans the environment for potential threats.	Awareness of a specific threat encourages preplanning and more intense focus. Physical indicators of stress may become evident.	The threat is assessed and managed through intensified cognitive and physical reactions. Survival stress functions become optimum.	Survival stress functions break down. Submission or freezing may occur.
<p><i>Example:</i></p> <p>A person drives to work and does not remember the drive (automatic pilot).</p>	<p><i>Example:</i></p> <p>While on the job, an officer is in a state of relaxed awareness and notices what is going on.</p>	<p><i>Examples:</i></p> <p>A patrol officer sees a vehicle backed into a parking space at a convenience store with the engine running, considers the possibility of a robbery in progress, and begins tactical planning.</p> <p>A correctional officer sees an inmate with possible contraband and begins forming a plan of action.</p>	<p><i>Examples:</i></p> <p>The patrol officer initiates the plan to engage the suspects as they exit the store.</p> <p>The correctional officer initiates the plan to engage the inmate.</p>	<p><i>Examples:</i></p> <p>The patrol officer panics and may not respond effectively.</p> <p>The correctional officer panics and may not respond effectively.</p>

Source: Jeff Cooper, *Principles of Personal Defense*

Coping With the Effects of Survival Stress

Survival stress is a mind-body reaction to fear. You can increase your coping skills and better prepare for the effects of stress by doing the following:

- preplan
- stay physically fit
- get enough rest
- keep a nutritious diet
- use controlled breathing techniques
- rely on techniques that involve gross motor movements rather than fine motor skills
- train under realistic environmental conditions designed to mirror high-stress scenarios
- anticipate the possibility of resistance with every subject encounter
- stay proficient in physical and mental skills
- stay proficient with firearms and other issued equipment

Be aware that officers who have experienced an extremely stressful situation, such as an officer-involved shooting, may later show signs of post-traumatic stress disorder.

SECTION VOCABULARY

complex motor skills

fine motor skills

gross motor skills

submit

survival stress

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 1 | Fundamental Principles of Defensive Tactics

LESSON GOAL: At the end of this lesson, you will understand the fundamental principles used in defensive tactics techniques.

Fundamental Principles of Defensive Tactics

To properly and effectively perform defensive tactics techniques, you must be able to apply certain fundamental principles.

balance—Maintaining a balanced posture is essential in performing any technique. To achieve balance, your head and hips must be aligned and your weight distributed evenly between your feet. If any one of these points is misaligned, you are not in balance. **Balance displacement** is a controlling technique used to break the subject's balance through the use of leverage principles.

leverage—Leverage is using a great force against a weaker resistance. It is used in conjunction with joint manipulation or pain and mechanical compliance to gain control.

pain compliance—Pain compliance is a subject's response to a combination of pain and verbal commands to stop resisting.

mechanical compliance—An officer may gain control over a subject by applying pressure or leverage on a joint by locking it up so that no movement of the joint is possible, causing the subject to comply with verbal direction.

joint manipulation—An officer may gain control over a subject by bending or twisting a joint in a direction that will cause pain or discomfort to the joint.

motor dysfunction—An officer may gain control over a subject by using an incapacitation technique that causes temporary impairment of muscular control.

penetrating strike—When delivering a strike, an officer strikes a muscle so that the striking object penetrates the muscle and nerves of the target area. This is a full transfer of kinetic energy that increases the power of the strike. For maximum effectiveness, most strikes are delivered using penetration so that the striking object stays on or indented in the target for an instant, allowing for energy transfer.

OBJECTIVES

- DT431.1.** Describe the fundamental principles of applying defensive tactics.
- DT431.2.** Explain the use of balance in applying defensive tactics.
- DT431.3.** Explain how leverage is used in the application of defensive tactics.
- DT431.4.** Explain the use of pain compliance in applying defensive tactics.
- DT431.5.** Describe the use of mechanical compliance in applying defensive tactics.
- DT431.6.** Describe the use of joint manipulation to control a resistant subject.
- DT431.7.** Describe how to use motor dysfunction to control a resistant subject.
- DT431.8.** Describe a penetrating strike.
- DT431.9.** Demonstrate the clinch technique.

SECTION VOCABULARY

- balance*
- balance displacement*
- clinch*
- joint manipulation*
- leverage*
- mechanical compliance*
- motor dysfunction*
- pain compliance*
- penetrating strike*

clinch—A technique that involves holding a person tightly in a close position. You can use the clinch with striking techniques, to transition to a takedown, or as a stalling technique. (See Figure 4-11)



1
Clinch



2

Figure 4-11

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 2 | Communication and Commands

LESSON GOAL: At the end of this lesson, you will be able to demonstrate how to give appropriate verbal direction.

OBJECTIVE

DT432.1. Demonstrate applicable verbal direction.

Communication is crucial at all levels of a use of force exchange. Unlike a category of force, communication is a part of all officer-subject interactions. You are encouraged to use communication before, during, and after a confrontation. Communication is necessary to continually gauge compliance. In a use of force situation, resistance begins when a subject fails to submit to an officer's authority. When an officer gives a verbal command, an evaluation will determine if escalation may become necessary.

Communication is exchanging information through verbal and nonverbal methods. Communication provides valuable insight into the likelihood of cooperation and compliance of a subject.

Dialogue is a controlled, nonemotional communication between an officer and a subject aimed at problem-solving and communication. Used as a strategy, dialogue is intentionally designed to gain rapport and exchange information.

Verbal direction is the use of proper, clear, and concise commands to let a person know what you need or expect them to do. The ability to give verbal direction is usually the first step in controlling the subject's actions. Establish yourself as a criminal justice officer. Give clear and concise commands. Make sure that your commands are loud enough for the subject to hear.

Touch is a nonthreatening, noncustodial physical contact and can be used to support or emphasize a verbal command. It can be effective to enhance your communication; however, before applying touch, consider its use carefully to avoid escalating a person's resistance.

SECTION VOCABULARY

communication

dialogue

touch

verbal direction

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 3 | Threat Assessment and Response

OBJECTIVES

- DT433.1.** Identify the need for doing a threat assessment.
- DT433.2.** Identify verbal and nonverbal cues in assessing threats.
- DT433.3.** Demonstrate the interview stance.
- DT433.4.** Demonstrate the offensive ready stance.
- DT433.5.** Identify relative positioning.
- DT433.6.** Demonstrate how to maintain a minimum reactionary gap.
- DT433.7.** Identify the danger zone.
- DT433.8.** Demonstrate hand clearing.
- DT433.9.** Define reaction time principle.
- DT433.10.** Demonstrate evasion techniques.
- DT433.11.** Demonstrate redirection techniques.

Nonverbal cues may include:

- increased breathing and pulse rates
- stopping of all movement
- clenched fists and quivering hands
- refusal to show palms of hands
- reddened or flushed face
- prominent expanding veins on face and forearms
- shifting of shoulders or change of stance
- glancing at a target area (target glance)
- ignoring the officer
- rapid, angry movements

LESSON GOAL: At the end of this lesson, you will understand the process of assessing a threat and be able to demonstrate appropriate responses.

Though it may be difficult to determine factors that constitute a specific threat, there are certain facts, circumstances, and conditions that, when taken together, may be perceived as threatening.

How you assess a situation and the level of threat you perceive will influence how you respond. The more information you have, the better prepared you will be to effectively assess the situation. You should consider all factors, whether obvious or not, when assessing threats.

You must recognize that threats may be fluid and constantly changing. Continuously analyze situations for their threat potential.

Subject Behavior

Certain verbal and nonverbal cues indicate the possibility of the subject's aggression or posturing.

Verbal cues may include abnormal stuttering, serious and specific swearing, and specific verbal threats.

Excited Delirium

Be aware of unusual symptoms that a subject may exhibit upon initial contact or that may develop or intensify during the course of a confrontation. These symptoms may indicate serious issues, such as physical illness, mental illness, drug reaction or overdose, or post-traumatic stress disorder.

Unusual symptoms or behavior is usually attributed to a condition known as excited delirium. It is defined in greater detail in First Aid; someone experiencing excited delirium may overheat easily, be hostile, and show superhuman strength.

A subject in a state of excited delirium could die suddenly and without explanation. This is sometimes referred to as ***Sudden In-Custody Death Syndrome (SICDS)***, a broad classification for unexplained in-custody deaths. This death may be wrongly attributed to the actions of an officer or the use of certain levels of force.

When confronting a subject with unusual symptoms, immediately request medical assistance. Be careful of the position in which the subject is restrained. Take care to maintain an open airway, and ensure continuous breathing and proper circulation until medical help arrives.

Environmental Factors

Some potential environmental factors to consider in threat assessment include weather, traffic conditions, terrain, and the presence of animals, bystanders, and potential weapons.

Stances

When you interact with a subject or encounter a situation that you believe poses a potential threat, assume one of the following stances, as appropriate. Stances refer to *how* you stand when you interact with a subject or when they approach you.

Interview Stance

Stand with head, hips, and feet aligned.

Plant your feet shoulder-width apart with the knees slightly bent.

Angle your body to the subject with the strong side away.

Place your hands above waist level. (See Figure 4-12)

Offensive Ready Stance

Stand with your head, hips, and feet aligned and your chin tucked.

Plant your feet slightly wider than shoulder-width apart with the knees slightly bent.

Angle your body so that your strong side is away from the subject. Place your hands just below eye level and toward your center. (See Figure 4-13)



Interview
stance

Figure 4-12



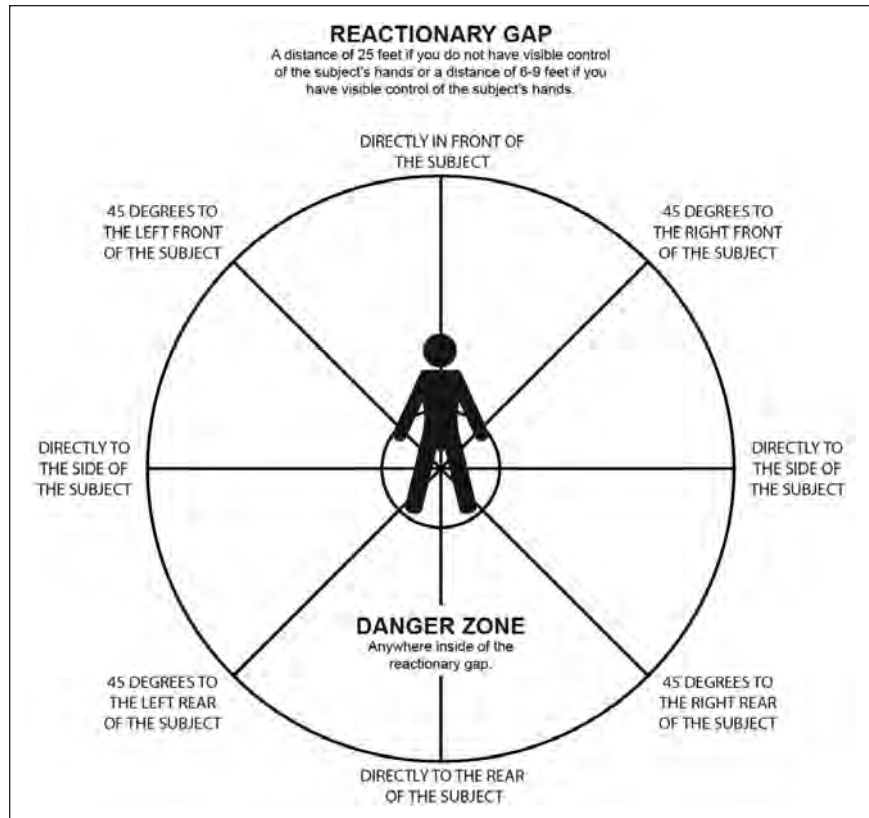
Offensive
ready stance

Figure 4-13

Relative Positioning

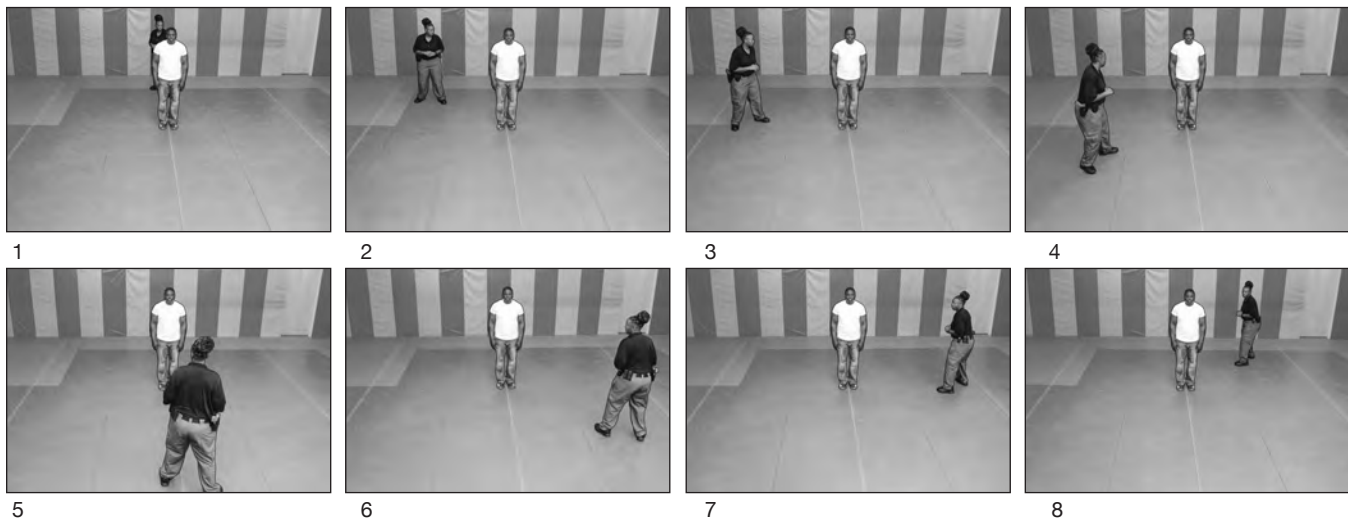
When preparing to approach a subject, you must place yourself in the safest possible position. *Relative positioning* describes *where* you stand or position yourself in relation to the subject. (See Figures 4-14 and 4-15)

Body movement refers to how you approach a subject or enter a scene. The manner and direction from which you approach a subject and the distance you maintain from them throughout the interaction are based on your assessment of the threat and potential harm present.



Relative positioning diagram

Figure 4-14



Relative positioning

Figure 4-15

The **reactionary gap** is the distance you must keep between you and the subject to react effectively against a sudden threat (see Figure 4-16). This distance is generally 6–9 feet if you have visual control of the subject’s hands, or 25 feet when you cannot see their hands.

The area within the reactionary gap is the **danger zone**. Any time you are in the danger zone, the potential for physical harm increases. If you need to close the reactionary gap, do so as quickly as possible while maintaining good balance.

Visual control of the hands is the ability to see both of the subject’s hands and to know that they hold no weapons.

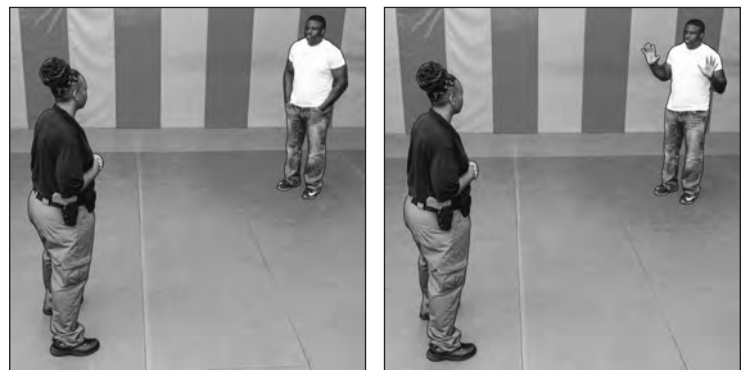
When approaching a subject, you may use the following hand-clearing technique:

- Maintain an appropriate reactionary gap.
- Visually scan the area for potential threats.
- Assume an appropriate stance.
- Identify yourself as an officer, if appropriate.
- Use clear, concise verbal commands.
- Tell the subject to expose both palms. (See Figure 4-17)



Reactionary gap

Figure 4-16

1
Hand-clearing technique

2

Figure 4-17

Reaction time principle is the amount of time it takes for the brain to process a physical threat and the body to respond. This process involves perceiving and analyzing the threat, forming a strategy, and initiating motor action(s). In other words, the officer sees the threat, figures out what to do, and then takes action.

The person who effectively manages the distance in a use of force encounter has a better chance of success. This applies during grappling and striking. Managing distance doesn’t only mean moving away from a threat; it can also mean closing distance between you and the subject. Managing the distance helps you control the encounter. Always consider environmental factors, such as being surrounded by a crowd or being in a confined area.

Evasion and Redirection

Use evasion and redirection movements to avoid or redirect an attack. *Evasion* is simply shifting your body or sidestepping to avoid the attack. *Redirection* is using empty-hand techniques to move the subject away. Using evasive and redirecting tactics may allow time to disengage, escape, or use other force options (such as blocks or strikes). (See Figures 4-18 and 4-19)

SECTION VOCABULARY

- body movement*
- danger zone*
- evasion*
- reaction time principle*
- reactionary gap*
- redirection*
- relative positioning*
- Sudden In-Custody Death Syndrome (SICDS)*
- visual control*



1



2



3

Evasion



4

Figure 4-18



1

Redirection



2



3



4

Figure 4-19

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 4 | Pressure Points

OBJECTIVE

DT434.1. Demonstrate pressure point techniques.

LESSON GOAL: At the end of this lesson, you will understand the concept of pain compliance and its use in controlling resistant subjects and be able to demonstrate how to apply a pressure point technique.

Pressure points are techniques used to control resistant behavior by using pain compliance. Pressure or leverage is applied using a fingertip or thumb tip to target a nerve, joint, or sensitive area, causing pain and compliance to verbal direction. These techniques do not work on every person or in all situations, but they are generally effective.

The two main components of pressure point techniques are:

- ***touch pressure***—touching the location of a nerve or sensitive area and applying continual, uninterrupted pressure with the tip of the finger(s) or thumb until the subject complies
- ***stabilization***—immobilizing the subject’s head so the subject cannot move or escape; be careful not to apply too much pressure or torque on the neck or spine when stabilizing the head

As soon as the subject complies by obeying your commands, release pressure to stop the pain. On all pressure point techniques, applying pressure longer than 3–5 seconds without a response may result in an adrenaline surge. This may cause the subject to exhibit symptoms similar to survival responses, an inability to feel pain, extraordinary strength, or selective hearing.

Use caution when applying a pressure point technique. The subject’s hands are free and you must move inside the danger zone. Also be aware of the possibility of being bitten by the subject.

Pressure point techniques covered in this lesson include:

- under the jaw
- hollow behind the ear
- hollow behind the collarbone
- elbow under the shoulder blade

Under the Jaw

Use this technique when you want a seated, kneeling, or prone subject to stand up.

Approach the subject safely.

Use loud, clear verbal commands to let the subject know what you want them to do.

Stabilize the subject's head. Locate the pressure point(s) under the jawbone.

Apply pressure until the subject is compliant.

Decrease the pressure when the subject complies. Do not release control, just the pressure. If the subject begins to resist again, reapply the pressure.

Follow up with appropriate action(s). (See Figure 4-20)



A



B

Pressure points—
under the jaw

Figure 4-20

Hollow Behind the Ear

Use this technique on a seated or prone subject or on a subject who is holding onto a fixed object.

Approach the subject safely.

Use loud, clear verbal commands to let the subject know what you want them to do.

Stabilize the subject's head. Locate the pressure point in the hollow behind the ear.

Apply pressure inward and toward the nose until the subject complies.

Decrease the pressure when the subject complies. Do not release control, just the pressure. If the subject begins to resist again, reapply the pressure.

Follow up with appropriate action(s). (See Figure 4-21)



A

Pressure points—behind the ear



B



C

Figure 4-21

SECTION VOCABULARY*pressure points**stabilization**touch pressure*

Pressure points—
behind the collarbone

Figure 4-22

Hollow Behind the Collarbone

Use this technique when you want a standing subject to sit, lie down, or move to another location. You can employ this technique from either the front or the side of the subject.

Approach the subject safely.

Use loud, clear verbal commands to let the subject know what you want them to do.

Stabilize the subject.

Locate the pressure point behind the collarbone.

Apply pressure toward the feet until the subject is compliant.

Decrease the pressure when the subject complies. Do not release control, just the pressure. If the subject begins to resist again, reapply the pressure.

Follow up with appropriate action(s). (See Figure 4-22)



A



B

Pressure points—
under the shoulder blade

Figure 4-23

Elbow Under the Shoulder Blade

Use this technique to reach the arms or wrists (for example, for handcuffing) of a subject who is on their stomach with their hands tucked under them.

Approach the subject safely.

Use loud, clear verbal commands to let the subject know what you want them to do.

Stabilize the subject where they are face down, on their stomach.

Bend your elbow and place it on the subject's back along the spine at the shoulder blade.

Apply downward pressure with the elbow until the subject is compliant.

Decrease the pressure when the subject complies. If the subject begins to resist again, reapply the pressure.

Follow up with appropriate action(s). (See Figure 4-23)

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 5 | Escorts and Transporters

LESSON GOAL: At the end of this lesson, you will be able to demonstrate proper escort and transporter techniques.

OBJECTIVE

DT435.1. Demonstrate escort and transporter techniques.

Officers may encounter subjects who refuse to obey their commands but demonstrate no physical resistance. You can use pain compliance, mechanical compliance, or joint manipulation techniques to move the unwilling subject from one location to another. These techniques are called escorts and transporters. These escort and transporter techniques are the basis for some takedowns. When using an escort or transporter technique, you enter the danger zone and should always be aware of your weapon's proximity to the subject.

Escorts

The *escort* position is a technique used to move a subject from one point to another without using pain compliance. It provides minimal control of the subject through leverage. If a subject resists, you may move to a transporter technique.

Escort Position

An escort may be your first physical contact with a subject. You apply pressure or leverage on a joint to lock it, and the subject complies.

Use loud, clear verbal commands throughout the application of the technique.

Maintain an appropriate stance.

Make contact with the subject's arm by grasping simultaneously the wrist and the upper arm just above the elbow.

Turn the subject's palm so that it is facing you.

Move the subject, or follow up with appropriate action(s). (See Figures 4-24, 4-25, and 4-26)



Escort—
option A



Escort—
option B



Escort—
option C

Transporters

Transporters, sometimes called *come-along holds*, are techniques used to move a subject from one point to another with pain compliance or mechanical compliance.

The following transporter techniques are included in this lesson:

- hammer lock
- shoulder lock

Hammer Lock Transporter

The hammer lock is a useful technique applied when a subject tries to pull away from the escort position. This technique uses pain compliance and mechanical compliance by moving the subject's arm behind their back. It can also be applied on a handcuffed subject.

Use loud, clear verbal commands throughout the application of the technique.

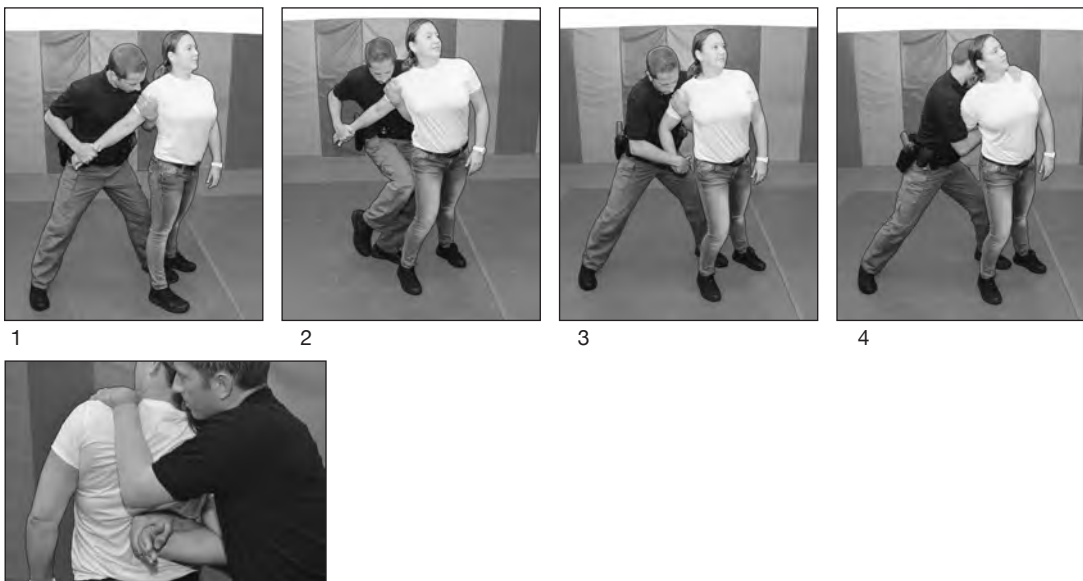
Begin from the escort position.

A strike or diversion may be necessary to complete the technique.

Mirror the controlled hand and rotate the subject's controlled hand while sweeping the subject's hand behind their back.

Maintain control by bending the wrist.

Control or move the subject, or follow up with appropriate action(s). (See Figure 4-27)



5
Hammer lock
transporter

Figure 4-27

Shoulder Lock Transporter

The shoulder lock transporter is a good controlling technique because of the position in which you put the subject's arm. This technique incorporates pain compliance, joint manipulation, and balance displacement. It can also be applied on a handcuffed subject.

SECTION VOCABULARY

escort

transporter/come-along hold

Use loud, clear verbal commands throughout the application of the technique.

Begin from the escort position.

Raise the subject's elbow upward, then roll the subject's shoulder forward.

Push the controlled arm behind the subject's back, over your forearm, placing your hand on the subject's triceps.

Reach across the subject's back and control the subject's head with your right hand (for example, by grabbing behind the subject's neck or the opposite shoulder).

Maintain control, or follow up with appropriate action(s). (See Figure 4-28)



1



2



3



4



5

Shoulder lock transporter



6



7

Figure 4-28

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 6 | Restraint Devices

OBJECTIVE

DT436.1. Demonstrate using restraint devices.

LESSON GOAL: At the end of this lesson, you will be able to demonstrate the proper application and removal of restraint devices.

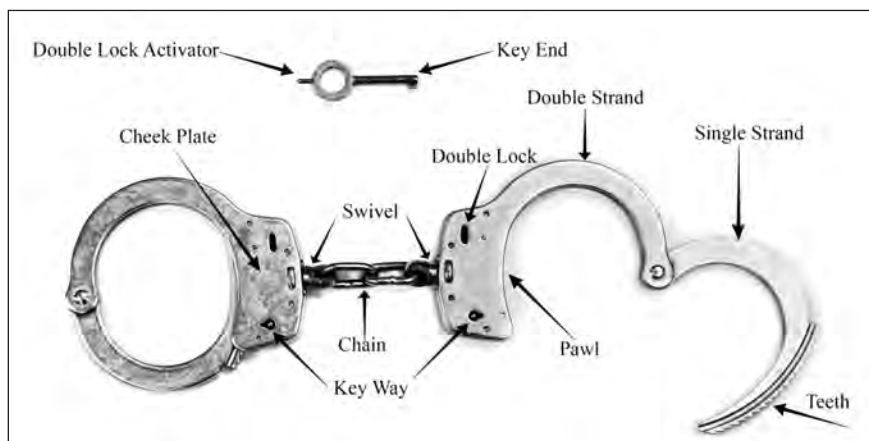
Restraint devices are tools, such as handcuffs, which are designed to temporarily restrain a subject's movements. There are other types of restraint devices, including waist chains (with black box), leg restraints (leg irons), and flexible leg restraints, that you may use in different circumstances.

Handcuffs

Handcuffs are temporary restraint devices used frequently to control a subject. Because handcuffing does not render a subject harmless, subjects should be continuously monitored to ensure officer safety. Applying handcuffs places the officer inside the reactionary gap or the danger zone. The subject may try to resist after the first handcuff is applied. Prepare to respond with an appropriate action.

The handcuffing procedure must be done in a controlled manner, to minimize potential harm to both officer and subject.

Using the nomenclature illustration, identify the parts of handcuffs. (See Figure 4-29)



Handcuff nomenclature

Figure 4-29

Handcuffs or any other restraint device must be kept in working order.

Properly holster or load the handcuffs consistent with your cuffing technique.

Three-Point Pin

The three-point pin can effectively control the subject through mechanical and/or pain compliance by using the subject's shoulder and wrist. Usually, a three-point pin is used to control the subject for handcuffing.

Use loud, clear verbal commands throughout the application of the technique.

Once a subject has been taken to the ground, maintain control of the subject's right arm.

Maintain the bent wrist to gain compliance on the subject's right arm.

Place your right knee across the subject's right shoulder blade. Avoid pressure to the spinal cord and neck when placing your knee or shin on the subject's shoulder.

Place your left knee on the ground close to the subject's rib area with the subject's upper arm on the front of your thigh.

Remain on the balls of your feet throughout the pin to allow quick recovery to a standing position. (See Figure 4-30)



1
Three-point pin



2

Figure 4-30

Handcuffing Technique

Handcuffing techniques may vary depending on the compliance level of the subject, but the basic steps for applying handcuffs are as follows:

Use loud, clear verbal commands throughout the application of the technique.

Visually inspect and direct the subject into a position that prepares for handcuffing.

Approach the subject.

Note: If a weapon has been drawn, safely manage the weapon before approaching the subject.

Draw the handcuffs from the holster.

Place one handcuff on one wrist.

Place the other handcuff on the other wrist.

Check for proper fit.

Double lock the handcuffs.

Search the subject.

This technique can be used from a variety of positions, including standing from a rear or front approach (see Figure 4-31), kneeling (see Figure 4-32), or prone (see Figure 4-33). With noncompliant subjects, use controlling techniques to apply the handcuffs.



Handcuffing—standing positioning

Figure 4-31



Removing Handcuffs

To remove handcuffs, follow these steps:

Use loud, clear verbal commands throughout the application of the technique.

Visually inspect and direct the subject into a position that prepares for removing handcuffs.

Approach the subject.

Draw the handcuff key.

Remove the handcuff from one wrist and close the cuff.

Control the subject's uncuffed hand.

Remove the other handcuff and close it.

Move away from the subject. (See Figure 4-34)



1
Removing handcuffs



2

Figure 4-34

Waist Chains

Waist chains are another type of restraint device, typically used by correctional officers to secure a subject when moving an inmate from one location to another. To apply waist chains, you will need verbal control of the subject.

Use loud, clear verbal commands throughout the process.

Position the subject facing you with their hands in front and palms facing each other. The subject's hands should be about 6 inches away from their body.

Facing the subject, place the handcuffs on their wrists, check for proper fit, and then double lock the cuffs.

Attach the black box to the handcuffs from the bottom up. Insert the elongated end of the chain to the backside of the black box.

Direct the subject to turn around, wrapping the chain around their waist, ensuring proper fit.

Have the subject pull their hands toward their body to take the slack out of the chain. Use a padlock to go through both lengths of the chain and secure on the subject's side. (See Figure 4-35)



1



2



3



4

Waist chains

Figure 4-35

Leg Restraints

Leg restraints, also called leg irons, are generally used along with waist chains to limit the movement of a subject. To apply leg restraints:

Use loud, clear verbal commands throughout the process.

Hold the leg restraints with the double bar facing the subject's legs. This will ensure that the key holes are facing down.

Have the subject lean against a wall or kneel on a chair to maintain a balanced stance.

Apply the leg restraints to each ankle, check for proper fit, and then double lock them. (See Figure 4-36)



1



2



3

Leg restraints



4

Figure 4-36

Flexible Restraints

Flexible cuffs and flexible leg restraints are two common types of flexible restraints. Flexible cuffs are a useful tool for restraining single or multiple subjects. These types of restraints are most commonly associated with multiple arrests or transports. They are lightweight plastic or nylon and easy to carry but have a high tensile strength. Flexible leg restraints, “hobbles,” are a useful tool for restraining a subject who is kicking, trying to run away, or posing a safety threat. Applying flexible leg restraints is best performed by more than one officer.

SECTION VOCABULARY

handcuffs

restraint devices

Flexible Cuffs

Using a single flexible cuff or a double flexible cuff, place the cuff around the subject’s wrists. Before tightening them, place an index finger against the subject’s wrist and tighten the flexible cuff to your index finger and the wrist. Remove your index finger and ensure the flexible cuffs are not cutting off blood circulation. Repeat this process with the second flexible cuff.

Removing Flexible Cuffs

Use care when removing flexible cuffs. Make certain the cutting instrument used to remove the cuffs does not have sharp pointed ends or an exposed blade. For example, do not use a pocket knife or a box cutter. Place the cutting instrument between the flexible cuff and the subject’s wrist. Using the appropriate pressure, carefully cut through the flexible cuffs. Remove and dispose of flexible cuffs properly.

Flexible Leg Restraints

When applying flexible leg restraints use loud, clear verbal commands throughout the process.

Control the subject by handcuffing them and placing them in the prone position. Your partner will control the subject’s upper body, either with a three-point pin or a wrist compression.

Move close to the subject, and kneel or squat near the subject’s legs. Control the subject’s legs by grabbing and wrapping your hands around them, working your way to the subject’s feet.

While holding the subject’s feet together, slide the restraints over the lower half of the subject’s legs. Keep the restraints above the subject’s ankles.

Tighten the restraint device by pulling the excess portion. The restraint should be tight enough to restrict leg movement while allowing normal blood flow.

To further restrict the subject’s movement, clip the excess to the handcuff chain by bending the subject’s legs at the knees to a 90° angle behind the subject. Place the subject in a sitting position or lying on their side.

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 7 | Frisks and Searches

OBJECTIVE

DT437.1. Demonstrate conducting physical frisks and searches.

LESSON GOAL: At the end of this lesson, you will be able to demonstrate pat down, custodial, and inmate clothed searches and articulate the process for conducting a strip/un clothed search.

A *search* is a government intrusion into a place in which a person has a reasonable expectation of privacy.

Because inmates and probationers have a significantly reduced expectation of privacy, searches by corrections and probation officers are much less limited by Fourth Amendment concerns.

Three search techniques are typically used in the defensive tactics context: pat down, custodial, and inmate.

Pat-Down Technique

A *pat down* is a physical frisk of a subject conducted in a predetermined pattern to locate weapons. Before a law enforcement officer may conduct a pat down, they must have reasonable suspicion that the subject is armed. (See s. 901.151, F.S., Stop and Frisk Law.) *Reasonable suspicion* means that facts or circumstances exist that reasonably indicate that the person has committed, is committing, or is about to commit a violation of the law.

“The purpose of a pat down is not to discover evidence of a crime but to allow the officer to pursue his or her investigation without fear of violence.” See *Adams v. Williams*, 407 U.S. 143 (1972).

Under the *plain touch/feel doctrine*, the officer may seize any object “whose contour or mass” the officer identifies as apparent contraband. See *Minnesota v. Dickerson*, 508 U.S. 366 (1993). A law enforcement officer may pat down only the outside of the clothing for weapons.

When conducting a pat down, you should:

Use loud, clear verbal commands throughout the process.

Be aware of verbal and nonverbal cues that indicate the probability of aggressive behavior. Remember that you are in the danger zone.

Visually scan the subject while assuming the interview stance.

Have the subject lift their arms to tighten clothing so you can visually search potential concealment areas, such as the waistline.

Have the subject move their hands away from their body.

Have the subject place their hands in a way so they can be controlled.

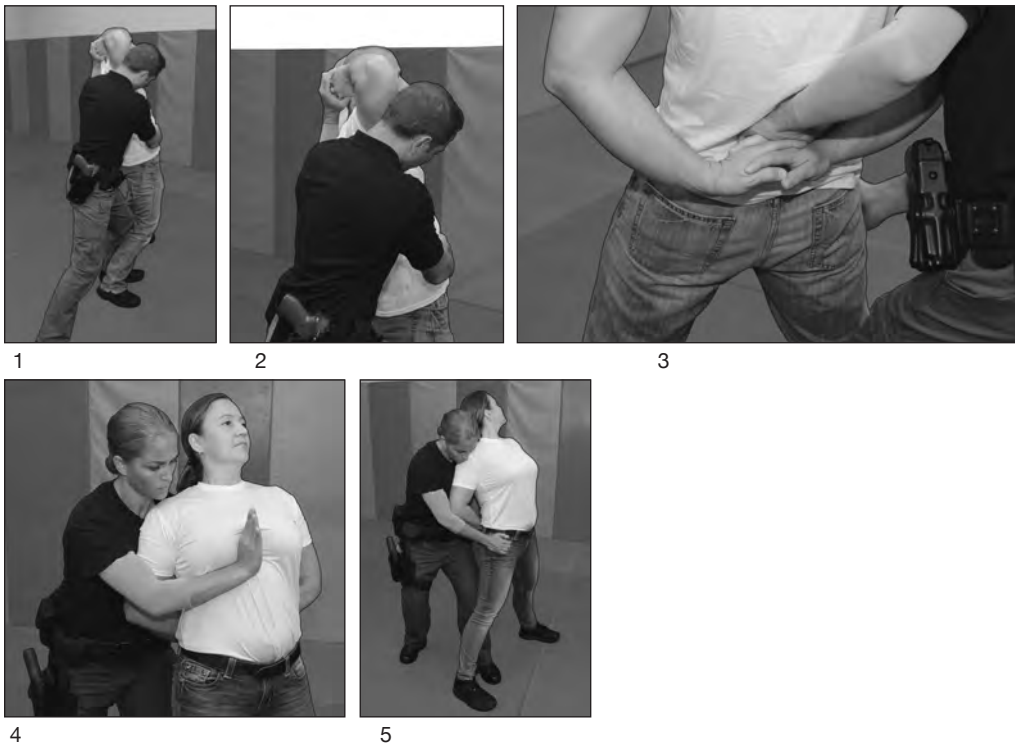
Physically control the subject's hands.

Keep the subject off balance.

Conduct the pat down in a predetermined pattern.

Follow up with appropriate action(s).

If you find a weapon, you should take it and place it beyond the subject's reach in a safe location. If handcuffing is not tactically sound, follow up with appropriate action(s). (See Figure 4-37)



Pat-down

Figure 4-37

Custodial Search Technique

A *custodial search technique* is used when a subject is taken into custody in an unsecured environment. Unlike the pat down, this is a complete search of the subject.

Perform a custodial search of a subject in a systematic and predetermined pattern using the *quadrant search approach*; this divides the body into four sections horizontally and vertically. During this close contact inside the danger zone, you are most vulnerable to a subject's physical assault. For this reason, you should handcuff first and then search.

The primary purpose of a custodial search is to detect potential weapons or contraband. By searching the subject's body, you should be able to detect items hidden in their clothing or on their body. You may search inside the waistband and pockets; however, you must be careful to avoid being injured by sharp objects, for example, needles and razor blades.

Follow agency policies regarding searching a subject of the opposite sex. You may modify the hand position to avoid the appearance of inappropriate contact. If possible, there should be a witness to the search.

When searching a handcuffed subject, do the following:

- Use loud, clear verbal commands throughout the process.

- Keep the subject off balance.

- Physically control the subject's hands.

- Conduct the search in a predetermined pattern. The groin is one of the most commonly overlooked areas. Remain professional and focus on conducting a proper, thorough search.

- Follow up with appropriate action(s). (See Figure 4-38)



Custodial search

Figure 4-38

Inmate Search Techniques

Searches of inmates are primarily designed to uncover contraband, prevent escapes, maintain sanitary standards, and eliminate safety hazards. There are three types of inmate searches: clothed, strip/unclothed, and body cavity.

Clothed Search

Clothed searches of inmates can be conducted at random by officers during the course of their daily routine. A female officer may conduct a search of a clothed male inmate. A male officer will conduct a clothed search of a female inmate only during an emergency situation as determined by the shift supervisor. The only exception to this provision is an instance when time and circumstances do not permit the presence of a female officer or consultation with the shift supervisor. If there is an imminent threat of physical violence, a search may be needed to secure the inmate to prevent injury to staff or other inmates.

Like a custodial search, a clothed search follows the quadrant search approach. In an institutional setting, however, handcuffing is not required because there is little risk of escape. Officers should be aware, though, of their vulnerability to a physical assault.

To conduct a clothed search:

- Use loud, clear verbal commands throughout the process.

- Remove or have the inmate remove the contents of their pockets and take off their shoes and hat.

- Inspect the shoes, hat, and personal effects before proceeding.

- Keep the inmate off balance.

- Maintain visual contact with the inmate's hands (for example, have the inmate face the wall with hands on the wall).

- Conduct the search in a predetermined pattern.

- Follow up with appropriate action(s).

SECTION VOCABULARY*custodial search technique**pat down**plain touch/feel doctrine**quadrant search approach**reasonable suspicion**search****Strip/Un clothed Search***

A strip/un clothed search is done visually. The officer does not touch the inmate during the search.

Strip/un clothed searches of an inmate may be conducted only by correctional officers who are of the same sex as the inmate, except in emergency circumstances. Inmates will generally be un clothed and searched upon their arrival at the correctional institution after returning from court, other institutions, any place where they may have come in contact with the public, or after an escape or attempted escape. There may be other occasions for a strip/un clothed search based on agency policies, or if there is reason to believe an inmate possesses contraband.

Before you can conduct a strip/un clothed search, you must move the inmate out of view of the inmate population. Only the inmate and staff involved will be present during the search.

To conduct a strip/un clothed search:

Use loud, clear verbal commands throughout the process.

Have the inmate remove all clothing.

Search the inmate's hair, ears, and mouth (dentures must be removed).

Visually check the entire body including armpits, hands, pubic region, between the toes, soles of the feet, inner portions of the legs, and groove between the buttocks. Any bandages or casts should be thoroughly examined by medical staff.

Search every article of clothing and personal property, including collars, cuffs, lapels, seams, and linings. Examine shoes for split soles, false linings, and removable insoles or heels.

Follow up per agency policies based on the results of the search.

Body Cavity Search

Body cavity searches of inmates may be done only by appropriate health services staff members in accordance with agency policies.

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 8 | Blocks and Strikes

LESSON GOAL: At the end of this lesson, you will be able to demonstrate proper blocking techniques and demonstrate properly executed and effective strikes to distract, incapacitate, or gain control of a subject.

Blocks

Blocks are reaction techniques using the arms, legs, or body to deflect or redirect an impending strike from a subject to areas of the body.

This lesson covers blocks to defend the upper and mid areas of the body.

Upper Area Block

In the upper area, use the arms to protect from the neckline to the top of the head. The officer can transition to another action, such as counterstrikes. (See Figure 4-39)



1
Upper area block

2

Figure 4-39

Mid Area Block

In the mid area, use the arms to protect the torso and the face. The officer can transition to another action, such as counterstrikes. (See Figure 4-40)



Mid area block Figure 4-40

OBJECTIVES

DT438.1. Demonstrate blocking techniques.

DT438.2. Identify target areas for empty-hand strikes.

DT438.3. Demonstrate striking techniques.

DT438.4. Demonstrate kicking techniques.

DT438.5. Demonstrate diversion techniques.

Strikes

An *empty-hand striking technique* is any impact technique using hands, arms, elbows, feet, legs, knees, or head to strike a subject in an offensive or defensive situation. The entire body can be used as a weapon. This could include punching, hitting, kicking, or slapping.

Striking techniques have specific target areas. Some target areas involve nerve motor points in muscles. When struck, the impact may cause disruption of nerve tissue leading to incapacitation or motor dysfunction. *Temporary motor dysfunction* is a type of incapacitation that causes temporary impairment of muscle control, such as a cramp. Strikes to the skeletal structure are also effective.

Target Areas—Empty-Hand Strikes

DF means deadly force, and NDF means nondeadly force. (See Figure 4-41)

The expected effect of NDF strikes is to disable or cause temporary motor dysfunction.

Front of Shoulder (NDF)—Strike with an empty hand.

Side of Neck (NDF)—Strike with an empty hand.

Top of Forearm (NDF)—Strike with an empty hand.

Head (NDF)—Strike with an empty hand. Strikes to certain areas of the head have the potential for injury depending on the amount of force used.

Inside of Forearm (NDF)—Strike with an empty hand.

Outside of Thigh (NDF)—Strike with an empty hand, leg, or knee.

Throat (DF)—Strike with an empty hand. Striking the throat is considered deadly force.

Inside of Thigh (NDF)—Strike with an empty hand, leg, or knee.

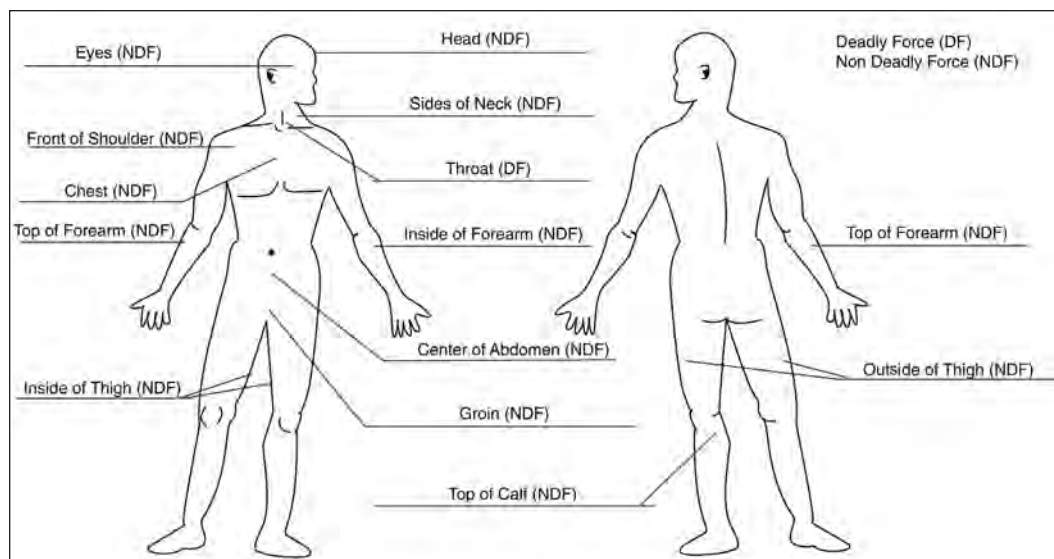
Eyes (NDF)—Strike with an empty hand. Striking the eyes is considered nondeadly force, but gouging the eyes is considered deadly force.

Center of Abdomen (NDF)—Strike with an empty hand.

Top of Calf (NDF)—Strike with an empty hand, foot, knee, or leg.

Groin (NDF)—Strike with an empty hand, knee, or leg. Striking a subject in the groin may be an effective escape from a close-quarter body hold.

Chest (NDF)—Strike with an empty hand.



Target Areas-Empty-Hand Strikes

Figure 4-41

There are two methods of delivering strikes: penetration and snap-back.

A penetrating strike is typically used to strike a muscle. The penetration of the muscle and nerves in the target area results in a full transfer of kinetic energy that increases the power of the strike. All targets are struck with the intention of preventing or stopping aggressive action.

A *snap-back* strike is delivered and then retracted very quickly, thus enabling multiple strikes, creating distance, setting up the next techniques, and causing distraction to the subject. A snap-back may be delivered with any body part used for striking, kicking, punching, and so on. A boxer's jab is one example of a snap-back.

Swinging and thrusting are two types of strikes. A swinging strike generates less power on impact due to the greater amount of surface area of the target. A thrusting strike magnifies the delivered power due to the smaller surface area making contact with the target area.

Two variables account for the amount of power generated in a strike. These are the amount of mass delivered with the striking weapon (that is, fist, foot, baton) and the velocity (speed) at which it is delivered. To generate maximum power effectively, you need a wide stable stance. Twist your upper torso and hips into the strike to allow the maximum amount of mass to complement the striking weapon. The faster the strike, the more power you will generate.

Some strikes may be used as diversion techniques. *Diversion* is a technique that interrupts the subject's concentration so that energy is redirected from the current focus. Diversion techniques can be used to gain space when you are held in a close-quarter body hold and can assist in applying other defensive tactics, such as takedowns and transporters. In certain situations, any strike can be used as a diversion.

This section covers several types of striking and kicking techniques:

- palm heel strike
- punches
- hammer fist strike
- backfist strike
- elbow strike
- knee strike
- front kick
- angle kick

Palm Heel Strike

You can use the palm heel strike to defuse a situation and gain control of a subject. This strike may be delivered to the center of the subject's chest primarily as a diversion technique or to the face as an incapacitating technique.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position.

Identify the target area.

Thrust the hand forward, striking the target area with the palm heel of the hand.

Rotate your shoulders and hips to deliver the strike.

Follow up with appropriate action(s). (See Figure 4-42)



1
Palm heel strike



2

Figure 4-42

Punches

You can punch to gain control of a situation by stunning the subject before using other techniques, such as a takedown followed by handcuffing.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position.

Identify the target area.

Make a fist. To make a proper fist, roll the fingers, tuck, and lock into the palm of the hand with thumb pressure.

Use the knuckles to strike the specific target area.

Follow up with appropriate action(s). (See Figure 4-43)

You can use punches from multiple angles and deliver punches to different areas of the body. Examples include jabs, crosses, hooks, upper cuts, overhands, and strikes with the back of the hand, forearm, or knuckles, or a variety of combinations.



1

Punches



2

Figure 4-43

Hammer Fist Strike

The hammer fist strike is one of the most powerful strikes you can use. A properly delivered strike usually causes the subject to release their grip in a situation where the subject suddenly grabs your wrist, equipment, or part of your clothing. Using a hammer fist temporarily disables the subject and lets you escalate, de-escalate, or disengage.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position.

Identify the target area.

Make a fist.

Use the bottom of the fist to strike the target area.

Follow up with appropriate action(s). (See Figure 4-44)



1
Hammer fist strike

2
Figure 4-44

Backfist Strike

When attacking from the rear, a properly delivered backfist strike can often give you a tactical advantage and may incapacitate or break the concentration of the attacker.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position.

Identify the target area.

Make a fist.

Use the back of the fist to strike the target area.

Follow up with appropriate action(s). (See Figure 4-45)



1
Backfist strike

2
Figure 4-45

Elbow Strike

You can use the elbow strike as an initial or follow-up strike to incapacitate the subject and create distance when you are close to the subject. This strike is not executed with the tip of the elbow but with the area of the arm about 1 inch below or above the elbow.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position.

Identify the target area.

Make a proper fist.

Bend your elbow to a 90° angle.

Rotate your shoulders and hips to deliver the strike.

Follow up with appropriate action(s). (See Figure 4-46)



1



2

Elbow strike

Figure 4-46

Knee Strike

You can use the knee strike when you are near a resistant or combative subject. Use it to gain control or distance.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position.

Identify the target area.

Drive your knee forward into the target area.

Follow up with appropriate action(s). (See Figure 4-47)



1

Knee strike



2



3

Figure 4-47

Front Kick

When an aggressive subject advances toward you, use the front kick to stop the subject's forward momentum.

Use loud, clear verbal commands throughout the application of the technique.

Transfer your balance to the support leg.

Lifting the knee, snap the foot forward.

Strike the target with either the ball or bridge of the foot.

Follow up with appropriate action(s). (See Figure 4-48)



1



2



3

Front kick



4

Figure 4-48

Angle Kick

The angle kick can disable a subject who begins to attack you. For maximum effectiveness, use a penetrating strike. This kick can be delivered without getting close to the subject.

Use loud, clear verbal commands throughout the application of the technique.

Transfer your balance to the support leg.

Lift the knee of the kicking leg and rotate the hip.

Either snap or thrust the leg toward the target area.

Strike the target with the shin or the ball or top of the foot.

Follow up with appropriate action(s). (See Figures 4-49 and 4-50)

SECTION VOCABULARY

block

diversion

empty-hand striking technique

snap-back

temporary motor dysfunction



1

Angle kick



2



3



4

Figure 4-49



1

Angle kick with strike pad



2



3



4

Figure 4-50

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 9 | Takedowns

OBJECTIVE

DT439.1. Demonstrate takedown techniques.

LESSON GOAL: At the end of this lesson, you will be able to demonstrate proper takedown techniques.

Takedowns are techniques used to bring a resisting subject from a standing position to the ground, making it easier to control them. After a takedown, you may escalate, de-escalate, or disengage, depending on your assessment of the situation.

Most takedowns use mechanical compliance or balance displacement to bring the subject safely to the ground.

This section covers several types of takedown techniques:

- straight arm takedown
- hammer lock takedown
- shoulder lock takedown
- rear takedown
- front takedown
- hip roll

Straight Arm Takedown

This technique is versatile and allows you to move into a control position for a resistant subject. The key to this technique is to maintain control of the subject's straight arm.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position, usually an escort position.

Slightly pull the subject off balance, straightening their right arm, pulling their wrist downward with their palm toward you to your right hip.

Apply downward pressure to the elbow while maintaining control of the wrist.

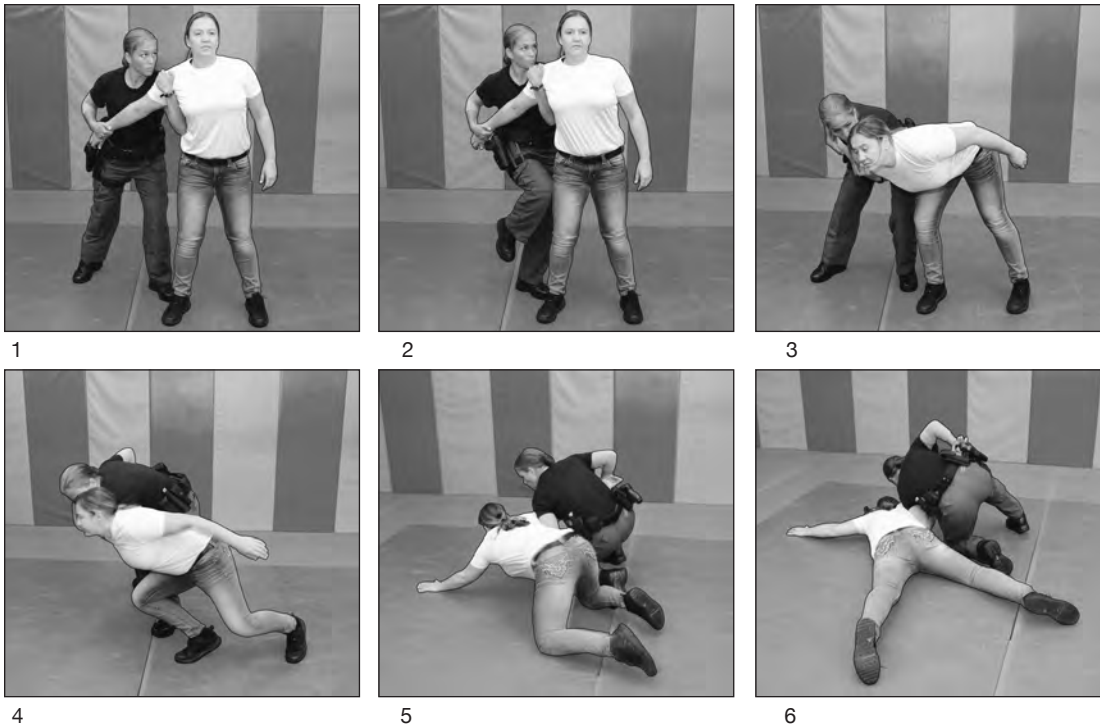
A strike or diversion may be necessary to complete the technique.

Move your right leg rearward, as needed, to rotate your hips clockwise.

Drop to your left knee (optional) and place the subject in a prone position.

Note: Depending on the surface, placing a knee on the ground may not be advisable.

Follow up with appropriate action(s). (See Figure 4-51)



4 Straight arm takedown

6 Figure 4-51

Hammer Lock Takedown

From a hammer lock transporter (restrained or unrestrained):

Use loud, clear verbal commands throughout the application of the technique.

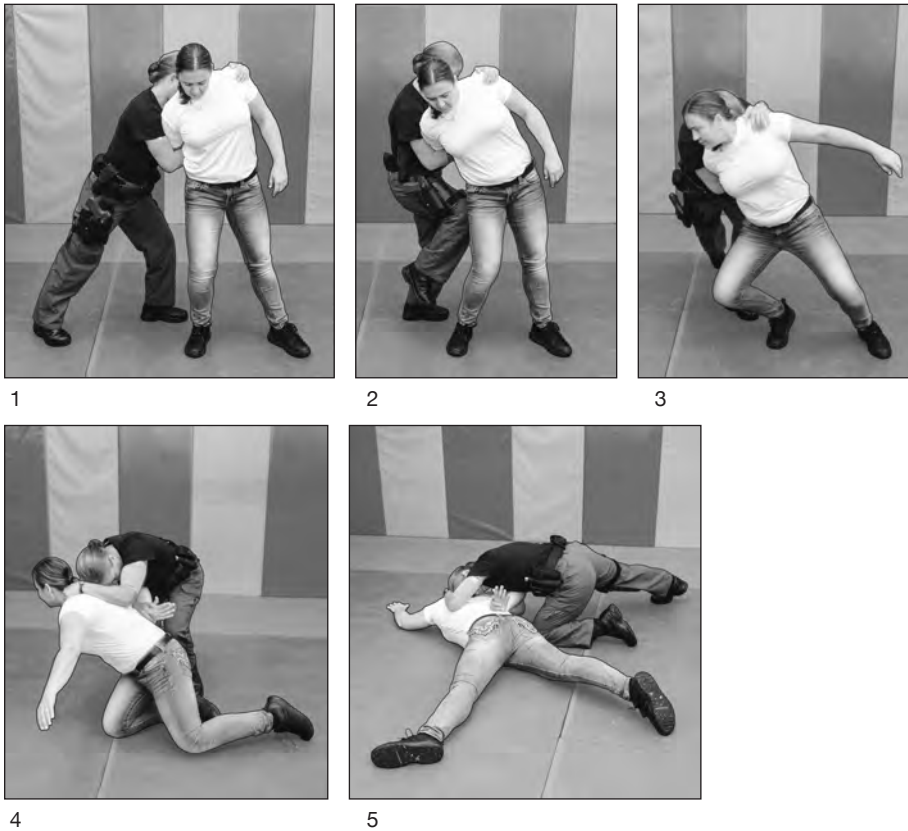
A strike or diversion may be necessary to complete the technique.

Move your right leg rearward, as needed, to rotate your hips clockwise.

Drop to your left knee (optional) and place the subject in a prone position.

Note: Depending on the surface, placing a knee on the ground may not be advisable.

Follow up with appropriate action(s). (See Figure 4-52)



4 Hammer lock takedown

5 Figure 4-52

Shoulder Lock Takedown

From a shoulder lock transporter (restrained or unrestrained):

Use loud, clear verbal commands throughout the application of the technique.

A strike or diversion may be necessary to complete the technique.

Move your right leg rearward, as needed, to rotate your hips clockwise.

Drop to your left knee (optional) and place the subject in a prone position.

Note: Depending on the surface, placing a knee on the ground may not be advisable.

Follow up with appropriate action(s). (See Figure 4-53)

The shoulder lock can be used from multiple positions, including from the clinch or on a handcuffed subject. (See Figure 4-54)



Shoulder lock takedown

Figure 4-53



Shoulder lock takedown from clinch

Figure 4-54

Rear Takedown

This technique is versatile and allows you to take down a resistant subject and establish control. The key to this technique is to maintain control of the subject's waist.

From an upright grappling position:

Use loud, clear verbal commands throughout the application of the technique.

Take an extended step behind the subject and lower your center of gravity, establishing a good base.

Once established behind the subject, place a hand on each side of the subject near the waistline/hip.

Extend one leg and plant your foot directly behind the subject's heel.

Sit down, twisting the subject back with you.

Continue the twist/spinning motion, following the subject to the ground. You should end up in a side mount or full mount position.

Follow up with appropriate action(s). (See Figure 4-55)



5 Rear takedown

Figure 4-55

Front Takedown

If at any time during a body lock, your position is more to the front of the subject than to the side or rear, a front takedown may be a more appropriate technique than the rear takedown.

Use loud, clear verbal commands throughout the application of the technique.

Grasp the subject's body as close to their hips as possible pulling them close to you while using your head to push their upper body back, causing the subject to be off balance.

Use your left leg to hook the subject's right leg below their knee.

Drag their leg toward and then behind you, lifting the subject's leg up and back while simultaneously pushing their upper body down with your head into their chest, forcing them to the ground.

Follow up with appropriate action(s). (See Figure 4-56)



1



2



3



4



5

Front takedown



6



7



8

Figure 4-56

SECTION VOCABULARY

*takedown***Hip Roll**

A hip roll is an effective defense against a subject who closes the gap and tries to control your upper body.

From an upright grappling position:

Use loud, clear verbal commands throughout the application of the technique.

Place your hip into the subject's lower abdomen. Your right hip should move past the subject's right hip.

Lower your center of gravity.

Pull the subject over the hip and direct them to the ground. (See Figure 4-57)



5
Hip roll

9
Figure 4-57

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 10 | Upright Grappling and Body Hold Escapes

LESSON GOAL: At the end of this lesson, you will be able to demonstrate proper upright grappling and body hold escape techniques.

OBJECTIVE

DT4310.1. Demonstrate upright grappling and body hold escape techniques.

One of the most common attacks an officer may face is an upright grappling position. *Grappling* is the use of body mechanics to leverage or control another person. When engaged in a grappling hold, you should consider methods of escaping, stabilizing, or controlling a resistant subject. With any sudden attack, preventing and breaking free should be your first priority.

There are several types of upright grappling body holds covered in this lesson:

- escape from front chokehold
- escape from rear chokehold
- escape from front body hold over/under arms
- escape from rear body hold over/under arms
- escape from headlock
- escape from front football tackle
- diversions
 - head butt
 - foot stomp
 - shin scrape

Defend and Escape From a Front Chokehold

The purpose of the escape from a front chokehold is to break away from a subject who grabs you around the throat from the front. This requires maintaining balance, disengaging, and following up with other techniques. You may also need to apply a diversion technique to escape. Subject and officer factors dictate what diversion to use and when.

The front choke is life-threatening. Execute this technique immediately:

If possible, use loud, clear verbal commands throughout the application of the technique.

Tuck your chin and shrug your shoulders.

Step straight back with your right leg and raise your left arm as you swing that arm up and over the subject's arm to break the hold (windmill).

Follow up with appropriate action(s). (See Figure 4-58.)

Pressure to the jugular notch and evasive movements can also be effective escapes from a front chokehold.



1



2



3



4

Defend and escape from a front chokehold

Figure 4-58

Defend and Escape From a Rear Chokehold

The rear chokehold is usually the result of a surprise attack or a struggle with a combative subject. Escape is crucial. Any chokehold can cause serious injury or unconsciousness. If you are unconscious, you cannot defend yourself from a subsequent use of deadly force.

If possible, use loud, clear verbal commands throughout the application of the technique.

Tuck your chin and shrug your shoulders.

Lower your center of gravity and raise your arm on the side they are choking you with.

Protect your airway with your other hand.

Create space between your hips and the subject's.

Windmill your raised arm in a downward motion between their hip and yours as you turn into the subject, grabbing their upper back. This should free you from the choke.

Follow up with appropriate action(s). (See Figure 4-59)



Defend and escape from a rear chokehold

Figure 4-59

Escape From Front Body Hold Over/Under Arms

A front body hold is usually the result of a surprise attack. A subject applying this type of hold on you can cause serious injury. Use your hands, feet, and legs to perform a diversion technique and escape.

Use loud, clear verbal commands throughout the application of the technique.

Lower your center of gravity.

Perform one or more striking techniques or pressure points to the appropriate target areas.

Follow up with appropriate action(s).

For escaping over the arms, create distance between you and the subject by putting your palms on the subject's hips (hip check).

For escape from under the arms, push the head away and follow up with appropriate action(s). (See Figure 4-60)



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4

Escape from front body hold over/under arms

Figure 4-60

Escape From Rear Body Hold Over/Under Arms

A rear body hold is usually the result of a surprise attack. A subject who grabs you in a rear body hold can exert force strong enough to the ribcage that breathing becomes difficult or a serious injury may occur. Immediate escape is imperative.

Use loud, clear verbal commands throughout the application of the technique.

Trap hands and lower your center of gravity.

Perform one or more striking techniques or finger peel to break the subject's grip.

Follow up with appropriate action(s). (See Figure 4-61)



Escape from rear body hold over/under arms

Figure 4-61

Escape From Headlock

The headlock is usually the result of a surprise attack or a struggle with a combative subject. Being in a headlock for an extended period can cause serious injury. Escape is crucial. To escape from a headlock, you must react quickly and apply leverage.

When a subject applies a headlock, turn your face into the subject's torso to establish an airway and protect vital areas of your face.

Strikes and diversion techniques are effective for escaping from a headlock. A wide stance is necessary to establish good balance.

Escape From Side Headlock

Use loud, clear verbal commands throughout the application of the technique.

Establish an airway, and a wide stance.

Perform one or more striking techniques or pressure points to the appropriate target areas, if needed.

Perform a rear takedown.

Follow up with appropriate action(s). (See Figure 4-62)



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4

Escape from side headlock

Figure 4-62

Escape From Front Headlock

Use loud, clear verbal commands throughout the application of the technique.

Establish an airway and a wide stance.

Perform one or more striking techniques or pressure points to the appropriate target areas, if needed.

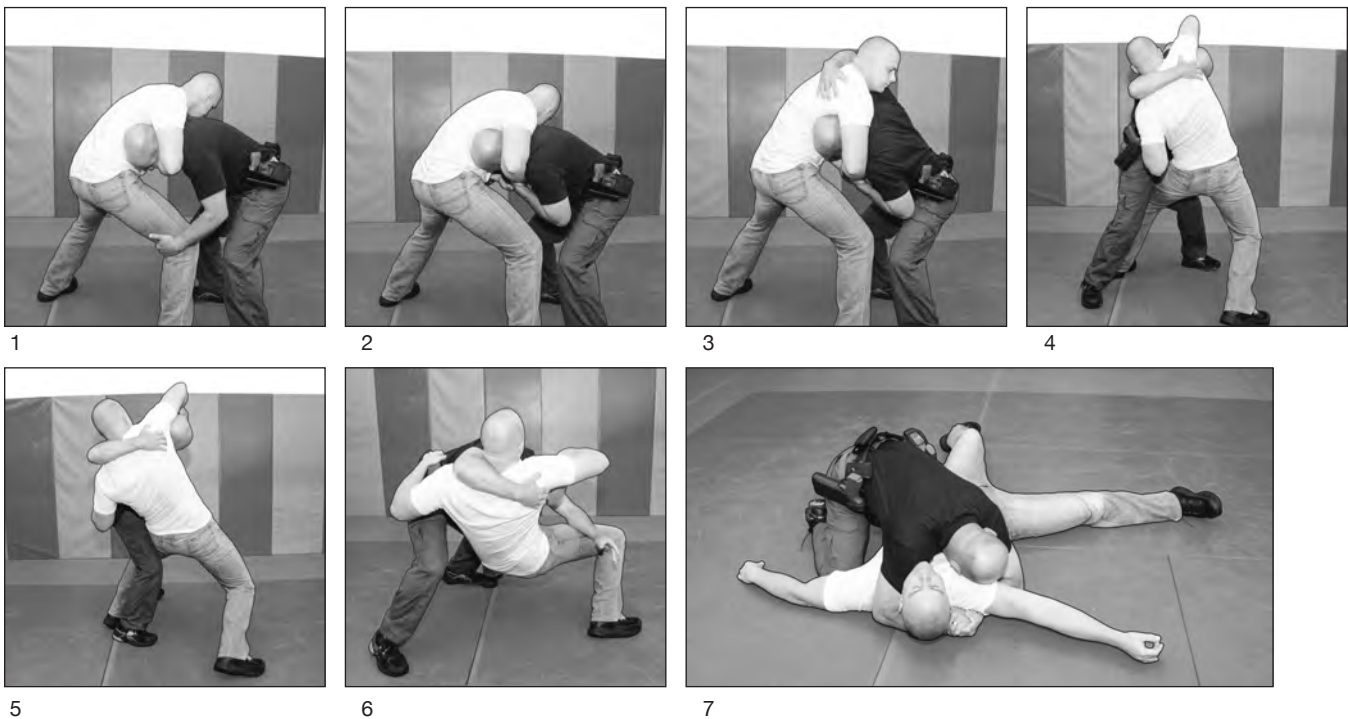
Bring your right arm over the subject's left shoulder and maintain downward pressure.

Quickly step around the subject's lead leg using your leg to place the subject off balance. This should place you on the subject's left side.

Use your right leg to buckle the subject's left leg, while driving them down with your shoulder and head pressure.

As the subject falls, move past their left leg, while maintaining constant shoulder and head contact with the subject's chest.

Guide the subject as they fall to the ground, ending in side control. (See Figure 4-63)



5
Escape from front headlock

Figure 4-63

Escape From Front Football Tackle

The football tackle is usually the result of a surprise attack or a struggle with a combative subject. Avoid being taken to the ground; instead drive the subject to the ground.

Use loud, clear verbal commands throughout the application of the technique.

Raise your arms in an offensive ready position.

Stop the subject's forward motion by shooting your legs backwards and putting your body weight on the subject's back.

Follow up with appropriate action(s). (See Figure 4-64)



1



2



3

Escape from front football tackle



4

Figure 4-64

Diversions

These diversion techniques inflict pain and can temporarily divert a subject's attention, redirecting the subject's attack. They can also be used to gain space when you are held in a close-quarter body hold.

Head Butt

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position.

Identify the target area.

The best target area for a head butt is the soft tissue of the subject's face or head.

Using the top of the forehead or the back of the head, thrust the head into the target area.

Follow up with appropriate action(s). (See Figure 4-65)



Head butt

Figure 4-65

Foot Stomp

The foot stomp is very effective when a subject attacks from the front or from the rear in close quarters.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position.

Transfer your weight to one leg.

Lift the other leg, bending at the knee.

Using the heel of the foot, deliver a downward thrust to the subject's foot.

Follow up with appropriate action(s). (See Figure 4-66)



1

Foot stomp



2



3



4

Figure 4-66

SECTION VOCABULARY*grappling****Shin Scrape***

With this technique, you must raise your foot and apply downward pressure on the subject's shin. It does not require much effort or strength, but, properly performed, the shin scrape is very effective in allowing you to escape from a body hold.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position.

Transfer your weight to one leg.

Lift the other leg, bending at the knee.

Turning the foot either to the inside or to the outside, deliver a downward scraping thrust along the subject's shin.

Follow up with appropriate action(s). (See Figure 4-67)



1
Shin scrape

2

Figure 4-67

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 11 | Vascular Neck Restraints

Note: This lesson is optional for law enforcement, corrections, and correctional probation.

LESSON GOAL: At the end of this lesson, you will be able to demonstrate a simulation of a vascular neck restraint technique.

OBJECTIVE

DT4311.1. Demonstrate a simulation of a vascular neck restraint technique.

The *vascular neck restraint* compresses certain veins and arteries in the neck to cause a subject to lose consciousness briefly.

Historically, the vascular neck restraint has been favored for its high probability of effectiveness in controlling a resistant subject. Unexplained in-custody deaths in previous years that are now attributed to Sudden In-Custody Death Syndrome caused many criminal justice agencies to restrict the use of this technique. Research establishes the physiology of this technique as safe and useable in the general population.

“While no technique is completely risk free, there is no valid medical reason to routinely expect grievous bodily harm or death following the correct application of the vascular neck restraint by professional criminal justice officers with standardized training and technique.” (Hall & Butler, 2007).

The vascular neck restraint is not recommended on elderly persons, pregnant women, children, or people with apparent disabilities due to their unique physiology.

SECTION VOCABULARY

*vascular neck restraint***Standard Vascular Neck Restraint**

Apply a standard vascular neck restraint by following these steps:

Use loud, clear verbal commands throughout the application of the technique.

Encircle the subject's neck with your right arm so you can apply equal pressure to each side of the neck using your forearm and bicep by positioning your elbow in front of the subject's throat.

With your right hand palm down and your left hand palm up, grab hands.

Variation: With your right hand palm down, grab your left bicep. Place your left palm behind the subject's head.

Bring your right wrist to your shoulder to apply equal pressure to the sides of the neck.

Stabilize the subject's head with your head.

Compress the neck until you get compliance or unconsciousness. When applied correctly, unconsciousness could occur in less than 10 seconds.

Follow up with appropriate action(s). (See Figures 4-68 and 4-69)

Because this is a vascular restraint, releasing the hold will quickly replenish the blood flow and immediately revive the subject. The subject should regain consciousness within about 30 seconds. If not, render medical aid.



Standard vascular neck restraint—basic position

Figure 4-68



Standard vascular neck restraint—variation

Figure 4-69

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 12 | Ground Control

LESSON GOAL: At the end of this lesson, you will be able to demonstrate basic techniques to defend yourself, escape from an attack, and control a subject while on the ground.

OBJECTIVES

DT4312.1. Demonstrate ground escape techniques.

DT4312.2. Demonstrate ground control techniques.

Ground fights present unique challenges to criminal justice officers because of the officers' equipment and the likelihood of a sudden deadly force assault.

Other factors that complicate a ground fight include general fitness level, physical size, maneuverability, loss of visibility, multiple subjects, environmental conditions, and the inability to disengage immediately.

Some positive features of ground fights include:

- The subject is close to you, allowing you to keep and maintain physical control.
- The subject does not have the support of a strong stance to generate power for striking.
- The subject is usually working against time and fearful that you may receive backup or other assistance.

Some negative features of ground fights include:

- The subject has immediate access to all of your equipment.
- The ground is often a rough surface that can quickly scratch and tear the skin.
- Equipment can cause pain or reduce movement as you roll on the ground.
- The subject has easy access to your vital areas.

Ground fighting is an anaerobic physical activity that will quickly tire you. A ground fight is exhausting and requires tremendous bursts of energy for short periods. **Stalling** is a tactical method of safely controlling a suspect until you physically recover or reassess the situation, or backup arrives. The stalling techniques presented here are based on leverage, not strength.

Stalling techniques for ground control covered in this lesson include:

- guard stall
- side control
- full mount
- full mount stall

Ground escape techniques covered in this lesson include:

- ground defense position
- guard break
- defend and escape from side control
- bridge and roll
- elbow escape
- defend and escape from a rear mount

Ground Defense Position

If you are knocked to the ground and cannot recover to the standing position immediately, you must go to a ground defense position. While in the ground defense position, you may have the ability to access a weapon or recover to a standing position.

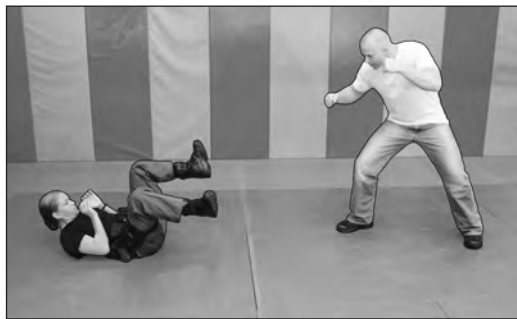
Use loud, clear verbal commands throughout the application of the technique.

From the foundation position, tuck your chin to your chest, with your arms and hands up protecting vital areas. Your legs will be up, knees bent toward the chest, and feet slightly angled.

Defend by kicking the subject in the knees, shins, or other available targets.

Lift your hips off the ground and use your feet to rotate in a circular motion tracking the subject's movements.

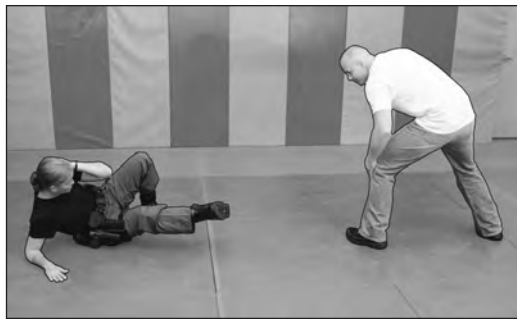
Follow up with appropriate action(s). (See Figure 4-70)



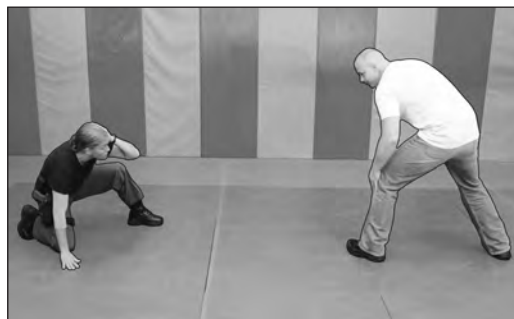
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4



5

Ground defense position

Figure 4-70

Guard

In the guard, one person is on their back with the other person positioned between their legs. The person on their back is subject to a variety of attacks such as strikes from different angles and being choked. (See Figure 4-71)

Guard Stall

The purpose of the guard stall is to prevent the subject from mounting you.

Follow these steps for the guard stall:

Use loud, clear verbal commands throughout the application of the technique.

The subject is positioned between your legs as you lie on your back.

If possible, cross your ankles behind the subject's back. If you can't cross your ankles, squeeze your legs together around the subject's waist.

Pull the subject down on top of you, chest-to-chest. (See Figures 4-72 and 4-73)



Guard

Figure 4-71



Guard stall—option A

Figure 4-72



Guard stall—option B

Figure 4-73

Guard Break

This position begins with you in the subject's guard. A strike or diversion may be necessary to complete the technique.

Use loud, clear verbal commands throughout the application of the technique.

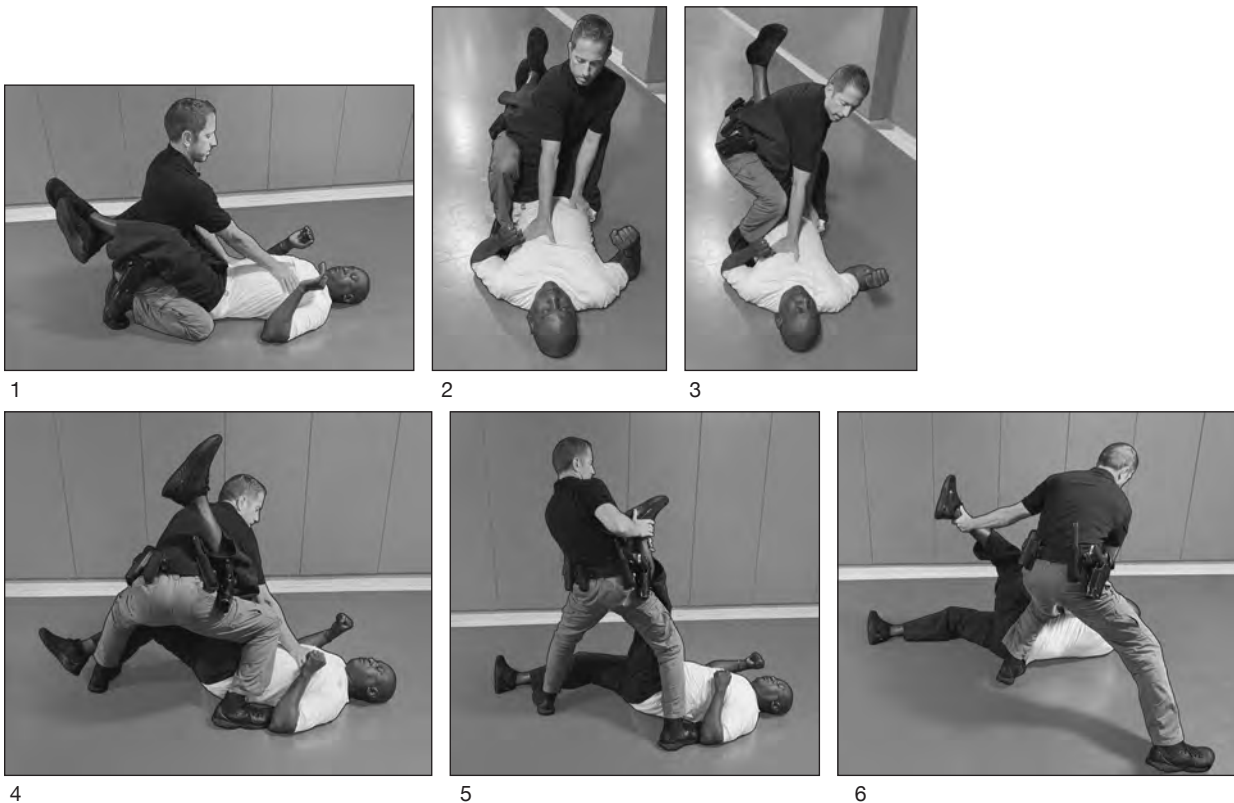
Control the subject's hips by placing both of your palms on the subject's torso and applying downward pressure.

Bring your right leg up and plant that foot as close as possible to the subject's hips while maintaining downward pressure on the subject's hips with your palms.

Come to a standing position and slightly turn your left foot outward.

Using your left elbow/hand, simultaneously apply pressure to the subject's inner thigh area. This should result in the subject's legs opening.

Create distance between you and the subject and follow up with appropriate action(s). (See Figure 4-74)



4 Ground break

Figure 4-74

Side Control

The most basic of the stalling positions is side control. This hold uses leverage tactics to hold the subject down while keeping you in a strategic position to prevent the subject from accessing your weapon or attacking critical areas, such as the head or throat. To effectively execute this technique, you must minimize space between your head and the subject's head.

Follow these steps for side control:

Use loud, clear verbal commands throughout the application of the technique.

The subject is on their back.

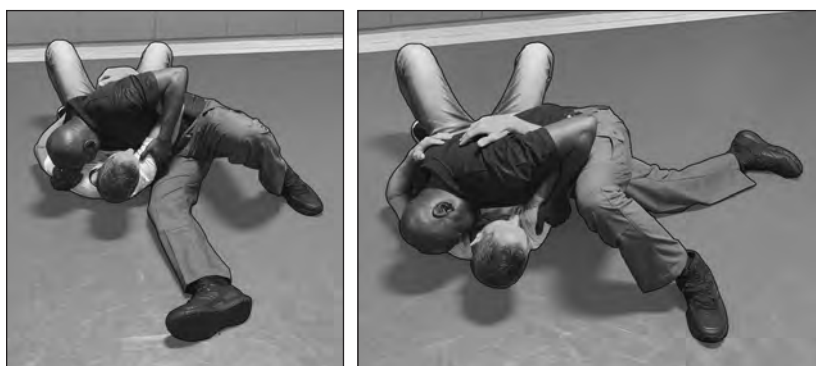
From the side, maintain chest-to-chest contact using your body weight to control the subject beneath you.

Follow up with appropriate action(s). (See Figures 4-75 and 4-76)



Side control—option A

Figure 4-75



1

Side control—option B

2

Figure 4-76

Defend and Escape From Side Control

When a person is controlling you from the side pressing down against you with their chest or using their arms to control your head and hips, they may prevent you from moving or escaping. It is also easy for the subject to deliver strikes and disarm you.

This can be one of the worst positions to be caught in. You must be able to escape, escalate, or get to your weapon.

From the ground defense position:

Use loud, clear verbal commands throughout the application of the technique.

As the subject attacks from the right side, bring your left arm across and underneath the subject's neck. Push up, lifting the subject's head to gain distance.

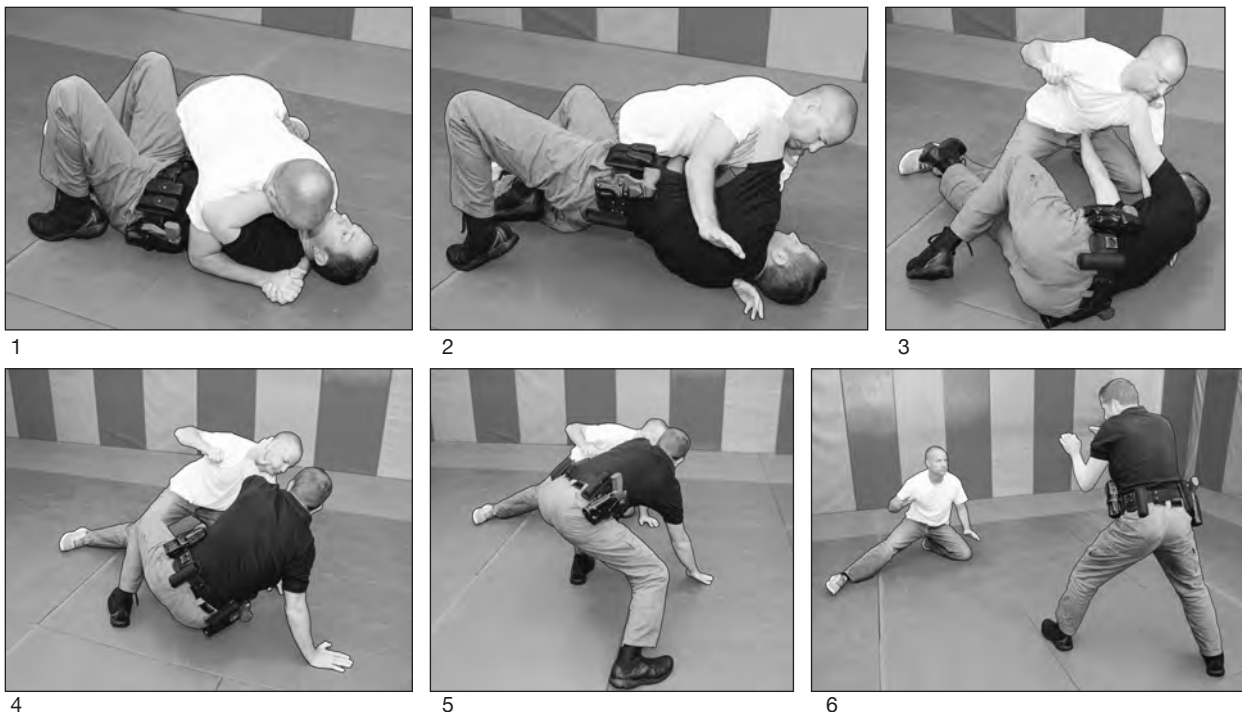
Place your right hand on the subject's left hip, blocking any hip movement.

Note: If the subject is striking you, you must control their arm instead of their hip.

Push off with one foot, force your hips up, and push out toward the opposite side. At the same time, place your right hand on the subject's hip to control, push away, and escape.

If you are unable to escape, recover to the guard position.

Follow up with appropriate action(s). (See Figure 4-77)



Defend and escape from side control

Figure 4-77

Full Mount

During a ground fight, a person may sit on top of another's chest, stomach, or waist and use their body weight to hold the opponent down. This, a full mount, is considered the most dominant position in ground fighting. The person on their back is subject to a variety of attacks, such as strikes from different angles and chokeholds. The person on top can establish control, use it as a stalling technique, or deliver strikes.

Follow these steps for the full mount:

Use loud, clear verbal commands throughout the application of the technique.

Straddle the subject using your body weight to control them. (See Figure 4-78)



Full mount

Figure 4-78

Full Mount Stall

Possibly the worst tactical position that you can find yourself in is when a subject has you on your back and is sitting on your chest. The full mount stall gives an officer an opportunity to survive a barrage of punches to the face. You will remain on the bottom, but the attacker will not be able to strike you in the face or throat. Your firearm will be out of reach covered by the subject's legs.

Follow these steps for a full mount stall:

Use loud, clear verbal commands throughout the application of the technique.

The subject sits on your midsection as you lie on your back.

Sit up and grab the subject around the upper body with both arms.

Pull the subject down on top of you.

Move your head left or right to breathe and avoid attack.

From this position, you may continue to hold the subject, escalate, or disengage. (See Figure 4-79)



Full mount stall

Figure 4-79

Bridge and Roll

The objective of this technique is to defend and escape.

From the *supine position* (lying on the back face up):

Use loud, clear verbal commands throughout the application of the technique.

The subject mounts your midsection.

Use blocking techniques to prevent strikes or choke attempts.

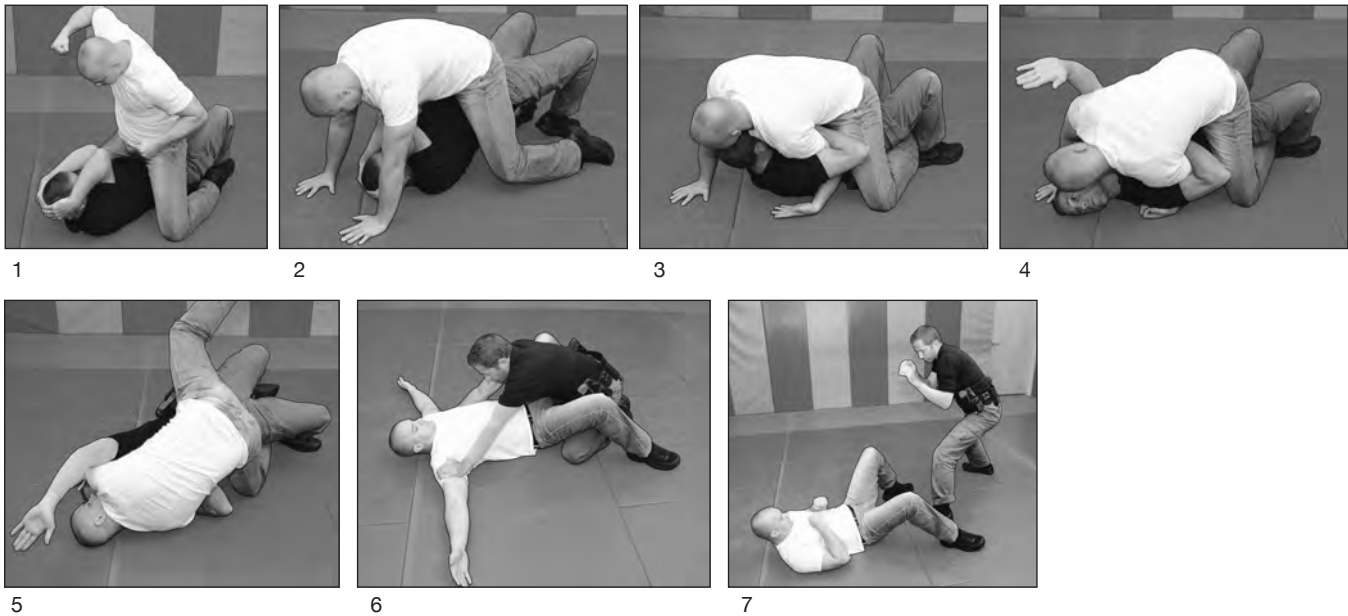
If needed, thrust your hips up to form a bridge, forcing the subject to post and allowing you to control their arms.

Control the subject's leg by placing your foot to the outside of the subject's leg.

Control the subject's arm on the same side by pulling it tight to your body.

Push up with your foot and drive your hips up to a bridge, thrusting the subject upward while you roll the subject onto their back. You will end up on top and between the subject's legs (the guard position).

Follow up with appropriate action(s). (See Figure 4-80)



5
Bridge and roll

7
Figure 4-80

Elbow Escape

This position begins with you on your back as the subject has mounted you.

Use loud, clear verbal commands throughout the application of the technique.

Bridge your hips and turn your body about 45° to your left.

Place your left leg flat on the ground.

Use your left elbow to push the subject's right knee away from you.

At the same time, slide your left leg under the subject's knee as space is cleared.

Hook your right leg behind the subject's right calf area.

Turn toward the subject and create space using the shrimping technique.

Escape to a standing position or place the subject in your guard.

Follow up with appropriate action(s). (See Figure 4-81)



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6



7

Elbow escape

Figure 4-81

Defend and Escape From a Rear Mount

When you are in a ground fight, the subject may sit on top of your back and use their body weight to hold you down. In this position, you are subject to a variety of attacks and strikes to the back of the head and neck. If you have a weapon, it may be vulnerable.

From the prone position:

Use loud, clear verbal commands throughout the application of the technique.

The subject mounts your lower back and places their legs to the outside of your legs to control you. The subject holds you down with their body weight.

Keep your hands around your head for protection from strikes and chokes.

Create space between you and the subject.

Turn onto your back as quickly as possible.

Follow up with an escape from full mount (bridge and roll/elbow escape). (See Figure 4-82)

SECTION VOCABULARY

stalling

supine position



1



2



3



4

Defend and escape from a rear mount

Figure 4-82

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 13 | Impact Weapons

Note: This lesson is optional for law enforcement, corrections, and correctional probation.

OBJECTIVES

DT4313.1. Identify target areas for impact weapon strikes.

DT4313.2. Demonstrate impact weapon techniques.

LESSON GOAL: At the end of this lesson, you will be able to demonstrate the proper use and application of intermediate weapons.

Intermediate weapons are tools used when empty-handed control is ineffective, but the subject's level of resistance does not merit deadly force. Though intermediate weapons may cause death or great bodily harm, they are not fundamentally designed to do so.

A strike with an impact weapon affects a subject psychologically when they see an officer use the weapon in a controlled, competent manner. It gives the impression of a well-trained officer and emphasizes their authority and officer presence.

The most common types of intermediate weapons include the following:

- impact weapons, such as batons or weapons of opportunity
- specialty impact weapons such as bean bag rounds (lead shot covered in a small fabric pillow, typically fired from a shotgun) or baton rounds (plastic or rubber bullets)
- electronic control devices, such as a CEW
- chemical agents

An *impact weapon* is any object used for striking. Impact weapons may disable or cause temporary motor dysfunction.

The most common impact weapon is the baton. Even though new intermediate weapons have been developed, such as chemical agents and CEWs, the baton remains a standard tool for some criminal justice agencies.

The baton is not the only impact weapon available to an officer. Any item an officer has at hand may be used as a potential impact weapon when needed, such as a broomstick, flashlight, clipboard, or radio. These unconventional impact weapons are also known as *weapons of opportunity*.

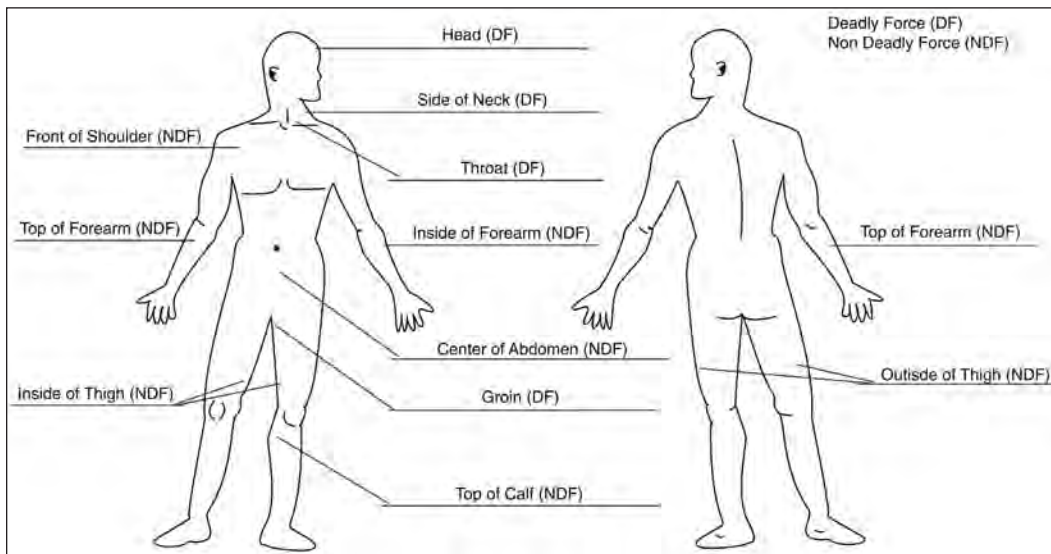
An *interview stance with an impact weapon* is a low profile stance with the weapon held partially hidden behind the leg.

An *offensive ready stance with an impact weapon* is a high profile stance with the weapon held at a shoulder position to enable a rapid strike.

An impact weapon can strike specific target areas.

Target Areas—Impact Weapons Strikes	
DF means deadly force, and NDF means nondeadly force. (See Figure 4-83)	
The expected effect of NDF strikes is to disable or cause temporary motor dysfunction.	
Front of Shoulder (NDF) —Jab with an impact weapon.	Side of Neck (DF) —Striking the side of the neck with an impact weapon is deadly force.
Top of Forearm (NDF) —Strike with an impact weapon.	Head (DF) —Striking the head with an impact weapon is deadly force.
Inside of Forearm (NDF) —Strike with an impact weapon.	Throat (DF) —Striking the throat with an impact weapon is deadly force.
Outside of Thigh (NDF) —Strike with an impact weapon.	Groin (DF) —Striking the groin with an impact weapon is deadly force.
Inside of Thigh (NDF) —Strike with an impact weapon.	
Center of Abdomen (NDF) —Jab with an impact weapon.	
Top of Calf (NDF) —Strike with an impact weapon.	

The most common techniques using an impact weapon are thrusts, swings, and blocks.



Target areas—impact weapon strikes

Figure 4-83

Impact Weapon Thrusts

This technique can be executed in all directions with the tip, back, or shaft of the impact weapon. Generally, the weapon is thrust in a straight line into a target.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position.

Hold the impact weapon with one or both hands.

Thrust the impact weapon into an appropriate target area.

Follow up with appropriate action(s). (See Figure 4-84)



1
Impact weapon thrusts



2

Figure 4-84

Impact Weapon Swings

This technique can be executed with the shaft or edge of the impact weapon. Generally, the weapon is swung in a circular motion to the target.

This technique is also appropriate for use with weapons of opportunity, such as a flashlight, radio, or cell phone.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate position.

Hold the impact weapon with one or both hands.

Swing the impact weapon to an appropriate target area.

Follow up with appropriate action(s). (See Figure 4-85)



1



2

Impact weapon swings

Figure 4-85

Impact Weapon Blocks

Blocks are reaction techniques. A block places the impact weapon between the officer and the subject. Scan blocks pull across the body. Power blocks push against the attacking arm.

Use loud, clear verbal commands throughout the application of the technique.

Assume an appropriate hand position.

Hold the impact weapon with one or both hands.

Sweep or push the impact weapon across the front of the body, defending against attack.

Follow up with appropriate action(s). (See Figure 4-86)



Impact weapon blocks

Figure 4-86

SECTION VOCABULARY

*electronic control device (ECD)
or electronic immobilization
device*

impact weapon

intermediate weapon

*interview stance with an impact
weapon*

*offensive ready stance with an
impact weapon*

weapons of opportunity

Electronic Control Devices

Electronic control devices (ECD), or electronic immobilization devices, use a high voltage, low-power electrical charge to induce involuntary muscle contractions that temporarily disable a noncompliant subject. It is considered safe when used on people, but it will cause extreme muscular tension and may cause temporary loss of balance or coordination.

Types of electronic control devices include conducted electrical weapon (CEW), handheld stun gun, electronic shield, electronic belt, and electronic sleeve.

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 14 | Chemical Agents

LESSON GOAL: At the end of this lesson, you will know the effects of a chemical agent through contamination and decontamination procedures.

Types of Chemical Agents

Criminal justice officers primarily use two types of chemical agents to control resistant subjects: OC (oleoresin capsicum) or CS (orthochlorobenzal-malonitrile).

Both are generally used in the form of handheld canisters and chemical projectiles. Special operations units may use other deployment systems, such as pepper foggers or gas guns.

OC, commonly called pepper spray, is an inflammatory agent that causes tearing and involuntary closing of the eyes, nasal discharge, sneezing, disorientation, and a sensation of respiratory distress. The skin will turn red due to the inflammation and show mild signs of puffiness. These effects wear off generally in 20–30 minutes, but in some cases they may last longer.

Although OC has become the preferred chemical agent of criminal justice agencies worldwide, CS may also be used.

CS is an irritant agent that causes burning and tearing eyes, nasal discharge, and skin and upper respiratory irritation. The chemical, when making contact with skin, gives the sensation of pain by activating and irritating the neural transmitters of the body. Though there is no actual burning caused by the chemical, there is the sensation of an intense burn once contaminated.

Contents of OC Spray

Oleo-resin capsicum is a natural derivative of the cayenne pepper, although there are some synthetic forms. The active ingredient in OC is known as capsaicin, which produces the heat felt when it makes contact with human tissue.

The heat value of capsicum is measured in **Scoville heat units (SHU)**. The SHU scale was originally designed for determining the heat properties (burning sensation) of peppers for the restaurant industry. Bell peppers are at the low end of the scale, and cayenne pepper is higher on the scale. This is a fitting measurement for a chemical agent like OC which is in essence nothing more than a vegetable product voluntarily ingested by countless people in the form of food and medicine. Though it is true that OC is hot, SHUs are not equated with thermal degrees and, as such, do not present the burning dangers associated with fire.

OBJECTIVES

DT4314.1. Identify the types of chemical agents used by criminal justice officers.

DT4314.2. Identify the active ingredient in oleoresin capsicum.

DT4314.3. Identify the use of the Scoville heat unit (SHU) in measuring the burning effect of chemical agents.

DT4314.4. Identify the physical effects of a chemical agent on a subject.

DT4314.5. Describe the correct responses to a subject's prolonged or severe reactions to chemical agent contamination.

DT4314.6. Identify decontamination procedures for contamination from a chemical agent.

Within the formula, capsicum is mixed with a propellant consisting of carbon dioxide, nitrogen, or isobutane, whose function is to expel the active ingredient from the canister. In addition, the formula will include water, vegetable oil, or alcohol-based solutions, which hold the capsicum suspended so that the material does not sink to the bottom. This solution allows the capsicum material to remain suspended so that it is discharged evenly with every spray. You do not need to shake the canister before deployment.

Alcohol-based sprays can create a potential fire hazard if sprayed directly into a flame or used in conjunction with electronic control devices (ECD). However, alcohol-based sprays adhere better to skin, making them more effective.

Effects of OC

OC has been proved to be highly effective on a majority of the population. There may be circumstances in which OC will not deliver the expected results. Any of the following factors could influence the results of the OC: a poorly placed spray where the OC does not make contact with the subject's face, the subject's mindset or past experience with the chemical agent, drug use, psychosis, or a high pain tolerance.

This chemical agent has the most desired effects when sprayed directly at the subject's head. Use caution when discharging any chemical directly into the eyes due to the compressed nature of the chemical, which discharges at a potentially dangerous speed. The effects of a direct discharge into the eyes has been known to cause slight tears in the eye membranes, which could lead to complications.

When OC enters the eyes, it causes them to close. The subject will feel an intense burning sensation and the capillaries of the eyes will dilate, causing the eyes to appear bloodshot. If the chemicals are inhaled, they will often cause coughing and gasping. If the gag reflex is activated, the chemicals may cause gagging and even vomiting. These are common reactions due to the irritation of the skin and slight swelling of the lining of the throat. The nasal cavity will also swell, causing sneezing and significant discharge of mucus. Officers should always use caution when approaching subjects who have been contaminated, to prevent cross-contamination.

OC is particularly effective on moist areas of the body, including lips, tongue, and sweaty areas. A subject's reaction to being sprayed can include a loss of balance, loss of coordination, anger, anxiety, fear, or panic.

There have been cases documented where subjects have died inexplicably after being taken into police custody. Some subjects had been contaminated with OC, which raised concerns that OC caused their deaths. While some unexplained deaths have been attributed to contamination by chemical agents, studies have shown that OC may be a contributing factor of the excited state of the subject, but there is no known evidence that OC caused their deaths. Recall from an earlier lesson the unusual behaviors that indicate a subject may be in a crisis state and in need of immediate medical attention (excited delirium) when encountered.

Officers are required to follow certain standards of care for each person contaminated by OC. Watch each contaminated person until they recover. If the person displays unusual behavior, immediately seek medical attention. If symptoms are acute, stabilize the subject, maintain an open airway, and ensure continuous breathing and proper circulation. The manufacturer's Safety Data Sheet (SDS) for the chemical agent used should be easily accessible.

The OC Canister

Follow the manufacturer's recommendations to maintain the canister in working order.

Though chemical canisters may dent or bend, there is generally no need to be concerned with the canisters leaking. Major manufacturers of these chemical contaminants have intentionally designed the canisters to be soft, pliable, and resistant to cracking and splitting. (See Figure 4-87)

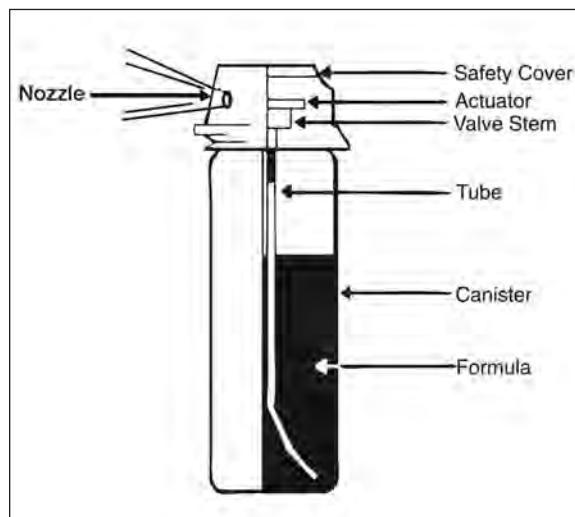
Decontamination Procedures

Decontamination procedures are an essential component of the proper use of chemical agents. The chemical agent's effects will wear off in time; however, decontamination may decrease the period of discomfort. Whenever a subject is contaminated, you should follow the decontamination procedures as prescribed by agency policies. This standard of care should take place as soon as the subject is under control.

When you must use a chemical agent on a suspect or encounter a person who has been accidentally contaminated, do not leave that person unattended while the effects of the contaminant are evident.

Psychological Decontamination

Contamination by a chemical agent may also have psychological effects on the exposed person. Tell the contaminated person to remain calm and reassure them that the contaminant causes no lasting effects and should dissipate within 20–30 minutes. This repeated reassurance will help prevent anxiety and panic, behaviors that can endanger you and others.



Chemical agent canister nomenclature

Figure 4-87

SECTION VOCABULARY*CS**OC**Scoville heat units (SHU)**strobing****Physical Decontamination***

While psychologically decontaminating the subject, an officer may also guide the person through the process of physical decontamination.

Strobing—After contamination, the person should never wipe or rub their eyes with their fingers. Doing so may rub small particles into the eye, which can ultimately damage the cornea. Instead, the person should begin by strobing their eyes. **Strobing** is forcefully blinking the eyes using all the muscles in the face, including those in the

forehead. This forceful blinking helps clear the vision and activates the tear ducts. Tears help clear the eyes and wash away particles of contaminant.

Breathing—Tell the person to concentrate on breathing to draw their attention from the burning sensation caused by the contaminant. Focusing on the discomfort may cause the person to shut down and panic. A rhythmic inhale through the mouth and then a forceful exhale through the nose will cause the mucous glands to begin working and the nose to run. This will clear the nasal passages and sinuses of mucus containing contaminant particles.

Removing contaminants—After strobing the eyes and breathing rhythmically, the person may remove contaminants from their skin. This will reduce the chemical agent's effects.

Air—The chemical agent's effects will wear off in time by mere exposure to air, for example by standing in a breeze or in front of a fan.

Water—The person should use a large amount of running water to irrigate their eyes and facial skin.

Decontaminant solutions—There is no absolute antidote for chemical agents, but decontaminant solutions, such as baby shampoo, may decrease contamination effects. Many manufacturers produce solutions that are easy to carry in patrol vehicles and require little or no cleanup. The eyes should be rinsed with water and dabbed with an uncontaminated towel to lift the contaminant from skin. Scrubbing or using oil-based soaps to decontaminate can cause the contaminant to adhere to the skin and prolong decontamination time.

Medical personnel should treat prolonged or severe reactions.

Documentation

Using a chemical agent is considered a use of force and should be documented according to agency policies. Document the contamination and the decontamination procedures taken.

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 15 | Weapon Retention

LESSON GOAL: At the end of this lesson, you will be able to demonstrate safe and effective methods of retaining weaponry.

OBJECTIVE

DT4315.1. Demonstrate weapon retention techniques.

During a confrontation with a subject, an officer must control their weapons to prevent the suspect from taking them. Maintaining an appropriate reactionary gap is one of the most effective methods to prevent being disarmed. This becomes more difficult in close-quarter combat situations. You must protect your weapons along with your vital areas while engaged in a fight.

The following techniques are covered in this lesson:

- holstered intermediate weapon retention
- drawn baton retention
- holstered handgun retention
- drawn handgun retention

Holstered Intermediate Weapon Retention

This technique is applicable to all intermediate weapons worn on the belt, such as a baton, chemical agent canister, or CEW.

The best defense against a subject grabbing your intermediate weapon is to maintain the reactionary gap. This technique works with an attempted front or rear grab.

Use loud, clear verbal commands throughout the application of the technique.

Adjust your stance to maintain balance.

Secure the weapon by forcefully applying downward pressure on the weapon or top of the subject's hand keeping the weapon in the holster.

Deliver strikes to appropriate target areas as you rotate your body to break the subject's grip.

Follow up with appropriate action(s). (See Figure 4-88)



1
Holstered intermediate weapon retention



2



3

Figure 4-88

Drawn Baton Retention

This technique works on one- and two-handed grabs.

When the subject grabs the drawn baton:

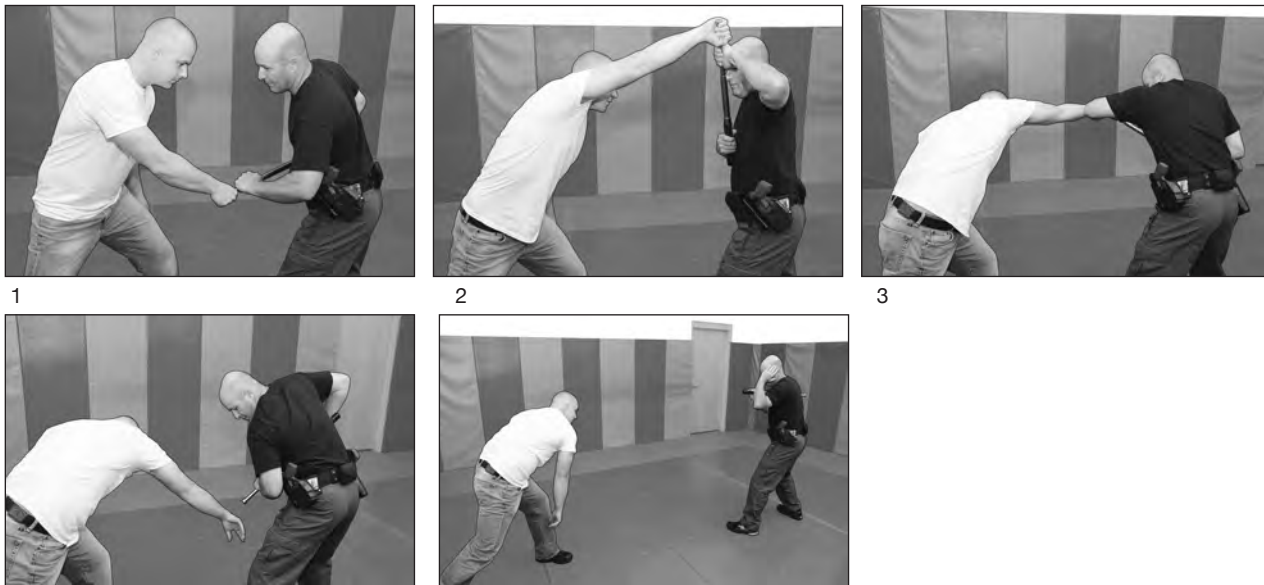
Use loud, clear verbal commands throughout the application of the technique.

Adjust your stance to maintain balance.

Rotate the long end of the baton upward and from the left to the right, to release the subject's grip.

Pull the baton back and away.

Follow up with appropriate action(s). (See Figure 4-89)



4
Drawn baton retention

Figure 4-89

Holstered Handgun Retention

This technique should not be used unless the holster is firmly affixed to the belt.

The best defense against a subject grabbing your handgun is to maintain the reactionary gap.

When a subject grabs your holstered handgun:

Use loud, clear verbal commands throughout the application of the technique.

Adjust your stance to maintain balance.

Secure the weapon by forcefully applying downward pressure on the firearm or top of the subject's hand keeping the weapon in the holster.

Deliver strikes to appropriate target areas as you rotate your body to break the subject's grip.

Follow up with appropriate action(s). (See Figure 4-90)



4 Holstered handgun retention

Figure 4-90

Drawn Handgun Retention

Use the cradle handgun retention technique when the subject grabs a drawn handgun's barrel. The person holding a handgun's barrel has greater leverage than the person holding its grip. The cradle changes the leverage to the officer's advantage.

When a subject grabs your handgun:

Use loud, clear verbal commands throughout the application of the technique.

Widen your stance and lower your center of gravity.

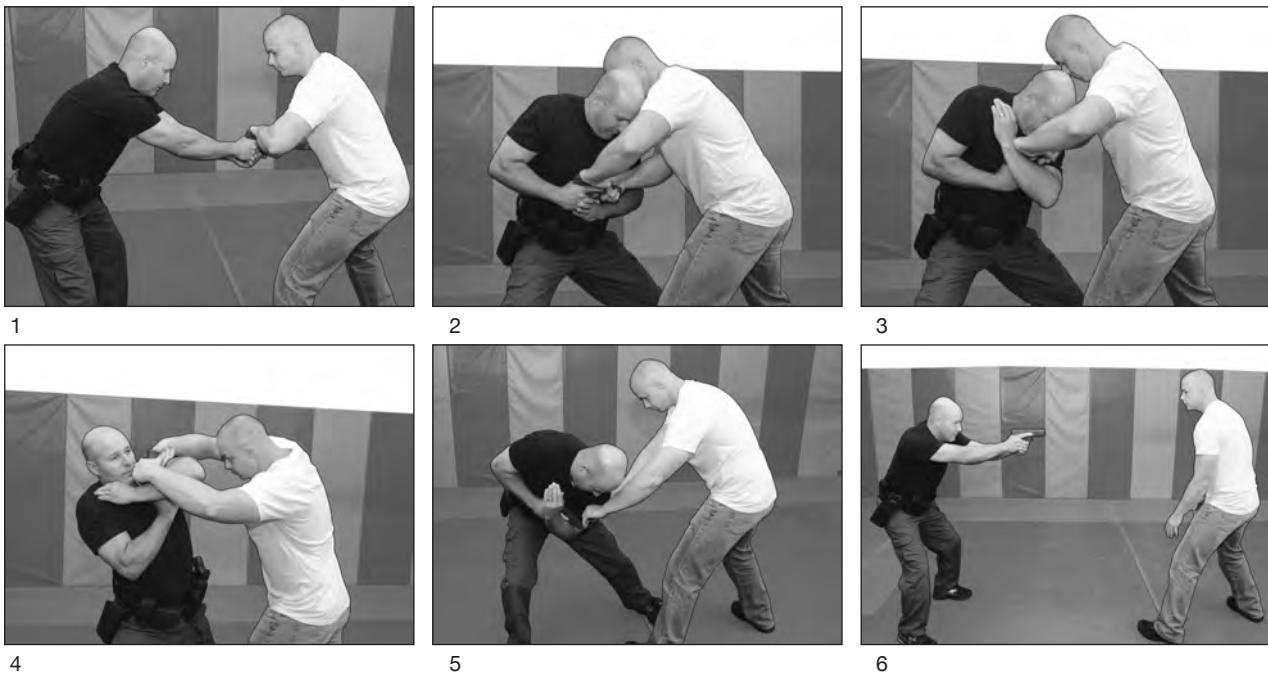
Step forward and bring the handgun closer to your chest.

Wrap your non-weapon arm under the handgun and the subject's hand and clamp them tightly to your chest.

Lever the gun barrel upward to release it from the subject's grasp.

Create distance from the subject by stepping back while pulling your cradled handgun downward.

Follow up with appropriate action(s). (See Figure 4-91)



4
Drawn handgun retention

6
Figure 4-91

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 16 | Handgun Defense

OBJECTIVE

DT4316.1. Demonstrate handgun defense techniques.

LESSON GOAL: At the end of this lesson, you will be able to demonstrate safe and effective methods of handgun defense.

Handgun defense techniques are a last resort when an officer believes that the subject who has a handgun is going to shoot them.

Many factors affect an officer's decision to employ handgun defense techniques:

- the proximity of the officer to the subject
- the officer's belief that the subject is going to shoot them
- the presence of other potential victims in the immediate area
- the consideration of other reasonable options
- the mindset and commitment to challenge the subject regardless of personal injury or initial failure

These techniques rely on several principles to be effective:

- **surprise**—Do not telegraph to the subject that you plan to counterattack. *Telegraphing* is small eye, hand, or foot movements in the direction that you plan to move.
- **action is faster than reaction**—When you enter the danger zone to deal with a subject, you are the initiator. The subject must react to your threat.
- **verbal distraction**—Reaction time increases when a subject processes two or more pieces of information at the same time. For example, ask the subject a question immediately before taking action.
- **physical proximity**—To initiate this technique, the subject's handgun must be within arm's reach.

Although this lesson pertains to the handgun, you can apply the same concepts to a long gun. Your primary objective is to get the muzzle pointed away from you.

After you are in position and make the decision to initiate a handgun defense technique, speed, intensity, and follow-through are most important.

Handgun Cycles of Operation

If you grab a revolver with the hammer cocked, you may stop it from firing by grabbing the hammer and preventing the firing pin from striking.

If you grab the revolver's cylinder, you may prevent it from cycling to the next round.

If you grab over the top of a semiautomatic pistol, you may stop the slide from cycling. However, one shot may fire, and the barrel will become very hot. You may also experience temporary flash blindness.

SECTION VOCABULARY

telegraphing

General Guidelines

General guidelines for encountering a subject with a handgun at close proximity include:

Move your body out of the way.

Control the weapon.

Follow up with appropriate action(s).

This could occur in multiple positions (for example, standing or on the ground).

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 17 | Defense Against Edged Weapons

OBJECTIVE

DT4317.1. Demonstrate defense against edged-weapons techniques.

LESSON GOAL: At the end of this lesson, you will be able to demonstrate how to defend against an attacker who is using an edged weapon.

You may encounter a situation where a subject is armed with a weapon. Knife fighting is a sophisticated technique, and this portion of the curriculum provides only a basic knowledge of an edged-weapon attack.

Defense against an edged weapon, bottle, club, or other blunt instrument may require a deadly-force response. You should use empty-hand techniques against edged-weapon attacks only when you have no other options.

An edged-weapon attack that involves distance or an impending threat gives you time to plan and react to the attack. If the attack happens suddenly and up close, you have limited options. Your best defense may be the use of empty-hand techniques. You usually have no time to disengage or select a weapon for defense.

If you identify a threat early on, your response can be much more effective. The longer it takes you to identify the attack, the less time you have to react. Awareness will help you recognize cues and early warning signs. Use redirecting techniques to avoid or redirect an attack to give you time to disengage and escape.

The minimum safe distance for an officer to be able to react to an edged-weapon attack without injury is about 25 feet.

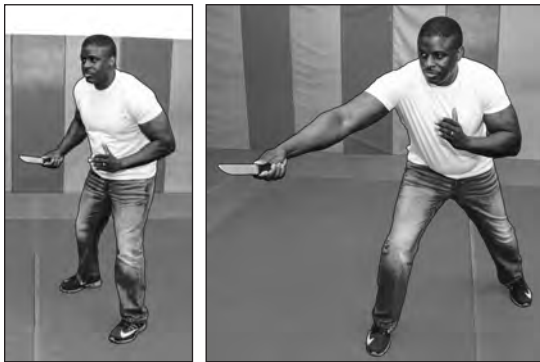
Before an incident occurs, you should mentally prepare to be cut. Develop a survival mindset to continue to fight, regardless of your injuries, until you are able to stop the aggression. Never give up!

Use obstacles, such as furniture, a vehicle, or clothing to create a barrier between you and the subject. Obstacles can slow down an attack and allow you to defend or to disengage from a situation, giving you time to use force options, control, or escape.

Knife Patterns

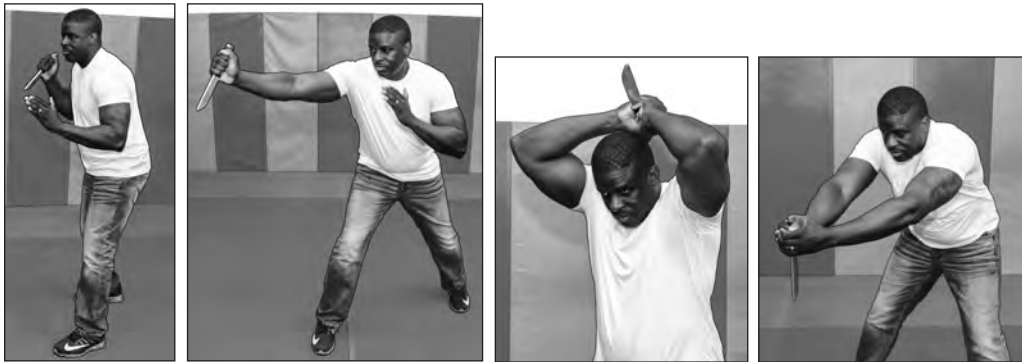
A knife-wielding subject is likely to use one of the following attack patterns:

- straight thrust (See Figure 4-92)
- overhead attack with one or two hands (See Figure 4-93)
- forehand slash (See Figure 4-94)



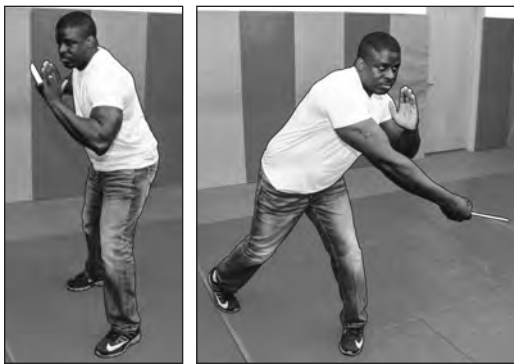
1 2
Knife patterns-straight thrust

Figure 4-92



1 2 3 4
Knife patterns-overhead attack, one or two hands

Figure 4-93



1 2
Knife patterns-forehand slash

Figure 4-94

Defensive Movements

The following movements may be used to defend against a spontaneous, close-quarter, edged-weapon attack:

- **evade**—Move or pivot away from the attacker.
- **secure**—Capture the weapon arm and secure it.
- **redirect**—Redirect the weapon arm.

Use loud verbal commands before, during, and after the attack.

Techniques for defense against edged weapons covered in this lesson include:

- redirection and evasion techniques
- defense against an overhead stab or forehand slash with an edged weapon

Redirection and Evasion Techniques

Use redirection and evasive movements to avoid or redirect an edged-weapon attack. Evasion is simply shifting your body or sidestepping to avoid the attack. Redirection is using your hands to move the subject away. Using evasive and redirecting tactics may allow time to disengage, escape, or use other force options.

When redirecting, move in an angle or circle away from the attacker. Most people can run faster going forward than backward, so the attacker has the advantage. By circling or angling away from the attack, you force the attacker to adjust their direction of travel.

Redirection Technique (1)

Use loud, clear verbal commands throughout the application of the technique.

As the subject attacks, pivot backward to evade the subject's forward movement.

Bring both hands up in front of your face to protect vital areas.

Push, slap, or strike the subject's arm or shoulder to create distance from the weapon.

Move away from the subject at an angle or circle.

Follow up with appropriate action(s). (See Figure 4-95)



1



2



3

Redirection technique—1



4

Figure 4-95

Redirection Technique (2)

Use loud, clear verbal commands throughout the application of the technique.

Block the subject's lower right arm with your left arm and bring the subject's arm across your centerline.

Use your right hand to reach across the subject's body and grasp the back of their right arm just above the elbow.

Slightly pull the subject off balance, straightening their arm, pulling their right wrist downward with their palm toward you to your right hip.

Apply downward pressure to the elbow while maintaining control of the wrist.

A strike or diversion may be necessary to complete the technique.

Move your right leg rearward, rotating your hips clockwise.

Drop to your left knee and place the subject in a prone position.

Follow up with appropriate action(s). (See Figure 4-96)



4
Redirection technique 2

6
Figure 4-96

Defense Against an Overhead Stab or Forehand Slash With an Edged Weapon

Use loud, clear verbal commands throughout the application of the technique.

Palm strike the subject's upper right arm near the shoulder with both hands to stop the movement of the weapon arm.

Capture and secure the subject's right arm by encircling it with your left arm. At the same time, deliver multiple disabling strikes.

Follow up with appropriate action(s). (See Figure 4-97)



1
2
3
4
5
6
Defense against an overhead stab or forehand slash with an edged weapon

Figure 4-97

UNIT 3 | DEFENSIVE TACTICS TECHNIQUES

LESSON 18 | Deadly Force Techniques

OBJECTIVE

DT4318.1. Demonstrate the simulation of deadly force techniques.

LESSON GOAL: At the end of this lesson, you will be able to demonstrate a simulation of deadly force techniques.

Deadly force is usually associated with the use of a firearm. However, certain empty-hand techniques and unconventional weapons can be used effectively in a deadly force encounter.

Empty-hand techniques become deadly force when they have the capability of causing great bodily harm or even death. A good example is a ground fight that turns into a deadly threat when a subject attempts to choke or bite you, gouge your eyes, or grab your gun. If you cannot access a weapon, then an empty-hand technique may help stop or disable your attacker, giving you the chance to recover to a different position.

Some empty-hand techniques can become deadly force if applied to a specific target area of the body. Some examples of deadly force techniques may include, but are not limited to, elbow strike, throat strike, and eye gouge.

Using Alternative Weapons

Any item an officer has at hand may be used as a potential weapon in a time of need. In fact, any extension of the body may be a weapon, such as a flashlight, radio, ballpoint pen, keys, or pocket knife. It is the use of the item that qualifies the item as a weapon. For instance, a firearm is just a firearm until it is used for a defensive purpose; however, an ashtray or coffee mug, which is not perceived as a weapon, becomes a weapon if used to strike someone.

A deadly weapon is any item used to cause death or great bodily harm. For example, a ballpoint pen directed to the eye becomes a deadly weapon. An officer in a deadly force situation should use unconventional weapons if available and necessary.

CHAPTER 5

Conducted Electrical Weapon/Dart-Firing Stun Gun

Use of the Conducted Electrical Weapon 334

The use and effects of conducted electrical weapons have been a topic of discussion in the media, among law enforcement officers and administrators, and within the scientific and medical professions. This chapter will introduce you to the basics of the conducted electrical weapon (CEW), particularly the dart-firing stun gun, and provide information about its practical use based on statutory requirements.

USE OF THE CONDUCTED ELECTRICAL WEAPON

Use of the Conducted Electrical Weapon

OBJECTIVES

- CEW521.** Describe the main terminology associated with a CEW.
- CEW519.** Describe the legal guidelines for training and using a CEW.
- CEW523.** Describe the history of the CEW.
- CEW524.** Describe the basic nomenclature, mechanics, and function of a CEW.
- CEW525.** Describe the basic nomenclature, mechanics, and function of a dart-firing stun gun.
- CEW526.** Describe the basic nomenclature, mechanics, and function of a stun gun.
- CEW540.** Explain how to use a dart-firing stun gun as a drive stun.
- CEW528.** Explain the effects of using a CEW on the human body.
- CEW532.** Describe primary and alternative sites on the body to target and areas to avoid when using a CEW.
- CEW549.** Explain the various subject behaviors that can influence your decision on using a CEW.
- CEW530.** Describe the statutory use of force guidelines for using a CEW.
- CEW537.** Describe tactical factors involved in deciding when to use a CEW or a firearm.

LESSON GOAL: At the end of this course, you will know the legal and use of force aspects of using a stun gun or CEW, how using a stun gun or CEW affects the human body, and how to operate a stun gun or CEW safely.

Terminology

A *conducted electrical weapon (CEW)* has several forms and names:

- basic stun gun
- dart-firing stun gun (DFSG)
- electronic immobilization device
- conducted energy device
- electronic control device

A CEW is a device that uses a high-voltage, low-amp electrical charge to induce pain compliance or involuntary muscle contractions that can, in the case of a DFSG, temporarily incapacitate a noncompliant subject. An *amp* is a measure of electrical current or power.

Legal Aspects of CEW Use

In 2006, the Florida Legislature created s. 943.1717, F.S. This legislation governs the training and use of DFSGs by criminal justice officers in Florida. While the Florida Statutes refer to “dart-firing stun guns,” most law enforcement agencies use the term “conducted electrical weapon.” This chapter will use the term CEW to refer to all forms of stun guns, including DFSGs, and provides a general overview of how a CEW operates within the law. The Criminal Justice Standards and Training Commission does not endorse any specific type or brand of CEW.

The Florida Statutes require law enforcement officers authorized to operate a CEW to attend the CJSTC-approved CEW course. Officers attend this

training during basic recruit training or through an equivalent training course that the employing agency provides. If your agency allows you to carry a CEW, they may require you to go through more agency training before you can operate a CEW. The CJSTC

requires that you attend at least one hour of annual training on CEW use if your agency allows you to carry and use a CEW.

As described in s. 790.01, F.S., a dart-firing stun gun is a nonlethal (a force level not intended to cause death or great bodily harm) weapon. Many law enforcement agencies, however, describe the CEW as “less lethal.”

The statutory guidelines in s. 943.1717, F.S., provide the minimum criteria for use of a CEW. According to the guidelines, a decision to use a dart-firing stun gun must involve an arrest or a custodial situation, and during the situation, the subject escalates resistance from passive physical resistance to active physical resistance, and

- has the apparent ability to physically threaten the officer or others, or
- is preparing or attempting to flee or escape

Your training, experience, and assessment of all relevant circumstances determine the appropriate and necessary use of a CEW.

In Florida, a person can lawfully carry a CEW openly or in a concealed manner without a permit. The CEW must be nonlethal and designed solely for defensive purposes. The person must be carrying the CEW for use as lawful self-defense.

History of CEWs

John Cover invented the stun gun in the 1960s. He intended to create an electric, nonlethal device to control violent criminal behavior by delivering relatively low-amp coupled with high voltage. The device gains compliance through pain or involuntary neuromuscular contractions and enables an officer to restrain a subject. Originally, the gun had to make physical contact with a subject, as its design fixed the electrodes directly to the device. The development of the DFSG removed the requirement for the gun to make physical contact with the subject, allowing the officer to use the gun at a distance.

Today, the two most common types of CEWs are the current basic stun gun and the DFSG. The CEW is typically small and easy to hold. Officers also use other electronic control tools, such as restraint devices and shields for crowd control in public riots or correctional settings.

How a CEW Works

The basic idea of a CEW is to disrupt the body’s communication system by generating a high-voltage, low-current electrical charge. In simple terms, the charge has a lot of pressure behind it, but not much intensity. Since it has a high voltage, the charge will pass through heavy clothing and skin, but it is not intense enough to damage the subject’s body unless you apply it for extended periods. For example, if lightning strikes someone or they stick a finger in an electrical outlet, the electric current can maim or even kill, but, in smaller doses, electricity is harmless. A low current does not injure a subject even if the voltage is high. However, a current that is high enough can injure a person even if the voltage is low.

CEW533. Describe subject and officer safety concerns that can influence your decision on using a CEW.

CEW501. Explain how to use backup officer(s) to gain compliance and handcuff a subject when using a CEW.

CEW551. Describe how to care for an in-custody subject after using a CEW.

CEW504. Describe how to document use of force reports involving CEW use.

CEW503. Recognize the importance of remaining current on CEW policy issues and trends.

CEWs use electrodes or probes and an electrical charge to control a subject. In the case of a basic stun gun, the electrodes attach to the front of the CEW. With a DFSG, the probes are the projectiles fired from the CEW and embedded into the subject.

For a CEW to operate, electricity must be able to flow between the electrodes on a stun gun or the probes from a DFSG. The electrodes on a stun gun are a fixed distance apart and provide limited pain compliance. The probes on the DFSG are not fixed, and the distance between them depends on how far away the subject is when delivered. The wider the probe spread on the target, the greater the effectiveness of the weapon. Electricity will not pass to another person in contact with the subject unless the other person makes direct contact between or on the probes. Exposing a subject who is standing in water to a CEW does not cause electrocution or increase the power applied. Electricity can pass through clothing and even some bullet-resistant materials, though.

The charge combines with the electrical signals from the subject's brain, making it very difficult for the subject to decipher any messages. The person has a hard time telling their muscles to move and may become confused, unbalanced, or, in the case of a DFSG, incapacitated. The current, sometimes generated with a pulse frequency, mimics the body's own electrical signals. The current will tell the subject's muscles to do a great deal of work in a short amount of time. Depending on shot placement, the subject's torso and limbs will respond in different ways.

Basic Stun Gun

Basic stun guns have a simple design. They are about the size of a flashlight and typically operate using nine-volt batteries. The circuitry includes multiple transformers and components that boost the voltage in the circuit, typically between 20,000 and 150,000 volts, and reduce the amperage. The electrodes are simply two plates of conducting metal positioned in the circuit with a gap between them.

When you press a stun gun against a subject and hold the trigger, the charge passes into the subject's body. The person's body fills the gap between the electrodes. The electrical pulses move from one electrode to the other, and surge electricity into the subject's muscular and nervous systems.

DFSG

A DFSG works the same way as a basic stun gun, except the two charged probes are not permanently attached to the device. Instead, they are at the ends of long conductive wires attached to the gun's electrical circuit. The DFSG uses the same basic firing mechanism as any compressed gas firing system or BB gun. Pulling the trigger opens the cartridge inside the gun, launching the probes through the air, with the attached conductive wires trailing behind.

The probes have small barbs so they will attach through a subject's clothing to their skin, allowing the current to travel down the wires into their body. The main advantage of this design is that it stuns subjects from a greater distance (typically 15 feet to 25 feet for patrol and 35 feet for SWAT). The disadvantage is that if only one probe hits the subject, the officer must reload and attempt a second contact. Some dart-firing stun guns have multiple cartridges that can deploy probes consecutively by pulling the trigger without reloading. Always reload in a safe manner; never place your hands in front of the cartridge, as a static electrical charge could cause the cartridge to deploy.

Officers can use a DFSG as basic stun gun, but probe hits are usually more desirable. Probe hits:

- are more effective in obtaining neuromuscular incapacitation vs. pain compliance
- can be applied from a safer distance
- usually require fewer cycles
- generally cause fewer injuries

A **cycle** is the predetermined amount of time (usually five seconds) that a stun device will discharge automatically when activated. Some dart-firing stun guns have a built-in cartridge-identification system. When fired, the cartridge also releases dozens of confetti-sized cartridge-identification tags. This allows investigators to trace to whom the cartridge was issued or sold and the location of the deployment. Some CEWs have a computer system that records the time and date of shots, the duration or number of cycles, the battery level, and the internal temperature of the unit.

Using a DFSG as a Drive Stun

A drive stun occurs when the front of the DFSG, with or without a live cartridge, directly touches the body of the resisting subject, and the electrical charge passes to their body. In this mode, the DFSG works as a basic stun gun and is a pain-compliance tool only.

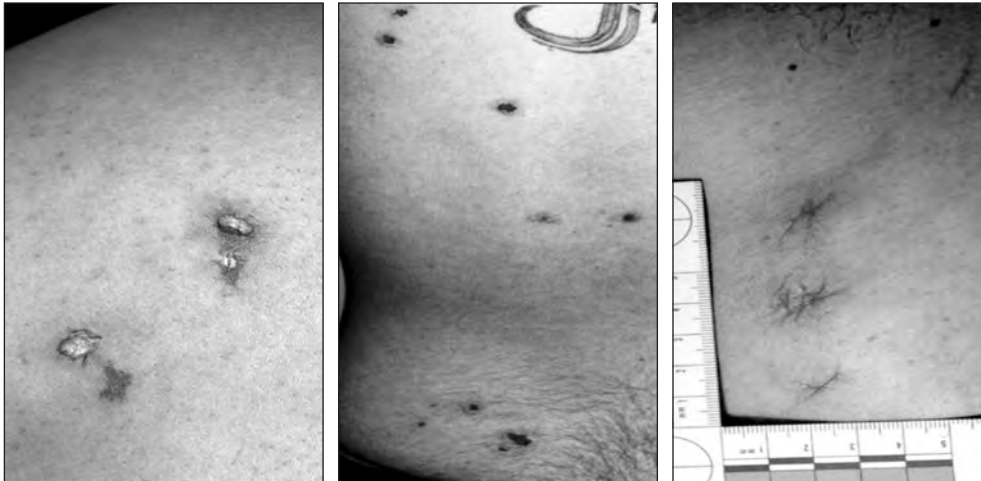
Circumstances when you may use a DFSG as a drive stun include:

- When the subject is too close to the DFSG or when a probe application would be hard to make.

For example, a subject and an officer are fighting, and the DFSG operator cannot get a clear shot on the subject. The drive stun does not incapacitate a subject but may help you take a subject into custody.
- When only one probe strikes a subject and the subject is rapidly moving closer, use the drive stun as a second probe to complete the cycle.
- When, after initially using a DFSG, you do not gain compliance or the subject increases resistance, apply the drive stun as a follow-up. Drive stun on a place on the body away from the embedded probes.
- When you use the DFSG with a live cartridge as a drive stun or make a close shot, and the subject increases resistance, apply the drive stun as a follow-up. Drive stun on a place on the body away from the embedded probes.

To initially use a DFSG as a drive stun (without firing the probes), apply the weapon directly to a subject. If the first choice of a target area is not effective, you may consider a different area of application, using an additional cycle of application, or an alternative force option.

Because the drive stun does not cause incapacitation, you may find yourself in prolonged struggles with a violent subject, resulting in drive stunning several times in several locations on the body. This often results in multiple discharges, causing scratches on the subject's body, and numerous *signature marks*, which are burn marks left on a subject's body after a drive stun application.



Stun signature marks

Figure 5-1

Effects on the Human Body

Although the intended use of a CEW as a nonlethal weapon is to prevent injury to the subject and other people present, the device has a very powerful physical effect. When CEW electrodes or probes hit a subject, they transmit electric impulses. These impulses interfere with communication between the muscular nervous system and the skeletal muscles. The muscle contractions after CEW exposure are due to the impulse interference, not the electric output. A subject may experience pain similar to the muscle pain one experiences after vigorous exercise. In the case of a dart-firing stun gun, this can cause physical incapacitation or *electro-muscular disruption (EMD)*. The subject may immediately lose control of their body and become incapable of any coordinated action. Possible effects of using a CEW on a subject could include the person:

- immediately falling to the ground
- yelling or screaming
- having involuntary muscle contractions
- freezing in place with legs locked
- feeling dazed for several seconds or minutes
- having vertigo or a temporary tingling sensation
- having critical incident amnesia, not remembering any pain
- showing minor signature marks from contact

The subject may not show any physical effects from the contact but may sustain injuries from falling because of the weapon's physical effects on their body. Sometimes these injuries are minor. Sometimes more severe injuries could occur. The fall that results from a stun, if it occurred from elevated heights or other hazardous areas, could cause significant injuries. Manufacturers' and independent studies assert that being stunned by a CEW has no residual medical impact. There is no basis to establish that CEWs pose unacceptable health risks when used appropriately on healthy subjects.

Some debate exists about the number of cycles of applications that is reasonable. Several law enforcement groups have established 15 seconds of CEW exposure as a significant safety point. Experts in the field agree that there is no definitive number for how many exposures are necessary, but applying the reasonableness standard may help you decide. Apply only the number of cycles reasonably necessary to capture or restrain the subject. Avoid prolonged and repeated exposures.

Target Areas

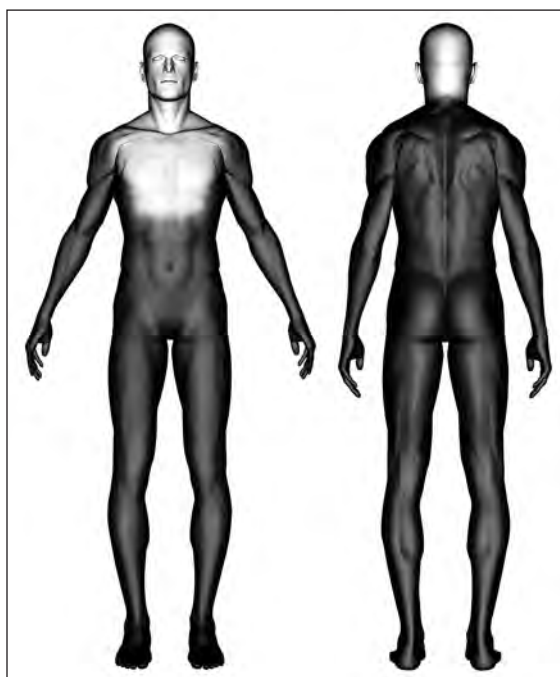
The primary target areas of a subject's body should be below the neck area for back shots. For front shots, the target area should be below the heart. Aim for areas with high nerve concentrations or large muscle mass, such as the abdomen, legs, inside of the thighs, back, and buttocks.

Alternative target areas are the back near the shoulders or the back of the legs where, if clothed, the clothing fits tighter and the probes will conduct electricity to the subject more effectively. The physical positioning of a subject, the clothing they are wearing, and the way they are wearing clothing could play a big role in how effective the CEW is. It may not work at all or may stop working when the subject has loose-fitting or very thick clothing.

Avoid intentionally targeting a subject's head, throat, face, breast, chest, heart area, groin, genitals, or any known preexisting injury area when possible. These areas have a higher potential for causing injury to the subject. (See Figure 5-2)

Subject Considerations

For some subjects it may be inappropriate to use a CEW as a restraining device. These subjects can exhibit specific behaviors that may make them susceptible to Sudden In-Custody Death Syndrome (SICDS). As discussed in *Defensive Tactics*, this is a sudden unexplained death while the subject is in custody. SICDS may be triggered by excited delirium or a **drug-induced psychosis**, a form of psychosis from drug use that causes hallucinations, delusions, or positional asphyxia. Positional asphyxia, as explained in First Aid, is the inability to breathe because of the subject's body position.



Preferred target areas are illustrated in dark shading. Light areas should be avoided when possible.

Figure 5-2

It is difficult to predict a subject's risk for SICDS. Pay attention to signs of excited delirium or drug-induced psychosis, which may include:

- unusual or psychotic behavior
- disorientation
- intense sweating, hot, feverish skin
- great strength and tolerance of pain
- delirious or delusional behavior
- extreme paranoia behavior
- elevated pulse rate
- knowledge of the suspect's history of drug abuse or use

Some subjects who are under the influence of drugs or alcohol comply. Other subjects do not have a typical response to the CEW. As in any high-risk situation, be prepared to take another tactical action. The quickest and safest way to restrain a noncompliant subject exhibiting excited delirium or drug impairment is to use a CEW, if necessary. Then, using the least restrictive means, restrain the subject at the earliest possible point in the encounter, and notify EMS as soon as possible.

If a subject is pregnant, ill, or physically impaired, such as blind or deaf, avoid using a CEW for compliance. Your agency will have policies and procedures for these situations.

Use of Force Considerations

You will recall from Defensive Tactics that the basis for analysis of use of force claims is the Fourth Amendment's objective reasonableness standard (*Graham v. Connor*). Keeping this in mind, you should be able to articulate why you chose to use a CEW. According to s. 943.1717, F.S., officers may decide to use a CEW only when a subject is resisting actively and physically.

The court established law on the use of a CEW in the case of *Draper v. Reynolds*, 369 F3d 1270 (11th Cir. 2004). Video of the traffic stop led the court to conclude that if the officer attempted handcuffing without the use of the CEW, the situation would have escalated into a serious physical struggle. The one-time shock of a subject with a CEW was not excessive force and was reasonably proportionate when the subject repeatedly refused verbal commands and became hostile, belligerent, and uncooperative during the stop.

Use verbal commands first to gain control of a situation. You can avoid many physical encounters by verbal de-escalation. By disengaging or de-escalating, you give the subject another opportunity to comply with your commands and avoid the use of the CEW. If you exhaust all verbal efforts to de-escalate the situation or if verbal commands or physical control is not feasible, the use of a CEW may be appropriate. However, you must give the subject a reasonable opportunity to comply with your directions. Warn the subject of the device's imminent use if they continue to be noncompliant, and when appropriate.

Not every situation where a subject displays an active physical resistance calls for using a CEW. During these encounters, continually assess whether to engage or disengage and decide on the appropriate force option. If you decide to use a CEW, expect to articulate in court that based on training, experience, and assessment of the circumstances, the use of the device was the best force option for the situation. You must not use a CEW for verbal defiance, belligerence, punishment, or horseplay.

Do not use a CEW to coerce a subject to give statements or perform an illegal act. Using a CEW in a punitive manner without lawful authority may violate a subject's civil rights. You and your agency may be liable for injuries to the subject.

Tactical Considerations

Using a CEW is not a substitute for using a firearm when the situation requires lethal force. This does not exclude CEW use in place of a firearm when you have the time, reasonable cover, and a backup officer. Once making the decision to use a CEW, consider a number of tactical factors:

- What is the most effective area of the body to target?
- What is the physical environment around the subject?
- Are there officer safety concerns, or danger to the subject or nearby public?
- Do you have available cover or concealment if the CEW does not work properly?
- Do you have any time constraints?
- Is backup present or on the way?
- At what point in the encounter might you require more CEW applications?

Safety Considerations

Observe the subject continually and be aware of the methods they may use to defeat a CEW; this especially includes noticing where a subject's hands are. Consider a number of safety factors before using a CEW. For instance, if you encounter a subject in an elevated location, such as upon a ledge or stairwell, consider that if you fire a CEW, the subject may fall and get hurt. If a subject is operating a vehicle or machinery, they could lose control of the vehicle and endanger others' lives. A subject could drown when hit with a CEW if they are in or near water. If a subject is in an environment containing hazardous materials or potentially flammable, volatile, or explosive materials, the CEW could ignite the material and burn the subject. If you use OC spray on a subject, the CEW could set the subject on fire. Follow your agency policies and procedures regarding using OC sprays and CEWs.

Using Backup

Try to have at least one backup officer present to handcuff the subject after you gain compliance. You will be operating the CEW while the backup officer moves in and secures the subject. While the cycle is active, the backup officer may not be able to manipulate the subject's arms or legs to handcuff them. At this point, the person is usually no longer trying to resist and wants to comply, but has little or no muscular control and may appear to be resisting. As a safety precaution, the backup officer should be aware of the subject's potential uncontrollable overreaction in these situations.

SECTION VOCABULARY*amp**conducted electrical weapon (CEW)**cycle**drug-induced psychosis**electro-muscular disruption (EMD)**signature marks***After Care**

Based on your training and agency policies, consider removing the probes if all signs of resistance are gone. Treat removed probes as biohazard sharps. If there is excessive bleeding, get immediate medical attention for the subject. Look for and treat any possible secondary injuries, and seek medical attention if required. Trained medical professionals should remove all deeply embedded probes or probes that penetrate sensitive tissue areas (for example, neck, face, groin, and breast). Monitor anyone in custody who has been subjected to CEW use, even if the subject is receiving medical care.

Maintenance, Care, and Storage

Most CEWs have basic maintenance requirements. Keep the device clean and dry as much as possible. If it gets wet, make sure to turn it off and place it in a clean, dry place until it dries completely. Never test the device while it is still wet. Store the device according to the manufacturer's recommendation and your agency policies. Avoid prolonged storage in extreme temperatures.

Documenting CEW Use

Your agency will require prompt and accurate reporting of the decision to use a CEW, including an explanation of each use and cycle of application. Always prepare clear and complete reports. Specific report forms and requirements vary by agency and may include:

- the subject's threats, behaviors, and actions
- each trigger pull or cycle (each use or application of force)
- each mode of use
- each injury or allegation of injury
- your justification for using a CEW
- your justification for each mode used
- the medical status and condition of the subject
- an accurate timetable for the events of the entire incident, if possible

Current CEW Policy Issues and Trends

Be familiar with updated department policies, procedures, and case law regarding the use of CEWs. Be aware of current trends that subjects may try to use when threatened with a CEW. For example, some people now keep objects or shields under their clothing in case they encounter a law enforcement officer. As a result, the use of a CEW is ineffective. Another trend is a subject's stop, drop, and roll drill to pull out darts. If a subject begins to roll, close the distance, move with the subject, and keep sufficient slack in the wire to maintain electrical contact. Subjects may wait for the cycle to stop, then pull out the darts and possibly begin to run away. Be prepared to close in and use a drive stun or transition to another force option to stop the subject from escaping.

CHAPTER 6

Criminal Justice Officer Physical Fitness Training

Fitness Training 344

This chapter provides the physical fitness training requirements for the Florida Basic Recruit Training Programs. As a student in basic training, you should understand what level of physical fitness is expected of you during the training academy. A physical fitness assessment will be conducted in the first two weeks of training and again in the last two weeks of training. This course explains each part of the two assessments. Your score for each part will be recorded separately and retained as part of your training record.

FITNESS TRAINING

Fitness Training

OBJECTIVES

- PT001.** Explain why physical training requirements are necessary for a criminal justice officer.
- PT002.** Describe each of the five parts of the required physical assessments in a Commission-approved Basic Recruit Training Program.
- PT003.** Demonstrate the vertical jump in the required entry and exit assessments.
- PT004.** Demonstrate one-minute sit-ups in the required entry and exit assessments.
- PT005.** Demonstrate the 300-meter run in the required entry and exit assessments.
- PT006.** Demonstrate the maximum push-ups in the required entry and exit assessments.
- PT007.** Demonstrate the 1.5-mile run in the required entry and exit assessments.

LESSON GOAL: At the end of this course, you will be able to demonstrate improvement in your overall fitness and understand the importance of adopting a commitment to lifelong fitness.

Physical Training Requirements

Job analyses have shown several physical tasks are necessary to perform essential job duties of a criminal justice officer. Physical fitness is an underlying and predictive factor for effectively performing tasks such as:

- sustained pursuit using aerobic power
- sprints using anaerobic power
- dodging using aerobic or anaerobic power and flexibility
- lifting and carrying using muscular strength and endurance, and anaerobic power
- dragging, pulling, and pushing using muscular strength and endurance, and anaerobic power
- jumping and vaulting using anaerobic power, and leg power and strength
- crawling using muscular endurance and flexibility
- use of force using muscular strength and endurance, and anaerobic power
- use of force using muscular strength and endurance, and aerobic power

Members of the Cooper Institute for Aerobics Research (CIAR) have conducted many studies over the years (Collingwood, Hoffman, & Smith, 2004) to define the specific areas and levels of physical fitness. The areas and levels that have been determined are consistent with the essential functions of a criminal justice officer's job.

Five physical fitness components will be measured at the beginning and at the end of your Basic Recruit Training Program. These components are:

1. **Vertical Jump**—measures leg power and consists of measuring how high a student jumps.

2. **One-Minute Sit-Ups**—measures abdominal or trunk muscular endurance. While students lie on their backs, they will be given one minute to do as many bent leg sit-ups as possible.
3. **300-Meter Run**—measures anaerobic power, or the ability to make an intense burst of effort for a short time period or distance. This component requires students to sprint 300 meters.
4. **Maximum Push-Ups**—measures the muscular endurance of the upper body and consists of doing as many push-ups as possible until muscular fatigue develops.
5. **1.5-Mile Run**—measures aerobic power or cardiovascular endurance (stamina over time). To complete this component, the student must run or walk, as fast as possible, for a distance of 1.5 miles.

At this time, the Criminal Justice Standards and Training Commission does not mandate entry-level physical fitness or wellness standards. However, a trainee should enter the Basic Recruit Training Program at a fitness level that will provide them with the potential to successfully complete all of the physical fitness goals by the last two weeks of training.

Students must come prepared to participate in all components of the assessment during the first week of training. Your training academy may provide information about proven workout routines you can follow to prepare yourself for the five exercises in the physical fitness assessments.

Students who are injured during basic training and unable to complete testing upon exiting, must successfully complete the training and testing at a later date when approved by their physician. A student cannot earn a graduation certificate until completing all of the required training and testing.

Vertical Jump

Purpose

This exercise is a measure of jumping or explosive power.

Equipment

1. vertical measuring apparatus fixed to a smooth wall
2. some way to mark extension when jumping (for example, chalk dust or Velcro) between each set of an exercise

How to Prepare for the Vertical Jump

A good way to prepare for this component is to do plyometric (stretching and sudden contracting of muscles) training. The basic plyometric exercise routine consists of three exercises: double-leg vertical jump, double-leg hop, and single-leg vertical jump. Perform each exercise with one set of 10 repetitions, three days a week. Do the repetitions without stopping, and rest three minutes before starting the next exercise.

Double-Leg Vertical Jump

Intensity level: High

Starting position: Stand with your feet shoulder-width apart.

Direction of jump: Vertical

Arm action: Double-arm action

Starting action: Begin by moving arms forcibly back and forth and jump as high as possible.

Ascent: Thrust arms upward vigorously, reaching as high as possible.

Descent: When your feet hit the ground, jump again immediately without a stutter step.

Double-Leg Hop

Intensity level: Medium

Starting position: Stand with your feet shoulder-width apart.

Direction of jump: Horizontal

Arm action: Double-arm action

Starting action: Begin by moving arms forcibly back and forth with a leaning action.

Ascent: Think about “hanging” in the air.

Descent: Land in the starting position and immediately repeat the movement.

Single-Leg Vertical Jump

Intensity level: High

Starting position: Stand with one foot on the ground.

Direction of jump: Vertical

Arm action: Double-arm action

Starting action: Rapidly move arms back and forth and jump as high as possible.

Ascent: Thrust your arms upward vigorously, reaching as high as possible.

Descent: When your foot hits the ground, jump again immediately without a stutter step.

(Place emphasis on maximum height and quick, explosive takeoffs. Repeat this exercise with the opposite leg after a brief rest of 15–30 seconds.)



Vertical jump

Figure 6-1

Procedures for Testing

1. Stand with your feet together and with one side of your body toward the wall, and reach up as high as possible to mark your standard reach.
2. Jump as high as possible and mark the highest point of your jump. Jump from both feet in a stationary stance. You can pump and thrust your arms upward.
3. Your score is the total inches, to the nearest $\frac{1}{2}$ inch, above the standard reach mark.
4. Record the best score after three trials. (See Figure 6-1)

One-Minute Sit-Ups

Purpose

This component of the assessment measures abdominal muscular endurance.

How to Prepare for Sit-Ups

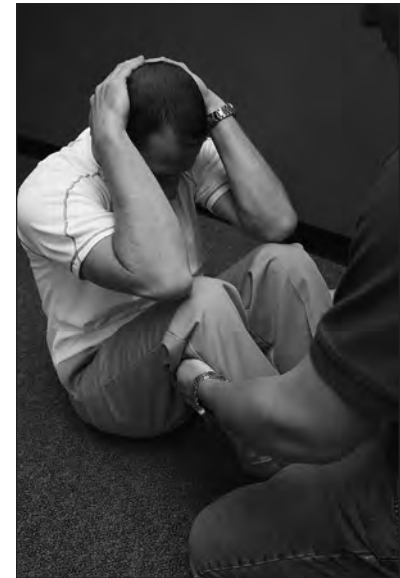
1. Estimate the maximum number of correct sit-ups you can do in one minute. Multiply that number by 0.75 (75%). Round the result to the lowest number. This will be the number of repetitions (sit-ups) you will do per set.
2. Warm up with some light activity of your choice, such as riding a stationary bike, walking or jogging on the treadmill, or doing light calisthenics.
3. Perform the number of sit-ups (correct form) determined in the calculation done in No. 1 above.

4. Rest no longer than 60 seconds, and do another set of repetitions.
5. Repeat No. 3 and No. 4 until you have done three to five sets of repetitions. Even though the last sets may be difficult, maintain proper form. If you have to hesitate longer on the floor on the last sets to finish every repetition, then do so, but rest no longer than what is necessary to recuperate. It is important you complete all the repetitions.
6. Do this routine every other day. Increase the number of repetitions per set by one or two each week.

If you are unable to do at least five repetitions per set, modify your routines to perform sufficient repetitions to address muscular endurance. Follow a crunch or curl routine for your abdominals, and get assistance when using leg exercises (multi-hip machine or leg lifts). Also, you could use an abdominal machine in a fitness facility using a light enough resistance to get in 15 repetitions per set for three sets.

Procedures for Testing

1. Start by lying on your back, with knees bent, heels flat on the floor, and fingers laced and held behind the head. Avoid pulling your head with your hands. Your buttocks must remain on the floor, and do not thrust your hips.
2. Have a partner hold your feet down.
3. Then, perform as many correct sit-ups as possible in one minute.
4. In the up position, touch your elbows to your knees and fall downward until your shoulder blades touch the floor.
5. Record the best score after the one-minute time limit has expired. Your score equals the total number of correct sit-ups.
6. Rest only in the up position (if you need to rest). Breathe as normal as possible; and make sure you do not hold your breath. (See Figure 6-2)



One minute sit-ups

Figure 6-2

300-Meter Run

Purpose

This exercise measures anaerobic power.

Equipment

1. stopwatch
2. 400-meter running track, or any measured 300-meter flat surface with sufficient distance for slowing to a stop

How to Prepare for the 300-Meter Run

To prepare for this component, do interval training. First, time yourself running 110 yards with all-out effort. This will be your initial time. Second, divide your initial time by 0.80 to get your training time.

Procedures for Testing

1. Warm up and stretch before testing.
2. Run 300 meters at your maximum level of effort.
3. Record the amount of time it took to complete the required distance.
4. Walk for 3–5 minutes immediately after the test to cool down. This is an important safety practice.

You may walk, if necessary. However, the time spent walking will be recorded as time walked and not time ran.

Maximum Push-Ups

Purpose

This component measures the muscular endurance of the upper body (anterior deltoid, pectoralis major, triceps).

How to Prepare for Push-Ups

1. Estimate the maximum number of correct push-ups you can do in one minute. Multiply that number by 0.75 (75%). Round the result to the lowest number. This will be the number of repetitions you will do per set.
2. Warm up with some light activity of your choice, such as riding a stationary bike, walking or jogging on the treadmill, or doing light calisthenics.
3. Perform the number of push-ups (correct form) determined in the calculation done in No. 1 above.
4. Rest no longer than 60 seconds, and do another set of repetitions.
5. Repeat No. 3 and No. 4 until you have done three to five sets of repetitions. Even though the last sets may be difficult, maintain proper form. If you have to hesitate longer on the floor on the last sets to finish every repetition, then do so, but rest no longer than what is necessary to recuperate. It is important you complete all the repetitions.
6. Do this routine every other day. Increase the number of repetitions per set by one or two each week.

Women may prepare for the push-ups using either the standard push-up or the modified knee push-up.

If you are unable to do at least five repetitions per set, adjust the above calculations to modified push-ups (from the knees) to keep the number of repetitions high enough to address muscular endurance. Get assistance in designing a strength routine using select machines, including chest, arms, and torso exercises.

Procedures for Testing—Standard Push-Ups

1. Place hands shoulder-width apart, with your fingers pointing forward.
2. Start from the up position, with your arms fully extended, your elbows locked, and only your hands and feet touching the floor. Keep your back straight at all times and lower your chest to about 3 inches from the floor. A small rubber ball or sponge (3 inches in dimension) can be placed below you on the floor to check for distance. Then, return to the up position with your elbows fully locked. This counts for one repetition.
3. When you elect to stop or cannot continue, the instructor will record your total number of correct push-ups as the score. Your score equals the total number of correct push-ups.
4. Rest only in the up position. Your back must remain straight while resting. There is no time limit for this exercise. (See Figure 6-3)



Standard push-up

Figure 6-3

Female students may choose to do standard or modified push-ups.

Procedures for Testing—Modified (Knee) Push-Ups for Women

1. Place your hands shoulder-width apart, with your fingers pointing forward.
2. Start from the up position, with your arms fully extended and your elbows locked. Keep your knees bent and your ankles crossed. Only your hands and knees should touch the floor. Keep your back straight at all times and lower your chest to about 3 inches from the floor. A small rubber ball or sponge (3 inches in dimension) can be placed below you on the floor to check for distance. Then, return to the up position with your elbows fully locked. This counts for one repetition.
3. When you elect to stop or cannot continue, the instructor will record your total number of correct push-ups as the score. Your score equals the total number of correct push-ups.
4. Rest only in the up position. Your back must remain straight while resting. There is no time limit for this exercise. (See Figure 6-4)



Modified push-up

Figure 6-4

1.5-Mile Run

Purpose

The 1.5-mile run is a measure of aerobic power (cardiovascular endurance). The objective in the 1.5-mile run is to cover the distance as fast as possible.

Equipment

1. stopwatch
2. indoor or outdoor track or another suitable flat running area measured to 1.5 miles

How to Prepare for the 1.5-Mile Run

To prepare for this test, gradually increase your running endurance. Begin at the level you can accommodate, and use a workout format that involves walking and running. Run a short distance, walk for a while, and run again. Begin slowly and proceed to the next level by improving your overall running or walking time.

Procedures for Testing

1. Warm up and stretch thoroughly before running.
2. Run 1.5 miles as fast as possible.
3. Finish times should be recorded.
4. Upon completing the run, walk for 3-5 minutes immediately following the run to cool down.

You may walk, if necessary. However, the time spent walking will be recorded as time walked and not time ran.

Acknowledgement: Our thanks to the Indiana Law Enforcement Academy for allowing us to use their materials in developing the physical fitness course materials.

GLOSSARY

A

abandonment: giving up a right or interest with the intention of never again claiming it (First Aid)

ABCs: airway, breathing, and circulation; assessment begins with ABCs (First Aid)

abdominal evisceration: an open wound where organs protrude from the abdominal cavity (First Aid)

ability: when considering deadly force, ability refers to the capacity a subject has to carry out intent to cause death or great bodily harm (Defensive Tactics)

abrasion: an open wound caused by scraping, shearing away, or rubbing the outermost skin layer (First Aid)

action: the mechanism of a firearm involved with presenting the round or cartridge for firing, and in removing the spent casing and introducing a fresh round or cartridge. This is also known as “cycling the gun.” (Firearms)

active resistance: a subject’s use of physically evasive movements directed toward an officer; examples include bracing, tensing, pushing, or pulling to prevent the officer from establishing control over the subject (Defensive Tactics)

acuity: sharpness of vision (Vehicle Operations)

advance directive: a written statement of a person’s wishes regarding medical treatment to ensure those wishes are carried out if the person is unable to communicate them to a doctor (First Aid)

AED: automated external defibrillator, a portable electronic device used to help those experiencing sudden cardiac arrest (First Aid)

aggressive resistance: a subject’s attacking movements toward an officer that may cause injury but are not likely to cause death or great bodily harm to the officer or others (Defensive Tactics)

AIDS: Acquired Immune Deficiency Syndrome, a disease of the immune system due to infection with HIV (human immunodeficiency virus) (First Aid)

airborne infection: any infection spread from person to person through the air; caused by breathing in microscopic, disease-bearing organisms called pathogens (First Aid)

amniotic sac: the bag of fluid surrounding a fetus (First Aid)

amp: short for ampere, the base unit of electrical current or power (CEW-DFSG)

amputation: the gross removal of a limb (First Aid)

anaphylaxis: a severe allergic reaction in which air passages swell and restrict breathing (First Aid)

anti-lock braking system (ABS): an electronic braking system that monitors and controls each of the wheels during braking to keep them from locking (Vehicle Operations)

apex: regarding turning while driving, it is the center point of a curve (Vehicle Operations)

arterial bleeding: bright red blood spurting from a wound, indicating a severed or damaged artery (First Aid)

asthma: a chronic disease that inflames airways and can cause wheezing, coughing and trouble breathing (First Aid)

AVPU: a method for identifying four levels of patient responsiveness: alert, verbal, pain, and unresponsive (First Aid)

avulsion: an injury characterized by a flap of skin, torn or cut, that may not be completely loose from the body (First Aid)

B

balance: a position in which the head is over the hips, and weight is distributed evenly between the feet; necessary for performing defensive tactics (Defensive Tactics)

balance displacement: a controlling technique used to break the subject's balance through the use of leverage principles (Defensive Tactics)

barricade position: a position behind cover (Firearms)

birth canal: the passage from the womb through which a fetus passes during birth (First Aid)

block: reactionary techniques using the arms, legs, or body to deflect or redirect a subject's impending strike to other areas of the body (Defensive Tactics)

bloodborne pathogens: pathogenic microorganisms in human blood that can cause disease in humans (First Aid)

body movement: how an officer approaches a subject or enters a scene (Defensive Tactics)

breach of duty: the failure of an officer to act or failure to act appropriately (First Aid)

breath control: important in the aiming process when firing a weapon; breathing while trying to aim causes the handgun to move vertically along with the rise and fall of one's chest (Firearms)

bruising: a discoloration of the soft tissue at an injury site (First Aid)

BSI (body substance isolation): the standard form of infection control with all patients, it requires isolating body substances from the officer and other patients to prevent disease and infection transmission; BSI includes two basic behaviors: using medical personal protective equipment and personal behaviors that reduce risk (First Aid)

C

caliber: the internal diameter of a gun barrel and of the bullets loaded into the gun (Firearms)

capillary bleeding: dark red blood oozing from a wound, indicating damaged capillaries (First Aid)

cardiac muscle: the heart muscles that works constantly to expand and contract it (First Aid)

cardiovascular training: any exercise that elevates the heart rate to a range between 60% and 85% of the maximum rate (Defensive Tactics)

Cartridge Parts and Types (Firearms)

Parts

bullet: portion of the cartridge that becomes a projectile when in flight

case/casings: the metal or plastic container that holds all parts of a round of ammunition: primer, powder charge, and bullet

crimp (shotgun only): the part of the case mouth that bends inward to grip the bullet; with shotgun shells, the term applies to the closure at the case mouth

headstamp: markings found on the head of ammunition that indicate the caliber or gauge and identify the manufacturer

powder: propellant used in most firearms; produces a large volume of gas when ignited

primer: the detonating mixture used to ignite the propellant or powder charge

rim: the edge on the base of a cartridge case that stops the progress of the case into the chamber

round: complete ammunition cartridge that contains all parts of ammunition; a military term meaning a single cartridge

shot (shotgun): spherical pellets of various sizes, usually made of lead

wad (shotgun): the only part not found in any other centerfire cartridge; this is used to seal and confine gases; can be made of plastic or compressed cardboard

Types

birdshot: normally used for bird hunting or practice; this shell has a load of small lead or steel shot pellets; used for training purposes

00 buckshot (double-ought buckshot): 2 ¾-inch shell with nine .33 caliber lead pellets or a 3-inch magnum shell with 12 .32 caliber pellets; penetrates solid wood doors, drywall, and wood walls at close range

rifled slug: single, hollow lead bullet that weighs from 7/8 ounce to 1 1/8 ounces; is .72 caliber and penetrates most materials but not solid steel

caster effect: the tendency for a vehicle travelling forward to straighten from a turn when the driver releases the steering wheel (Vehicle Operations)

CDC: Centers for Disease Control and Prevention (First Aid)

central nervous system: the complex of nerve tissues that controls the activities of the body, comprising the brain and spinal cord (First Aid)

centrifugal force: the force enacted on a vehicle moving in a curved path that acts outwardly away from the center of rotation (Vehicle Operations)

centripetal force: (tire traction) the force that is necessary to keep a vehicle moving in a curved path and is directed inward toward the center of rotation (Vehicle Operations)

cervix: the narrow passage that forms the lower end of the uterus; it contains a mucus plug during pregnancy (First Aid)

circulatory system: the system that pumps blood throughout the body; it consists of the heart, blood, blood vessels, lymph, and the lymphatic vessels and glands (First Aid)

clinch: a technique that involves holding a person tightly in a close position; used with striking techniques to transition to a takedown, or as a stalling technique (Defensive Tactics)

closed chest injury: results from blunt trauma to the chest area; damages internal organs or causes internal bleeding (First Aid)

closed fracture: a fracture in which the skin at the injury site remains intact (First Aid)

color vision: the ability to distinguish colors (Vehicle Operations)

command presence: an officer's demeanor and the way they exhibit confidence through personal appearance, erect posture, alertness, and attention to surroundings (Defensive Tactics)

communication: the exchanging of information through verbal and nonverbal methods; provides valuable insight into the likelihood of cooperation and compliance of a subject (Defensive Tactics)

complex motor skills: a combination of fine and gross motor skills using hand and eye coordination timed to a single event (Defensive Tactics)

compliance: the verbal or physical yielding to an officer's authority without apparent threat of resistance or violence (Defensive Tactics)

concealment: an object or group of objects that creates a visual barrier between an officer and a threat but may not stop a projectile (Firearms)

conducted electrical weapon (CEW): a device that uses a high-voltage, low-power electrical charge to induce involuntary muscle contractions that temporarily incapacitate a non-compliant subject (also known as a dart-firing stun gun, electronic control device, electronic immobilization device, and conducted energy device).

constant radius: a turn that remains the same throughout, getting neither wider nor smaller (Vehicle Operations)

contusion: bruise; a closed injury that is discolored and painful at the injury site (First Aid)

counter steering: turning the vehicle's front tires in the desired direction to regain traction (Vehicle Operations)

cover: anything that creates a bullet-resistant barrier between an officer and a threat (Firearms)

CPR: cardiopulmonary resuscitation, an emergency procedure that combines chest compressions and ventilation to restore blood circulation and breathing (First Aid)

CS: orthochlorobenzal-malonitrile, a chemical agent that causes severe irritation to the eyes, commonly used by law enforcement in riot control to force crowds to disperse; usually in the form of hand-held canisters and chemical projectiles (Defensive Tactics)

custodial search technique: a complete search of the subject used when a subject is taken into custody in an unsecured environment (Defensive Tactics)

cyanosis: a bluish discoloration of the skin resulting from poor circulation or low oxygenation of the blood (First Aid)

cycle: the predetermined amount of time (usually five seconds) that a stun device will discharge automatically when activated (CEW-DFSG)

D

danger zone: the area within the reactionary gap (Defensive Tactics)

deadly force: force that is likely to cause death or great bodily harm (Defensive Tactics)

deadly force resistance: a subject's hostile, attacking movements, with or without a weapon, that create a reasonable perception by the officer that the subject intends to cause and has the capability of causing death or great bodily harm to the officer or others (Defensive Tactics)

decreasing radius: a turn that gets tighter during the turn much like a circle getting smaller (Vehicle Operations)

de-escalation: reduction of the intensity of a conflict or potentially violent situation (Defensive Tactics)

defensive tactics: a system of controlled defensive and offensive body movements that criminal justice officers use to respond to a subject's aggression or resistance (Defensive Tactics)

depth perception: the ability to judge distance and perceive space to determine how far away an object is (Vehicle Operations)

diabetes: a disease in which the body does not produce or properly use insulin (First Aid)

dialogue: controlled, nonemotional communication between an officer and a subject, aimed at problem solving and communication (Defensive Tactics)

digestive system: the system that ingests and digests food and nutrients; it includes the stomach, pancreas, liver, gallbladder, and small and large intestines (First Aid)

dilation: the first stage of labor before birth; begins with the initial contraction and continues until the fetus enters the birth canal (First Aid)

disengagement: the discontinuing of commands or the physical use of force; breaking away from a subject (Defensive Tactics)

dislocation: an injury occurring when the end of a bone comes out of its socket at the joint (First Aid)

distal circulation: blood circulation below the injury site (First Aid)

diversion: a technique that interrupts the subject's concentration so that energy is redirected from the current focus (Defensive Tactics)

DNR/DNRO: Do Not Resuscitate or Do Not Resuscitate Order; documents the terminally or chronically ill patient's wish to withhold specific medical care (First Aid)

DOTS: deformities, open injuries, tenderness, and swelling; injuries and symptoms to look for during a physical assessment of a potentially injured person (First Aid)

double action only: a firearm in which every round fires double action with the hammer at rest against the rear of the slide (Firearms)

double feed (handgun): a failure to extract the round in the chamber and a new round being fed from the magazine (Firearms)

double feed (shotgun): a weapon malfunction when the shell stop fails to retain a shell in the magazine tube after one has been moved onto the carrier (Firearms)

double/single: a pistol in which the hammer must be manually cocked and the first round fires double action but the subsequent rounds fire single action (Firearms)

drug-induced psychosis: a form of psychosis that can result from drug use, typically causing hallucinations, delusions, or positional asphyxia (inability to breathe because of body position) (CEW-DFSG)

duty life: the recommended time (normally expressed in months) that ammunition can be expected to be reliable (Firearms)

duty to act: the duty to take some action to prevent harm to another and for the failure of which an officer may be liable depending on the relationship of the parties and the circumstances (First Aid)

E

electro-muscular disruption (EMD): physical incapacitation caused when DFSG probes hit a subject, transmitting electric impulses that interfere with the electric impulses used by the human nerve system to communicate with the skeletal muscles

electronic control device (ECD) or electronic immobilization device: a device that uses a high voltage, low-power electrical charge to induce involuntary muscle contractions that temporarily incapacitate a non-compliant subject; also known as electronic immobilization device, conducted energy weapon (CEW), or conducted energy device (CED) (Defensive Tactics, CEW)

emergency move: a relocation performed when a patient is in immediate danger or when the patient's location prevents providing care to them or another patient (First Aid)

empty-hand striking technique: any impact technique using hands, arms, elbows, feet, legs, knees, or head to strike a subject in an offensive or defensive situation (Defensive Tactics)

EMS system (emergency medical services system): a network of trained professionals linked to provide advanced, out-of-hospital care for victims of a sudden traumatic injury or illness (First Aid)

EMT: emergency medical technician who has advanced, specialized training that enables them to provide comprehensive care to patients (First Aid)

endocrine system: the system that regulates other body systems by secreting hormones directly into the bloodstream from glands (First Aid)

escalation: increasing the intensity or seriousness of a situation (Defensive Tactics)

escort: a technique used to move a subject from one point to another without using pain compliance; provides minimal control of the subject through leverage (Defensive Tactics)

evasion: shifting one's body or side stepping to avoid an attack (Defensive Tactics)

evisceration: an open wound where the organs protrude (First Aid)

excited delirium: a state of extreme mental and physiological excitement characterized by exceptional agitation and hyperactivity, overheating, excessive tearing of the eyes, hostility, superhuman strength, aggression, acute paranoia, and endurance without apparent fatigue; can lead to death (First Aid)

expressed consent: consent that is clearly and unmistakably stated (First Aid)

expulsion: the second stage of labor; the fetus moves through the birth canal and is delivered (First Aid)

eye-targeting: looking in the desired direction of travel to avoid an obstacle and steering in that direction (Vehicle Operations)

F

failure to eject (stovepipe): a weapon malfunction that occurs when a fired round does not completely eject (Firearms)

failure to extract: a weapon malfunction that occurs when a spent casing remains in the chamber while a new cartridge enters the chamber (Firearms)

failure to feed: a weapon malfunction that occurs when the cartridge fails to feed into the chamber (Firearms)

failure to fire: a weapon malfunction that occurs when the trigger is pulled, but the round fails to detonate (Firearms)

femur: thighbone; the longest and strongest bone in the human body (First Aid)

fine motor skills: the muscle control required to make small, precise movements (Defensive Tactics)

flail chest: a closed chest injury that occurs when two or more adjacent ribs are fractured in two or more places and become free floating (First Aid)

follow-through: the maintenance of sight alignment before, during, and after firing a round (Firearms)

Force Guidelines: a framework for making decisions involving the reasonable use of force by criminal justice officers (Defensive Tactics)

fracture: a bone break (First Aid)

frostbite: a localized injury from overexposure to cold (First Aid)

frozen cylinder: a cylinder that does not rotate (Firearms)

full thickness burn: a third-degree burn that damages all skin layers and affects muscles and nerves; causes skin to look waxy, white, or charred (First Aid)

G

gauge: a measurement of shotgun bores derived from the number of bore-sized balls of lead per pound (Firearms)

genitourinary system: the system responsible for reproduction and waste removal (First Aid)

Good Samaritan Act: protects a first aid provider from liability for medical care performed in good faith or medical care similar to that expected of another first aid provider with equal training (First Aid)

grappling: the use of body mechanics to control a subject (Defensive Tactics)

gross motor skills: the movements of the large or major muscles of the body used in tasks such as running, punching, or kicking (Defensive Tactics)

H

handcuffs: temporary restraining devices used frequently to control a subject (Defensive Tactics)

handgun: a semiautomatic pistol or revolver (Firearms)

heart attack: caused by oxygen deprivation to part of the heart, typically from a blocked blood vessel, possibly leading to cardiac arrest (First Aid)

hematoma: a closed injury that appears as a discolored lump (see swelling) (First Aid)

hepatitis A virus: a highly infectious disease spread by person-to-person contact, generally through fecal contamination or oral ingestion (First Aid)

hepatitis B virus: a highly infectious disease spread through sexual contact, sharing contaminated needles (through intravenous drug use), or through blood transfusions (First Aid)

hepatitis C virus: the most common chronic bloodborne infection; primarily transmitted through direct contact with human blood, from sharing needles or drug paraphernalia, or from an infected mother delivering her baby (First Aid)

HIPAA (Health Insurance Portability and Accountability Act of 1996): protects the rights of patients and restricts the release of patient information (First Aid)

HIV: human immunodeficiency virus, a bloodborne virus that attacks the immune system and causes AIDS; transmission occurs primarily during sexual contact with an infected individual, when intravenous drug users share contaminated needles, from infected mother to unborn child, and from contact with blood, certain body fluids, and tissue from an infected individual (First Aid)

hyperthermia: occurs when the body cannot recover from fluid loss due to a heat-related situation (First Aid)

hypothermia: the excessive cooling of the body's core temperature (First Aid)

I

ICS (Incident Command System): a multiple-agency response to a disaster (First Aid)

impact weapon: any object used for striking (Defensive Tactics)

implied consent: consent inferred from conduct rather than from direct expression (First Aid)

incipient skid: a skid that occurs just before tires lose traction during braking; the tires lock and cause a skid (Vehicle Operations)

incipient spin: a skid that occurs just before the drive tires lose traction during acceleration (Vehicle Operations)

increasing radius: a turn that becomes wider during the turn much like a circle getting larger (Vehicle Operations)

informed consent: a person's agreement to allow something to happen, made with full knowledge of the risks involved and the alternatives (First Aid)

inhalation burn: occurs when a patient has a burn to any part of the airway (First Aid)

insulin: the hormone needed to convert sugar, starches, and other food into energy needed for daily life (First Aid)

intent: when considering deadly force, intent refers to a subject's sense of resolve to voluntarily make the bodily movement that becomes the act to commit a criminal offense (Defensive Tactics)

intermediate weapon: a tool used when empty-handed control is ineffective, but the subject's level of resistance does not merit deadly force; baton, OC spray, conducted electrical weapon (Defensive Tactics)

interview stance with an impact weapon: a low profile stance with the weapon held partially hidden behind the leg (Defensive Tactics)

involuntary muscles: smooth muscles that carry out many automatic body functions (First Aid)

J

joint manipulation: a method of gaining control over a subject by bending or twisting a joint in a direction that will cause pain or discomfort to the joint (Defensive Tactics)

L

labor: the final phase of pregnancy; begins the birthing process (First Aid)

laceration: an open wound in soft tissue (First Aid)

leverage: using a great force against a weaker resistance (Defensive Tactics)

LOC (level of consciousness): a patient's mental status due to illness or injury (First Aid)

M

malfunction: a condition that prevents a weapon from operating normally (Firearms)

MCI (multiple casualty incident): an incident that involves more than one victim (First Aid)

mechanical compliance: a method used to gain control over a subject by applying pressure or leverage on a joint by locking it up so that no movement of the joint is possible, causing the subject to comply with verbal direction (Defensive Tactics)

medical alert: a bracelet, necklace, or card that alerts medical personnel to a specific medical condition (First Aid)

motor dysfunction: a method of gaining control over a subject by using an incapacitation technique that causes temporary impairment of muscular control (Defensive Tactics)

MRSA: methicillin-resistant *Staphylococcus aureus*, a type of bacteria that are highly contagious and resistant to certain antibiotics; causes a skin infection that is red, swollen, or painful, or an area that is warm to the touch or is draining pus; may look like a spider bite, pimple, or boil, and the person may have a fever (First Aid)

muscular system: the system that gives the body shape, protects internal organs, and provides body movement (First Aid)

N

negligence: failure to exercise the standard of care that a reasonably prudent person would have exercised in a similar situation; conduct that falls below the legal standard established to protect others against unreasonable risk of harm, except for conduct that intentionally, wantonly, or willfully disregards others' rights (First Aid)

nervous system: the system that controls voluntary and involuntary body activity, supports higher mental functions such as thought and emotion, allows the individual to be aware of and react to the environment, and keeps the rest of the body's systems working together (First Aid)

night vision: the ability to see clearly in darkness (Vehicle Operations)

nonlethal weapon: a weapon that is not fundamentally designed to cause death or great bodily harm (Defensive Tactics)

O

objective reasonableness: a term the courts have used to describe the process for evaluating the appropriateness of an officer's response to a subject's resistance (Defensive Tactics)

OC: commonly called pepper spray; a type of chemical agent commonly used by law enforcement, usually in the form of handheld canisters and chemical projectiles (Defensive Tactics)

occlusive: airtight (First Aid)

offensive ready stance with an impact weapon: a high profile stance with the weapon held at a shoulder position to enable a rapid strike (Defensive Tactics)

officer presence: an officer's ability to convey to subjects and onlookers that he or she is ready and able to take control (Defensive Tactics)

open chest injury: an injury that occurs when penetration opens the chest area (First Aid)

open fracture: a fracture where the skin at the injury site is broken and the bone may protrude through the skin (First Aid)

opportunity: when considering deadly force, opportunity refers to a subject's capacity for carrying out an intention to cause death or great bodily harm to others (Defensive Tactics)

oversteer: the tendency of a vehicle to steer into a sharper turn than the driver intends (Vehicle Operations)

P

pain compliance: a subject's response to a combination of pain and verbal commands to stop resisting (Defensive Tactics)

partial thickness burn: second-degree burn that damages the first two skin layers, which blister and feel very painful (First Aid)

passive resistance: a subject's verbal or physical refusal to comply with an officer's lawful direction, causing the officer to use physical techniques to establish control (Defensive Tactics)

pat down: a physical frisk of a subject conducted in a predetermined pattern to locate weapons (Defensive Tactics)

penetrating strike: striking a muscle so that the striking object penetrates the muscle and nerves of the target area; a full transfer of kinetic energy that increases the power of the strike (Defensive Tactics)

perfusion: a patient's pulse rate (First Aid)

peripheral nervous system: the system of nerves that connect to the spinal cord and branch out to every other part of the body; it serves as a two-way communication system (First Aid)

peripheral vision: the ability to see above, below, and to the sides (Vehicle Operations)

physical control: achieving compliance or custody through the use of empty-hand or leverage-enhanced techniques, such as pain compliance, transporters, restraint devices, takedowns, and striking techniques (Defensive Tactics)

pitch: a vehicular motion that occurs during acceleration or braking and causes the transfer of a vehicle's weight from front to rear or rear to front (Vehicle Operations)

placenta: the disk-shaped inner lining of the uterus; provides nourishment and oxygen to a fetus (First Aid)

placental: the third stage of labor during which the placenta separates from the uterine wall and moves through the birth canal for delivery (First Aid)

plain touch/feel doctrine: permits officers to seize any object "whose contour or mass" they identify as apparent contraband during a pat down (Defensive Tactics)

PMS: assessments of pulse, motor, and sensory functions when examining extremities for potential injuries (First Aid)

point shooting: a technique used when a shooter cannot use the sights on the weapon or he or she has no time to align the sight properly; the firearm is viewed as an extension of the arm and pointed at the target (Firearms)

positional asphyxia: the placement of a body in a position that interferes with the ability to breathe and could result in death (First Aid)

posting: supporting the balance of the body using a limb (Defensive Tactics)

PPE (personal protective equipment): items that serve as a barrier against infection; includes eye protection, gloves, protective clothing, masks or shields, and biohazard bags (First Aid)

pressure points: techniques used to control resistant behavior by using pain compliance (Defensive Tactics)

prone position: lying on the stomach face down (Defensive Tactics)

PSI (pounds per square inch): used to measure tire pressure (Vehicle Operations)

puncture wound: an injury caused by a pointed object that pierces or penetrates the skin (First Aid)

pursuit: an active attempt when an officer drives an authorized emergency vehicle (with emergency equipment activated), to apprehend occupants of a moving vehicle if the driver increases vehicle speed, takes other evasive actions, or refuses to stop in an apparent attempt to avoid apprehension (Vehicle Operations)

Pursuit Immobilization Technique (PIT): a way an officer stops a violator's vehicle by using the police vehicle to apply force to either the rear right or left side of the violator's vehicle to end the pursuit (Vehicle Operations)

Q

quadrant search approach: dividing the body into four sections horizontally and vertically during a search (Defensive Tactics)

R

radius: the distance from the center to the outside of a circle (Vehicle Operations)

reaction time principle: the amount of time it takes for the brain to process a physical threat and for the body to respond (Defensive Tactics)

reactionary gap: the distance officers must keep between themselves and a subject to react effectively against a sudden threat (Defensive Tactics)

reasonable suspicion: the facts or circumstances that reasonably indicate that a person has committed, is committing, or is about to commit a violation of the law (Defensive Tactics)

recovery position: a position where the patient is rolled over (preferably onto the left side) with knees slightly bent; helps maintain an open airway if the patient vomits and may prevent positional asphyxia (First Aid)

redirection: using one's hands to move the subject away (Defensive Tactics)

relative positioning: an officer's position in relation to the subject (Defensive Tactics)

respiratory pause: the extended pause between breaths, which is the optimum time to fire the shot(s) (Firearms)

respiratory system: the system that delivers oxygen to and removes carbon dioxide from the blood (First Aid)

restraint devices: tools such as handcuffs designed to temporarily restrain a subject's movements (Defensive Tactics)

roadblock: vehicles, barricades, cones, or other objects that partially or completely block traffic flow (Vehicle Operations)

roll: a vehicular motion that occurs when turning and that shifts the vehicle's weight from side to side (Vehicle Operations)

rolling friction: traction created when a vehicle's tires constantly rotate against the road surface without losing contact (Vehicle Operations)

S

safety check: performed each time you pick up, put down, or hand a firearm to another person, and involves pulling back the slide to the locked position or opening the cylinder or bolt to physically and visually check that the firearm is not loaded (Firearms)

SAMPLE: signs and symptoms, allergies, medications, past history, last oral intake, events; a method to help an officer acquire information useful in determining causes of injury or illness (First Aid)

Scoville heat unit (SHU): a measure of the heat properties (burning sensation) of capsaicin, the active component of chili peppers used in OC spray (Defensive Tactics)

search: a government intrusion into a place in which a person has a reasonable expectation of privacy (Defensive Tactics)

shelf life: the recommended time that ammunition can be expected to be reliable, from manufacture time to issue time (Firearms)

shock: failure of the heart and blood vessels (circulatory system) to maintain enough oxygen-rich blood flowing to the vital organs of the body (First Aid)

shooting hand: the hand that is used to shoot a firearm (Firearms)

shrimping: the movement in a hip escape; moving from side to side while avoiding or defending against an attack (Defensive Tactics)

sight alignment: the relationship of the front sight and rear sight with the shooter's eye (Firearms)

sight picture: the relationship between the eye, front sight, rear sight, and target (Firearms)

signature marks: the marks left on a subject's body after stun-gun applications (CEW-DFSG)

single action: a firearm in which the hammer must be cocked before the weapon can be fired (Firearms)

skeletal system: the supporting framework for the body, giving it shape and protecting vital organs; attains mobility from the attached muscles and manufactures red blood cells (First Aid)

skid: the loss of rolling friction and traction that occurs when a vehicle's wheels lock and do not turn while the vehicle is still moving (Vehicle Operations)

skin: the protective covering for the inside of the body; it provides a barrier against bacteria and other harmful substances and organisms; it acts as a communication organ and helps regulate body temperature (First Aid)

slide: results from the loss of both rolling friction and traction; the vehicle's wheels still rotate but they do not control the vehicle's movement (Vehicle Operations)

snap-back: a strike that is retracted very quickly, thus enabling multiple strikes, creating distance, setting up the next techniques, and causing distraction to the subject (Defensive Tactics)

squib load: a weapon malfunction that occurs when the primer ignites and there is no burn or partial burn of the powder charge (Firearms)

stabilization: immobilizing the subject's head so the subject cannot move or escape (Defensive Tactics)

stacked feed: a weapon malfunction that occurs when a round is in the chamber and the action is closed (Firearms)

stalling: a tactical method of safely controlling a suspect until an officer can physically recover, reassess the situation, or backup arrives (Defensive Tactics)

stance: the posture a shooter assumes while firing a shot (Firearms)

START (Simple Triage And Rapid Treatment): a method of triage that assesses a large number of victims rapidly using personnel with limited medical training (First Aid)

STD (sexually transmitted disease): an infection transmitted through sexual contact; among the most common infectious diseases (First Aid)

strobing: forcefully blinking the eyes using all the muscles in the face, including those in the forehead (Defensive Tactics)

stroke: damage to part of the brain due to the rupture or blockage of a blood vessel (First Aid)

submit: accept or yield to a superior force or to the authority or will of another person (Defensive Tactics)

sucking chest injury: a type of open chest injury in which air or blood escapes into the area surrounding the lungs, creating a change in the pressure in the chest cavity (First Aid)

Sudden In-Custody Death Syndrome (SICDS): a broad classification for unexplained in-custody deaths (Defensive Tactics)

superficial burn: a first-degree burn that damages the first layer of skin; becomes red and feels very painful (First Aid)

supine position: lying on the back face up (Defensive Tactics)

support hand: the hand that assists the shooting hand (Firearms)

survival stress: a measure of anxiety caused by an appraisal of a stimulus that leads to an extreme state of arousal (also known as fear-induced stress) (Defensive Tactics)

swelling: the soft tissue that is raised when blood or other body fluids pool beneath the skin at an injury site (First Aid)

T

tactical load: a technique used to reload in a tactical situation (Firearms)

takedowns: techniques used to bring a resisting subject from a standing position to the ground, making it easier to control him or her (Defensive Tactics)

TB (tuberculosis): a highly infectious airborne infection (First Aid)

telegraphing: small eye, hand, or foot movements in the direction that an officer plans to move (Defensive Tactics)

temporary motor dysfunction: a type of incapacitation that causes temporary impairment of muscle control (Defensive Tactics)

totality of circumstances: a test that considers the overall facts of a situation to determine if an officer had the authority to detain someone for committing a crime or to perform a legal search (Defensive Tactics)

touch: nonthreatening, noncustodial physical contact that can be used to support or emphasize a verbal command (Defensive Tactics)

touch pressure: touching the location of a nerve or sensitive area and applying continual, uninterrupted pressure with the tip of the finger(s) or thumb until the subject complies (Defensive Tactics)

tourniquet: a device for stopping the flow of blood through a vein or artery by compressing a limb with a cord or tight bandage (First Aid)

transporter/come-along hold: a technique used to move a subject from one point to another with pain compliance or mechanical compliance (Defensive Tactics)

triage: a system of sorting and classifying patients; determines order in which patients receive medical attention; assesses a large number of victims rapidly (First Aid)

trigger control: results when the trigger finger pulls the trigger straight back with increasing yet constant and steady pressure until the firearm discharges (Firearms)

umbilical cord: the cord that connects a fetus to the placenta, which provides nutrients during gestations (First Aid)

understeer: the tendency of a vehicle to turn less sharply than the driver intends (Vehicle Operations)

universal precautions: procedures designed to prevent transmission of HIV, hepatitis B virus, and other bloodborne pathogens (First Aid)

uterus: the organ that holds a developing fetus (First Aid)

V

vascular neck restraint: a physical restraint compressing certain veins and arteries in the neck to cause a subject to lose consciousness for a brief period (Defensive Tactics)

venous bleeding: bleeding where dark red blood flows steadily from a wound, indicating a severed or damaged vein (First Aid)

verbal direction: proper, clear, and concise commands that let a subject know what an officer needs or expects them to do (Defensive Tactics)

visual control: the ability to see a subject's hands and to know that those hands hold no weapons (Defensive Tactics)

voluntary muscles: muscles used for deliberate acts, such as chewing, lifting, and running (First Aid)

W

wheel tracking: an occurrence that causes the rear wheels to follow a tighter path than the path the front wheels traveled in a turn (Vehicle Operations)

Y

yaw: the transfer of a vehicle's weight causing an end-for-end motion resulting in the vehicle turning 180 degrees on a horizontal plane (Vehicle Operations)

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