

# Mandatory Boating Safety Education for All Ages

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## **Abstract**

*This paper examines the different types of requirements for recreational boat operators to complete a mandatory boating safety education course within the United States. The goal of recreational boating safety education is to reduce the occurrence of boating accidents and subsequent deaths and injuries. Research was conducted and a survey was sent to the boating safety education coordinator in all fifty states. The survey established that most recreational boat operators involved in boating accidents in the United States had not completed a boating safety education course. The research further indicates a correlation between the implementation of mandatory boating safety education requirements and a decline in recreational boating accident deaths and injuries.*

## **Introduction**

Recreational boating in Florida and throughout the United States is a popular activity enjoyed by many, however, over the past five years (2016-2020) within the state of Florida, there have been 337 people killed and over 2,100 people injured in boating accidents (Florida Fish and Wildlife Conservation Commission, 2021). Throughout the United States in 2020 alone, the U.S. Coast Guard Office of Auxiliary and Boating Safety reported 767 deaths and over 3,100 injuries as a result of boating accidents. When residents and visitors to Florida head out on the water for an enjoyable day in the sun, they want to get the fun started and the thought of possibly being killed or injured in a boating accident is probably not even crossing their mind. For those who don't own a boat, renting one is an easy process. Almost anyone can rent a boat to get out on the water quickly, but how many of the people operating a boat on any given day have any experience, training, or education in operating that boat?

There are navigational rules to follow when operating a boat on the water just as there are rules of the road when driving a car. Knowing these rules, and other important boating information, is where boating safety education can make a difference between having a great day on the water or having a very bad day. But what is boating safety education? In most cases, boating safety education occurs when a recreational boater takes a state approved course on basic boating skills and subsequently passes a test to demonstrate basic boating knowledge. The main reason for boating safety education is to reduce boating accidents. We know that if we can reduce accidents, we also reduce deaths, injuries, and property damage.

This paper will look at the different types of boating safety education laws, the support of boating safety education from the public, and the different implementation methods of boater education throughout the United States. Throughout this paper, when referring to boating safety education requirements, the reference is for recreational

boaters operating power boats 10 horsepower or greater. Some states have implemented mandatory boating education for all boaters regardless of age. Others have mandatory boating safety education based on age, while some states have no mandatory boating safety education at all. This paper will discuss the results and statistics gathered from the implementation of boating safety education. It will also discuss the next steps to making waterways as safe as possible.

## **Literature Review**

### **Boating safety education laws**

There are several variations of law regarding the requirement of taking a boating safety education course by a recreational boater throughout the country. According to the National Association of State Boating Law Administrators (NASBLA) there are two main types of mandatory boating safety education. The most popular within the United States is a mandate based on either the age, or the born-on date of the boater. There are 37 states, including Florida, which have this requirement. According to Florida State Statutes, boater safety education is required for anyone operating a vessel who was born on or after January 1, 1988. The other type requires boater safety education for all ages. There are six states plus the District of Columbia which have adopted this requirement. According to NASBLA, there are four states which have no mandatory boating safety education, and the remaining states have laws which either require a course for rental boats only or require a motor vehicle license to operate a boat (National Association of State Boating Law Administrators, 2018).

When discussing boating safety education courses, the states which mandate a course by law generally require a course which has been approved by the National Association of State Boating Law Administrators (NASBLA). The National Boating Education Standards were accepted by NASBLA in 1999 and these standards outline the minimum curriculum to facilitate safe and enjoyable recreational boating. The standards also provide the basis for the boating safety education courses recognized by the United States Coast Guard (USCG) and approved by NASBLA. The main reason for having minimum standards required for boating safety education courses is to assure boaters receive standardized information in recognizing and avoiding dangerous situations on the water (Dillon, 2015).

### **Can boating safety education courses make a difference?**

According to the 2020 recreational boating statistics from the U.S. Coast Guard Office of Auxiliary and Boating Safety, 77% of deaths from boating accidents occurred on boats where the operator had not received boating safety instruction and just 12% of deaths occurred where the operator had received boating safety education (when education status was known). Additional data which demonstrates a relationship between boating safety education and lower fatality rates comes from a study by NASBLA's education committee which found that states that have had boating safety education requirements the longest also have the lowest average fatality rates, and the longer the

requirements had been in place, the lower the fatality rates became. This study also found that states with the highest average fatality rates had no boating education course mandates (National Association of State Boating Law Administrators, 2007).

Boating fatalities within the United States have dropped about 2% per year since 1970. This decline may be attributed to several things such as the passing and subsequent enforcement of stricter boating laws, regulations, and standards. However, the development of formal boating safety education would certainly be among the contributing factors (RTI International, 2020).

The state of Florida passed its' current law in 2010, which requires all persons operating a boat who were born after January 1, 1988, to complete a boating safety education course. In the time period between 2010 and 2018, the number of recreational boaters increased by 2% and the number of boating accidents also trended upwards, however, the number of fatalities and injuries remained consistent and did not show a steady increase. It was also noted there was a substantial decline in the number of boating education courses completed in Florida by people over the age of 30. It is important to note the study by Hsieh was completed in 2018, and at that time Florida law would have mandated that anyone age 30 or younger take a boating safety course (Hsieh, 2020)

In 2020, the most common causes of boating accidents in the United States were collisions with another vessel or a collision with a fixed object. These types of accidents are most often attributed to events which are under the control of the boat operator such as operator inattention, carelessness, navigation rule violations, poor decisions in bad weather, and alcohol consumption. State and nationally approved boating safety education courses contain information and instruction regarding each of these topics (U.S. Coast Guard Office of Auxiliary and Boating Safety, 2021; National Boating Education Standards Panel, 2018).

### **Public support for boating safety education in Florida**

In 1998, a survey was conducted by the Survey Research Laboratory of Florida State University for the Florida Department of Environmental Protection, Division of Law Enforcement. The survey was answered by 1,057 people (approximately 41%) who represented Florida's registered boat owners. When answering the question of how important boating safety education was to them, 95.4% answered that it was important to them (Florida Fish and Wildlife Conservation Commission, 2008).

In 2005-2006, Florida Boating Awareness Campaign surveys were distributed online to registered boat owners in south Florida. There were over 680 responses received. In answering a question which asked what they would most like to see regarding boating regulations in their area, boating safety education requirements was either the top answer or was the second most popular answer. In answering another question, inadequate boating safety education arose as one of the top safety issues of concern while boating (Florida Fish and Wildlife Conservation Commission, 2008).

In 2006, the Florida Fish and Wildlife Conservation Commission (FWC) conducted a survey through VAI/Marketing Research Online asking for opinions of recreational boat owners regarding boating related subjects. The survey went to 10,000 registered boat owners and had a response rate of just below 10%. When answering the question of what

would most improve their enjoyment of recreational boating, 72% indicated they wanted all boat operators to pass a test regarding their knowledge of safe boating practices, boating laws, and navigation rules (Florida Fish and Wildlife Conservation Commission, 2008).

In 2007, FWC conducted a poll of Florida voters through Mason Dixon Polling and Research, Inc. regarding support for mandatory boating education. Results indicated that 89% of those who answered supported requiring all boaters to complete a basic boating course regardless of age. Those voters who were also boat owners supported the requirement with 68% stating they wanted mandatory boating safety education for all ages (Florida Fish and Wildlife Conservation Commission, 2008).

In a 2007 study conducted in the state of Washington, one question asked the respondents to rate which boating program and service should have more time and money dedicated to it. The top two answers were boater safety and boater education with 74% stating boater safety and 71% checking off boater education. When asked what challenges may be faced in meeting boater safety and education needs, the most common answer was a need to overcome the unwillingness among boaters to take an education course (Responsive Management, 2007).

## **Implementing boating safety education**

When states pass a law to mandate boating safety education, there are a couple of different ways to implement the new requirement. The method which most states have adopted is to slowly phase in the education requirement for boating operators either by the age of the operator or by the born-on date of the operator. The age of the operator requirement is usually based on a determined age group, such as anyone under 21 years of age. The born-on date requirement sets a date, and anyone born after that date will be required to take a boating safety education course. Another method is referred to as a quick phase in (QPI), the QPI makes the requirement mandatory for all boat operators on a given date, for example Oregon passed their mandatory boating safety education law in 1999 and developed courses and testing by 2003. By 2009 all boat operators regardless of age were required to have taken a boating safety education course (Meehan & Hogan, 2006; M. McKenzie, Oregon boating safety coordinator, personal communication October 22, 2021).

An analysis was completed in 2006 which compared the QPI method of boating safety education versus other education policies. The analysis noted the average age of boat operators who were involved in fatal accidents was 40 years old. The states with safety course mandates, which were targeting younger boat operators, were not properly addressing the age group which was involved in the most fatal accidents. At the time of the analysis, there were 14 states which had a born-on date education requirement. The states with the latest born-on year, 1989, will have their boat operators reaching 40 years of age in 2029. The two states which initiated a QPI for all ages of boat operators established a bigger improvement in the fatality accident rate (number of fatal accidents per 100,000 registered boats) in comparison to the rest of the United States (Meehan & Hogan, 2006).

The comparative analysis acknowledged limitations in the study since there were only two states which had a QPI at the time and recommended follow up on QPI results

once states such as Oregon, Washington, New Hampshire, and New Jersey completed their QPI of boating safety education courses. However, the study concluded that results of the analysis indicated that states which required boating education via a QPI method would show a significant drop in boating accident fatalities once the QPI was complete, and the drop would be greater than in states using other types of boater education implementation. The analysis further predicts that states implementing QPI requirements may first see standard average variations in the fatal accident rate, but after the QPI was finished, the fatal accident rate would drop for several years before eventually leveling off (Meehan & Hogan, 2006).

## **Methods**

This research was conducted to determine if mandating a boater safety education course for all ages of boat operators would assist in decreasing the number of boating accidents and/or the severity of injuries incurred in boating accidents. Surveys were taken through Google Forms survey tool and were sent to the boating education specialist, or the boating law administrator in each state within the United States (in some states, the boating law administrator is the de facto boating education specialist).

Survey questions were developed to determine several key factors regarding mandatory boater safety education. The first was to determine the current boating education course requirement of the respondent (if they had one), and how long the mandate had been in place. The second was to determine the total number of boating accidents each respondent had for the years of 2016-2020, and what percentage of those accidents involved operators who did not have any type of boater education. The third factor was to determine how long it took to implement a boater safety education program that was mandatory for all ages. The final factor was to determine how important a boater safety education course was to the respondents and what type of boater safety education they would implement if starting from scratch with no obstacles, such as budget, to overcome.

The survey was confidential to encourage responses and honest answers. A strength of the research is there was a known number of people who received the survey, and a response rate could be determined. A weakness of the research would be the lack of statistics regarding a correlation between boater safety education courses and boating accidents. I intentionally limited the questions asking for hard numbers in an effort to obtain a high response rate to the survey.

## **Results**

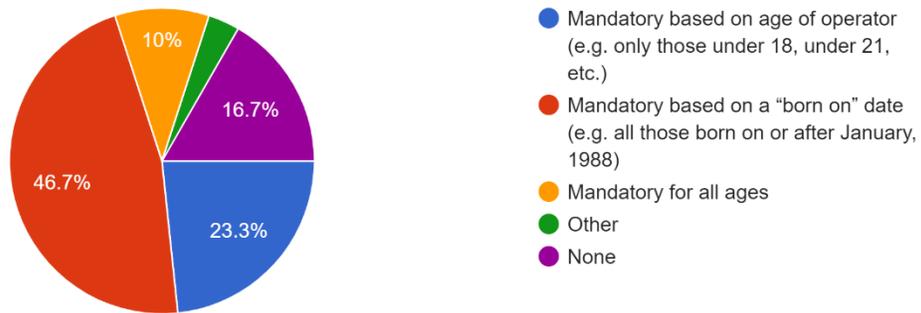
The survey was sent to the boating safety education coordinator (or boating law administrator) in every state for a total of 50 surveys disseminated. I received 30 responses for a response rate of 60%. Some respondents did not answer every question in the survey.

The first question asked about the type of mandatory boating safety education the state currently utilizes. All 30 respondents answered this question.

- Fourteen (46.7%) require mandatory boating safety education based on a born-on date (e.g. all those born on or after January 1, 1988),
- Seven (23.3%) require mandatory boating safety education training based on the age of operator (e.g. only those under 18, under 21, etc.),
- Five (16.7%) had no required mandatory boating safety education,
- Three (10%) required mandatory boating safety education for all ages,
- One (3%) responded as “other”.

What type of mandatory boating safety education does your state currently have?

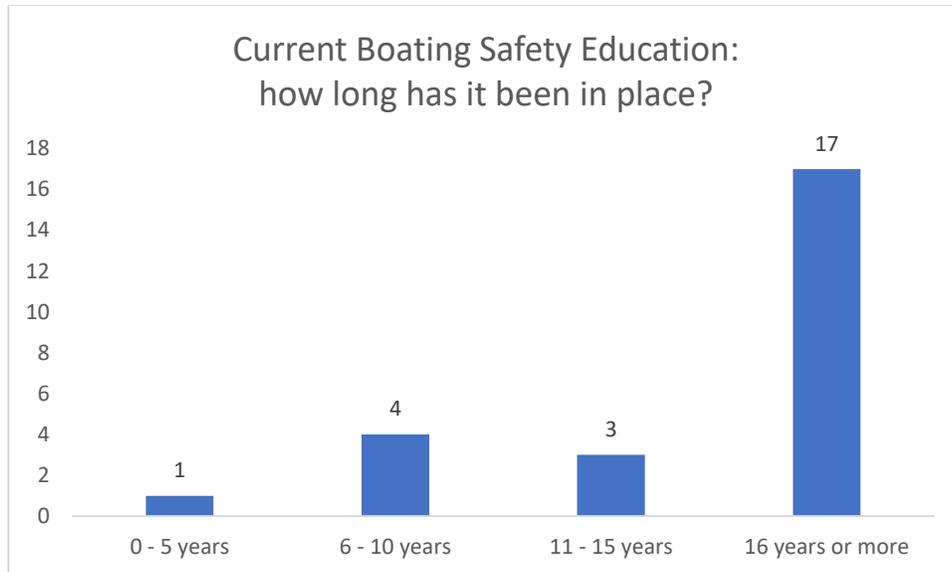
30 responses



Questions two and three were only directed to those respondents who answered “none” to question number one. Out of the five respondents who answered they had no mandatory boating safety education in their state, four indicated they were not pursuing any type of mandatory boating safety education. One indicated they were pursuing a mandatory boating safety education requirement for all ages.

Question four was directed to those who had indicated they had a current boating safety education mandate in place and asked how long the mandate had been in place. This question applied to, and was answered by, 25 respondents.

- 17 (68%) indicated their current mandate has been in place 16 years or longer,
- 4 (16%) indicated their current mandate has been in place for 6-10 years,
- 3 (12%) indicated their current mandate has been in place for 11-15 years,
- 1 (4%) indicated their current mandate has been in place for 5 years or less.

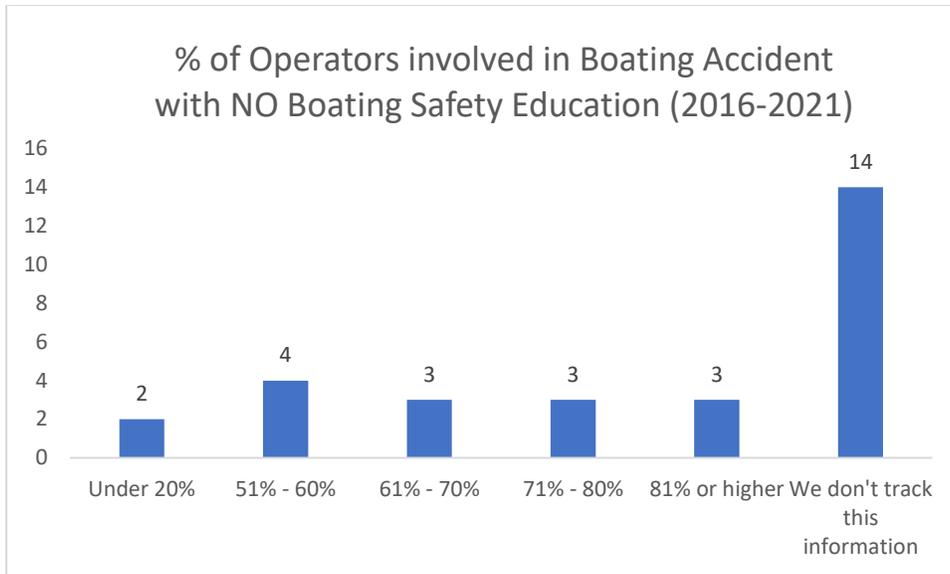


Question 5 was directed at all respondents and asked what their total number of reportable boating accidents were for the years 2016-2020. Three respondents did not answer this question. The 27 states who responded had a total of 12,999 boating accidents during the five-year period.

Question 6 was directed at all respondents and asked for the number of registered motorized vessels in their state. One state did not answer this question. The 29 states who answered the question provided the number of registered vessels as of either 2020 or 2021, depending on the data availability. There was a vast range of numbers reported anywhere from 108 registered motorized vessels to 985,005.

Question 7 asked about the percentage of vessel operators during the time period of 2016-2020 who were involved in any type of boating accident and had no boating safety education (when education status was known). Twenty-nine of the 30 respondents answered this question.

- 14 (48.3%) reported they do not track this information,
- 4 (13.8%) reported that between 51- 60% of the vessel operators involved in a boating accident had no boating safety education,
- 3 (10.3%) reported between 61-70%, 71-80%, and 81% and higher of the vessel operators involved in a boating accident had no boating safety education. These three categories totaled just under 31%,
- 2 (6.9%) reported less than 20% of boating accidents involved operators with no boating safety education.

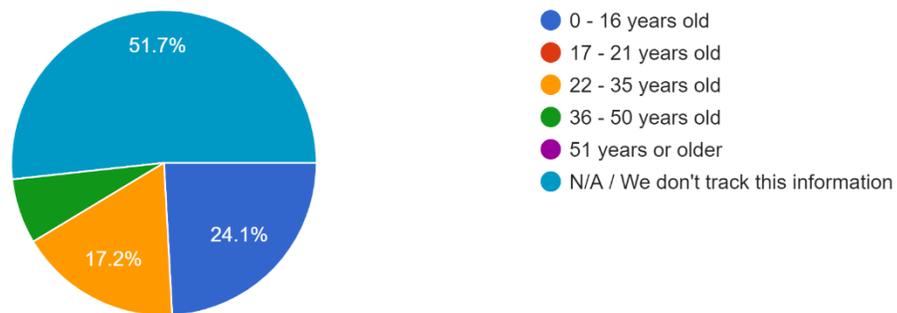


Question 8 asked states with a boating safety education course requirement which age group during the time period 2016-2020 completed the most courses. There were 29 responses to this question.

- Fifteen (51.7%) reported they did not track the information, or the question was not applicable,
- Seven (24.1%) reported the age group 0-16 years old completed the most courses,
- Five (17.2%) reported the age group 22-35 completed the most courses,
- Two (6.9%) reported the age group 36-50 completed the most boating safety education courses, while no state reported the age group of 51 years or older as having completed the most courses.

If you have a boating safety education course requirement, which age group for the years 2016-2020 completed the most courses?

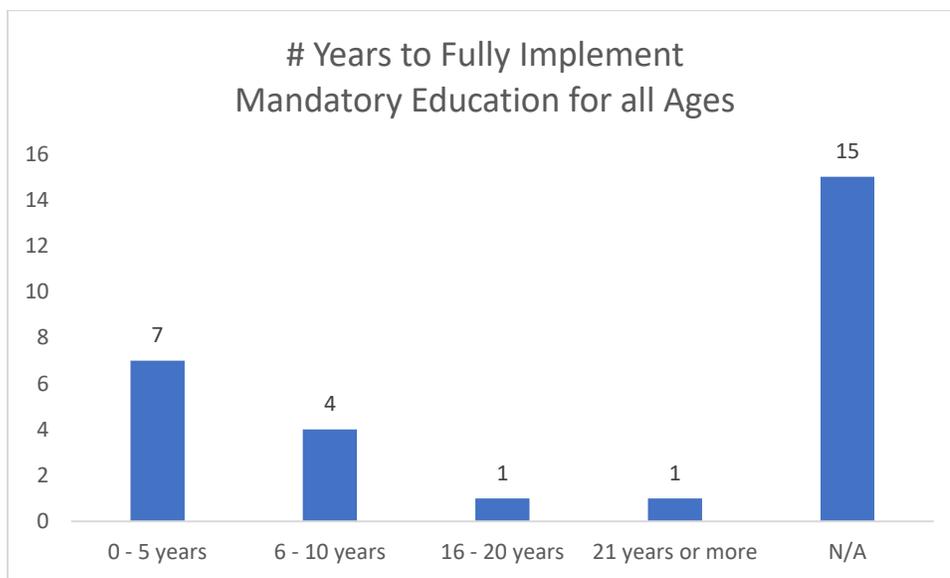
29 responses



Question 9 asked whether there was a minimum age requirement to operate a powered vessel (not specific to personal watercraft) in their state e.g., no one under 14 may operate a powered vessel. All 30 respondents answered this question. Twenty-five (83.3%) respondents reported they did have a minimum age requirement in their state to operate a powered vessel, while five (16.7%) reported they did not have a minimum age requirement.

Question 10 asked those states which had a mandatory boating safety education requirement for all ages how many years it took (or will take) to fully implement. There were 28 responses to this question.

- 15 (53.6%) reported this question did not apply to their state,
- 7 (25%) reported it took, or will take, 0-5 years to fully implement,
- 4 (14.3%) reported it took, or will take, 6-10 years to fully implement,
- 1 (3.6%) reported it took, or will take, 16-20 years,
- 1 (3.6%) reported it took, or will take, 21 years or more to fully implement.



Question 11 asked the respondents what their goals were when implementing boating safety education mandates. The survey provided several goals, and the respondent had the ability to check as many as applied, there was also a fill-in option if the respondent wished to add to the provided goals. There were 27 responses to this question.

- The goal to reduce serious injuries/fatalities was the most popular with 23 (85.2%) respondents checking this goal,
- Reduction of reportable boating accidents was checked by 22 (81.5%) respondents,

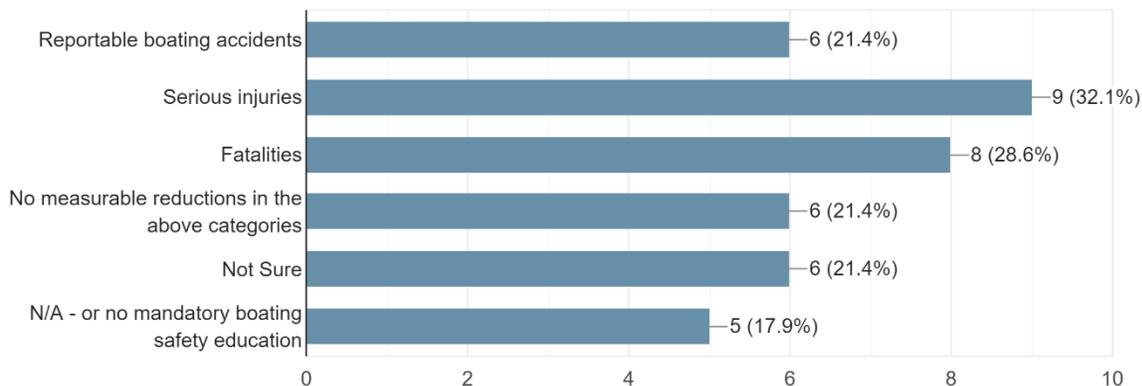
- Increasing the number of recreational boaters who had boating safety educations was checked by 19 (70.4%) respondents,
- Reducing boating under the influence was a goal of 13 (48.1%) respondents,
- Two respondents (7.4%) checked the “other” box and filled in an answer stating the question was not applicable or they were not sure of the goals their state had when implementing boating safety education.

Question 12 inquired as to what areas the respondents may have seen reductions in since the implementation of mandatory boating safety education. Respondents were supplied with multiple possible answers and were able to check any/all that applied to them. There were 28 answers to this question.

- Nine (32.1%) reported a reduction in serious injury boating accidents,
- Eight (28.6%) reported a reduction in boating accident fatalities,
- Six (21.4%) reported a decline in reportable boating accidents,
- Six (21.4%) reported no measurable reduction in any of the listed categories,
- Six (21.4%) reported they weren’t sure of any reductions in the listed categories,
- Five (17.9%) reported as not applicable, or they had no mandatory boating safety education program in place.

For those states with mandatory boating safety education, since implementing the mandatory education, have you seen a reduction in: (check all that apply)

28 responses



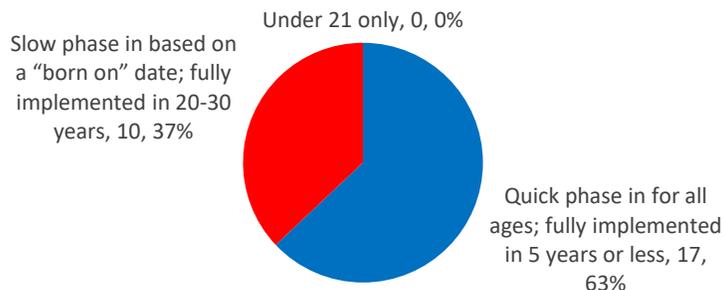
Question 13 asked the respondent to gauge how important they felt boating safety education is for the recreational boater. There were 29 responses to this question. The possible responses were very important, somewhat important, neutral, not very important, not important at all. Twenty-eight respondents felt boating safety education is very important, while one respondent felt it was somewhat important.

The last question asked the respondents what type of boating education mandate they would put in place if they were just starting a boating education program and they had no obstacles such as budget, or legislative requirements. The survey provided

several response options including none, under 21 only, slow phase in based on a born-on date which would be fully implemented in 20-30 years, quick phase in for all ages which would be fully implemented in five years or less, there was also an option for “other” which allowed for a text response. Although there were a couple text responses in the “other” category, those responses clearly fit into one of the provided responses, and the results were updated accordingly. There were 27 responses to this question.

- Seventeen (63%) respondents would opt for a quick phase in approach to mandatory boating safety education in which all ages would require education within five years or less,
- Ten (37%) respondents would choose a slow phase in option based on a born-on date to be fully implemented within 20-30 years,
- The under 21 only option was not selected by any of the respondents.

### Boater Safety Education Mandates Desired



### Discussion

This research was conducted to determine the status and effectiveness of current mandatory boating education programs throughout the United States. It was also aimed at determining if the mandatory boating education requirement Florida has would benefit by switching to a QPI from the current slow phase in based on a born-on date. The response rate to the survey of 60% was adequate and I believe the results would have reflected similar responses even with an increased response.

The survey data revealed that of the fourteen states who track the age group which completes the most boating safety education courses, twelve (86%) of those states reported those who were 35 years old or younger as the group which completed the most courses. It also revealed that of the fifteen survey respondents who track the education status of boat operators involved in accidents that thirteen (87%) report a majority (51% or higher) of those operators have no boating safety education.

In Florida specifically, for the years 2016-2020, data collected by the FWC reveals the age group which completes the most boating safety education courses is 17-35 years old. Florida statistics further reveal the operator age group most involved in boating

accidents are those 51 years and older, coming in behind that age group are those between the ages of 36-50. Florida's mandatory boating education requirement is for all those born on or after January 1, 1988, which requires all those turning 34 years old in 2022 (the year this research was conducted) to take the boating safety education course. With Florida's current law, there is a seventeen-year gap between those required to take a boating safety education course and the lowest end of the age group contributing to the most boating accidents.

The survey questions included asking about different goals each state had regarding implementing boating safety education requirements. The top goals mentioned were reducing boating fatalities, serious injuries, and reducing the number of reportable boating accidents. The survey then went on to ask about the goals which were realized after the boating safety education requirements had been implemented. Responses indicated that for those states who measure this data, the majority saw a reduction of boating accidents involving fatalities and serious injury, while a lesser amount realized a reduction in the number of reportable boating accidents. A minority of the respondents reported no measurable reductions in the listed goals.

This survey was taken by those who are considered subject matter experts in the topic of boating safety and boating safety education. One of the last questions posed to this group of experts asked them what type of boating safety education requirement they would implement in a perfect world with no obstacles in their way. The majority of these experts chose the option of a quick phase in of the education mandate to be completed in five years or less while a minority of the experts chose a slow phase in which would be complete in 20-30 years. Not one respondent chose the option to have no boating safety education requirement. This fact alone indicates how important these subject matter experts believe education is to boating safety.

## **Recommendations**

After considering the established data and research on the topic of mandatory boating safety education, and analyzing the survey results I received, I believe a quick phase-in of mandatory boating safety education for all ages would be most beneficial in reaching the goals of overall boater safety. When considering Florida specifically, it is readily apparent the current mandate does not require the age group involved in the most boating accidents to complete a boating safety education course. Florida offers a free boating safety education course, and I would recommend the course stays free to prevent barriers to the education.

Public opinion towards boat operators being educated and passing a test regarding their knowledge of safe boating practices is very high. I believe there would be little to no public push back to new legislation requiring boating safety education for all ages in Florida via a quick phase-in method. Section 327.395, Florida Statutes, addresses boating safety education and I recommend this statutory language be revised to read that a person may not operate a vessel powered by a motor of 10 horsepower or greater unless such person has completed an approved boating safety education course (current exemptions would remain). This could be implemented by phasing in persons by age group over a period of five years. For example, the first year the new requirement is

implemented would require all persons 40 years old and younger to complete a course, then 50 years old and younger the next year, 60 years old and younger the third year, 70 years old and younger the fourth year, and all ages to have the boating safety education course completed by the end of year five.

Florida currently has several ways to take an approved boating safety education course which include an online course, an in-person course, or a home study version where a test is taken and mailed to FWC headquarters for grading. The boating safety education course providers which Florida has currently approved to administer the course would be able to handle the increased demand for courses without any delays. I also anticipate additional course providers applying for approval to administer the course in Florida, which would add to the current availability and options for a person to find and take an approved course.

I currently work in the section within FWC which issues the boating safety education card to persons who have completed an approved boating safety course. I believe this recommendation can realistically be accomplished without adding staff to current personnel who issue the boating safety education cards. Although the number of cards being issued each year would increase, the current staff would be able to handle the increase. And with the recent option FWC has provided to obtain the card in an electronic format, the number of mailouts of physical cards has decreased substantially, which has saved money in postage and staffing hours.

We know that when boat operators complete a boating safety education course, they are less likely to get in a boating accident. Less accidents equate to less fatalities and serious injuries which is what boating safety is all about. When all boat operators become educated regarding boating safety, the waters will become a safer place to recreate and enjoy time with friends and family.

Captain Rachel Bryant started her career in 1993 as a Deputy Sheriff with the Lee County Sheriff's Office. In 2001, she joined the Department of Environmental Protection which merged with the Florida Fish and Wildlife Conservation Commission in 2012. She currently serves as the Boating Safety Unit leader. Rachel also serves on the selection committee for both the Florida Law Enforcement Officers' Hall of Fame, and the Florida Sheriff's Association Deputy of the year. She currently serves as President of the State Law Enforcement Chiefs' Association. Captain Bryant obtained her Associates Degree from Tallahassee Community College.

## References

- Dillon, P. (2015, October 23). Measuring boating education's impact. *Small Craft Advisory*. <https://sca.nasbla.org/2015/10/23/measuring-boating-educations-impact/>
- Florida Fish and Wildlife Conservation Commission. (2008). *2008 Session Legislative Proposal on Boating Safety Education*.
- Florida Fish and Wildlife Conservation Commission. (2021). *2020 Boating Accident Statistical Report*. <https://myfwc.com/boating/safety-education/accidents/>
- Gabe, T. M., & Hite, D. (2003). The effects of boating safety regulations. *Coastal Management*, 31(3), 247–254. <https://doi.org/10.1080/08920750390198487>
- Hsieh, J. C. (2020, May). *A study of recreational boating public interventions, regulations and accidents utilizing Federal and State Data*. <https://jscholarship.library.jhu.edu/bitstream/handle/1774.2/63873/Hsieh-Capstone-2020.pdf?sequence=1&isAllowed=y>
- Meehan, C., & Hogan, H. (2006, September). *A comparative analysis of recreational boating policies: "Quick phase-in" education vs. other education policies*. United States Coast Guard Office of Boating Safety. [https://www.uscgboating.org/library/education-phase-study/Phase\\_In\\_2006.pdf](https://www.uscgboating.org/library/education-phase-study/Phase_In_2006.pdf)
- National Association of State Boating Law Administrators. (2007, February 1). *Boating education requirements do make a difference* [Press release]. <https://community.nasbla.org/viewdocument/boating-education-requirements-dom>
- National Association of State Boating Law Administrators. (2018). *Mandatory education*. Retrieved October 19, 2021, from <https://www.nasbla.org/education/mandatory-education>
- National Boating Education Standards Panel. (2018, June). *Technical Report – Basic Boating Knowledge - Power*. National Association of Boating Law Administrators' National Boating Education Standards Panel. [https://higherlogicdownload.s3.amazonaws.com/NASBLA/76594a34-f3a1-4916-95ac-1e9c872170cc/UploadedImages/education/national-education-standards/MASTER\\_Technical\\_Report\\_-\\_Power\\_Boating\\_-\\_June\\_2018\\_FINAL\\_for\\_ANSI\\_Registration.pdf](https://higherlogicdownload.s3.amazonaws.com/NASBLA/76594a34-f3a1-4916-95ac-1e9c872170cc/UploadedImages/education/national-education-standards/MASTER_Technical_Report_-_Power_Boating_-_June_2018_FINAL_for_ANSI_Registration.pdf)
- Responsive Management. (2007). *Washington boater needs assessment*. Washington State Recreation and Conservation Office. <https://rco.wa.gov/wp-content/uploads/2019/06/BoaterSurveyData.pdf>

RTI International. (2020, October). *National recreational boating safety survey*. United States Coast Guard Boating Safety Division.  
<https://uscgboating.org/library/recreational-boating-survey/NRBSS-Participation-Survey-Final-Report-11302020.pdf>

The 2021 Florida Statutes. (2021). *Boating safety education*. Retrieved October 19, 2021, from  
[http://www.leg.state.fl.us/Statutes/index.cfm?App\\_mode=Display\\_Statute&Search\\_String=&URL=0300-0399/0327/Sections/0327.395.html](http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0300-0399/0327/Sections/0327.395.html)

U.S. Coast Guard Office of Auxiliary and Boating Safety. (2021). *2020 recreational boating statistics*. <https://uscgboating.org/library/accident-statistics/Recreational-Boating-Statistics-2020-Revised.pdf>

## Appendix

### Boating Safety Education Survey

The purpose of this survey is to determine the status and effectiveness of mandatory boating education courses throughout the United States. The survey is confidential and should take about 15-20 minutes to complete. There are only 4 questions which ask for numbers or percentages. These questions relate to your states total number of reportable boating accidents, the number of registered motorized vessels in your state, the percentage of vessel operators involved in a boating accident that had taken a boating safety course, and what age group completes the most boating safety education courses. The answers to these questions may be readily available if your state compiles an annual boating statistical report. However, if you are not able to answer any of the 4 questions, I encourage you to complete the other questions in the survey.

When taking the survey, keep in mind this survey is asking about recreational boating and the questions are for powered (10hp or more) vessels only. Not for personal watercraft specific laws and not for human powered craft.

### Questions

1. What type of mandatory boating safety education does your state currently have?  
(answer other than none will auto direct to question number 4)  
Mandatory based on age of operator (e.g. only those under 18, under 21, etc.)  
Mandatory based on a "born on" date (e.g. all those born on or after January, 1988)  
Mandatory for all ages  
Other  
None
2. If answer is none, is your state pursuing mandatory boating safety education? (If "yes", will auto direct to question #3. If "no", will direct to question #5)  
Yes  
No
3. If your state is pursuing mandatory boating safety education, what type?  
Mandatory based on age of operator (e.g. only those under 18, under 21, etc.)  
Mandatory based on a "born on" date (e.g. all those born on or after January 1, 1988)  
Mandatory for all ages  
Other  
N/A
4. How long has your current boating safety education mandate been in place?  
0-5 years  
6-10 years  
11-15 years  
16 years or more  
N/A

5. For the years of 2016-2020, what is your total number of reportable boating accidents?  
(Fill in answer)
6. How many registered motorized vessels does your state have?  
(Fill in answer)
7. For the years of 2016-2020, what are the percentages of operators who were involved in any type of boating accidents who did NOT have boating safety education (when education status was known)?  
  - Under 20%
  - 21% - 30%
  - 31% - 40%
  - 41% - 50%
  - 51% - 60%
  - 61% - 70%
  - 71% - 80%
  - 81% or higher
  - We don't track this information
8. If you have a boating safety education course requirement, which age group for the years 2016-2020 completed the most courses?  
  - 0 - 16 years old
  - 17 - 21 years old
  - 22 - 35 years old
  - 36 - 50 years old
  - 51 years or older
  - Not applicable / We don't track this information
9. Is there a minimum age requirement in your state to operate a powered vessel (not specific to personal watercraft) e.g. no one under 14 may operate a powered vessel?  
  - Yes
  - No
10. For those states with mandatory education for all ages, how many years did it take (or will it take) to fully implement?  
  - 0-5 years
  - 6-10 years
  - 11-15 years
  - 16- 20 years
  - 21 years or more
  - N/A
11. When implementing boating safety education mandates, what were your goals? (check all that apply)  
  - Reduce reportable accidents
  - Reduce serious injuries/fatalities
  - Reduce Boating Under the Influence
  - Increase number of recreational boaters who had boating safety education
  - Other (fill in)

12. For those states with mandatory boating safety education, since implementing the mandatory education, have you seen a reduction in: (check all that apply)
- Reportable boating accidents
  - Serious injuries
  - Fatalities
  - No measurable reductions in the above categories
  - Not sure
  - N/A – no mandatory boating safety education
13. How important do you feel boating safety education is for recreational boat operators?
- Very Important
  - Somewhat important
  - Neutral
  - Not very important
  - Not important at all
14. If you were to start a boater safety education mandate and your agency had no obstacles (budget, legislative, etc.), what type of boating safety education mandate would you put in place?
- None
  - Under 21 only
  - Slow phase in based on a “born on” date which would be fully implemented in 20-30 years
  - Quick phase in for all ages which would be fully implemented in 5 years or less
  - Other