

# 2023 RECREATIONAL BOATING STATISTICS

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U.S. DEPARTMENT OF HOMELAND SECURITY  
U.S. COAST GUARD  
OFFICE OF AUXILIARY AND BOATING SAFETY



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## FOREWORD

Under the authority of Title 46, United States Code, the Inspections & Compliance Directorate has been delegated the responsibility to collect, analyze, and annually publish statistical information obtained from recreational boat numbering and casualty reporting systems. Within the Directorate, the Office of Auxiliary and Boating Safety, Boating Safety Division has National Recreational Boating Safety Program responsibility.

Recreational Boating Statistics 2023, the 65<sup>th</sup> annual report, contains statistics on recreational boating accidents and state vessel registration. This publication is a result of the coordinated effort of the Coast Guard and those states and territories that have Federally-approved boat numbering and casualty reporting systems. These include all states, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands.

Recreational Boating Statistics 2023 may be copied and distributed freely in the interest of boating safety. For questions and suggestions regarding content, use the address, telephone number, or email address at the top of this page. For an electronic copy, visit the Boating Safety Division website at [www.uscgboating.org](http://www.uscgboating.org).

/A.M. Beach/  
Captain, U.S. Coast Guard  
Director of Inspections & Compliance

**Record of Changes**

Page number	Date changed	Description of changes
25	06/27/2024	The data for "Congested waters" and "Carbon monoxide exposure" was inadvertently flipped. Data was corrected and the report was reposted on <a href="http://uscgboating.org">uscgboating.org</a>

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## 2023 EXECUTIVE SUMMARY

- In calendar year 2023, the Coast Guard counted 3,844 accidents that involved 564 deaths, 2,126 injuries and approximately \$63 million dollars of damage to property as a result of recreational boating accidents.
  - The fatality rate was 4.9 deaths per 100,000 registered recreational vessels. This rate represents a 9.3% decrease from the 2022 fatality rate of 5.4 deaths per 100,000 registered recreational vessels.
  - Compared to 2022, the number of accidents decreased 4.9%, the number of deaths decreased 11.3%, and the number of injuries decreased 4.3%.
- Where cause of death was known, 75% of fatal boating accident victims drowned. Of those drowning victims with reported life jacket usage, 87% were not wearing a life jacket.
- Where length was known, 4 of every 5 boaters who drowned were using vessels less than 21 feet in length.
- Alcohol use is the leading known contributing factor in fatal boating accidents; where the primary cause was known, it was listed as the leading factor in 17% of deaths.
- Where instruction was known, 75% of deaths occurred on boats where the operator did not receive boating safety instruction. Only 15% percent of deaths occurred on vessels where the operator had received a nationally-approved boating safety education certificate.
- There were 145 accidents in which at least one person was struck by a propeller. Collectively, these accidents resulted in 23 deaths and 133 injuries.
- Operator inattention, improper lookout, operator inexperience, excessive speed, and machinery failure ranked as the top five primary contributing factors in accidents.
- Where data was known, navigation rules violations were a contributing factor in 53% of accidents, 34% of deaths, and 60% of injuries.
- Collisions (with vessels, objects, groundings) were the most frequent first event in accidents, attributing to 56% of accidents, 24% of deaths, and 53% of injuries.
- Where data was known, the most common vessel types involved in reported accidents were open motorboats (45%), personal watercraft (19%), and cabin motorboats (13%).
- Where data was known, the vessel types with the highest percentage of deaths were open motorboats (44%), kayaks (17%), and personal watercraft (8%).
- The 11,546,512 recreational vessels registered by the states in 2023 represent a 1.9% decrease from last year when 11,770,383 recreational vessels were registered.

<b>Table 1 • 2023 EXECUTIVE SUMMARY</b>						
<b>TOP FIVE PRIMARY ACCIDENT TYPES</b>						
Accident Rank	Accident Type	Number of Accidents		Number of Deaths	Number of Injuries	
1	Collision with recreational vessel	1053		41	523	
2	Collision with fixed object	449		54	288	
3	Flooding/swamping	386		44	90	
4	Grounding	359		15	206	
5	Capsizing	234		132	103	
<b>VESSEL TYPES WITH THE TOP CASUALTY NUMBERS</b>						
Casualty Rank	Type of Boat	Drownings	Other Deaths	Total Deaths	Total Injuries	Total Casualties
1	Open motorboat	149	98	247	1117	1364
2	Personal watercraft	15	32	47	527	574
3	Canoe/kayak	108	30	138	64	202
4	Pontoon	35	6	41	140	181
5	Cabin motorboat	12	8	20	156	176
<b>LIFE JACKET WEAR BY TOP FIVE KNOWN CAUSES OF DEATH</b>						
Known Cause of Death Rank	Cause of Death	Number of Deaths	Life Jacket			
			Worn	Not Worn	Unknown if worn	
1	Drowning	377	48	319	10	
2	Trauma	93	39	50	4	
3	Cardiac arrest	18	6	12	0	
4	Hypothermia	3	0	3	0	
5	Other	3	0	3	0	
<b>TOP TEN KNOWN PRIMARY CONTRIBUTING FACTORS OF ACCIDENTS</b>						
Accident Rank	Contributing Factor	Number of Accidents		Number of Deaths	Number of Injuries	
1	Operator inattention	586		33	323	
2	Improper lookout	421		30	284	
3	Operator inexperience	414		44	200	
4	Excessive speed	299		26	214	
5	Machinery failure	291		9	80	
6	Navigation rules violation	210		16	134	
7	Alcohol	211		79	201	
8	Weather	181		35	60	
9	Hazardous waters	176		54	77	
10	Force of wake/wave	134		5	99	

**Mission and Strategic Plan of the National Recreational Boating Safety Program**

The mission of the National Recreational Boating Safety (RBS) Program is “to ensure the public has a safe, secure, and enjoyable recreational boating experience by implementing programs that minimize the loss of life, personal injury, and property damage while cooperating with environmental and national security efforts.”

The Coast Guard has released the Strategic Plan of the National Recreational Boating Safety Program for 2022-2026 to address the following initiatives: 1) Positively influence recreational boater behavior; 2) Positively influence recreational boat and accessory manufacturers; and 3) Leverage recreational boating data. To view the Strategic Plan of the Program, please visit the Division’s website at <http://www.uscgboating.org/content/strategic-plan.php>.

**Overview of Statistics**

This report contains statistics on registered recreational vessels and boating accidents during calendar year 2023. Data used to compile the recreational boating accident statistics come from four main sources: State marine agencies; Federal agencies, including the Coast Guard, National Park Service, Army Corps of Engineers, and Forest Service; the public, on a CG-3865 Recreational Boating Accident Report (BAR) form; and the news media. The Coast Guard collects data from multiple sources in an attempt to document all incidents that meet reporting requirements.

The data in this publication reflects a collaboration of state and Coast Guard efforts. After reports are submitted, the Coast Guard reviews them and standardizes the data so that it can be used for national comparison. The data in this publication reflects Coast Guard standardized values, which may be different from the state’s original submission.

The following table reflects the number of accidents, deaths, injuries, and losses of vessels that were captured from federal and news media sources that met reporting requirements and are included in this report.

Table 2 • NEWS MEDIA AND FEDERALLY-SOURCED ACCIDENTS AND CASUALTIES						
	Accidents	Deaths	Injuries	Vessel losses	Damages	Notes
AL	4	3	0	1	\$50,000.00	
AT	4	5	0	1	\$1,098,000.00	4 accidents offshore in the Atlantic Ocean
DE	1	0	4	1	\$50,000.00	
FL	12	4	5	5	\$3,303,800.00	
GA	2	0	2	0	\$5,000.00	
GU	1	0	2	1	\$315,000.00	
IN	1	1	0	0	\$0.00	
LA	1	0	0	0	\$2,000,000.00	
MA	2	0	5	2	\$48,000.00	
MI	2	0	4	1	\$33,085.00	
MS	2	1	1	1	\$70,000.00	
NC	3	1	1	1	\$116,000.00	
NH	1	1	0	0	\$0.00	1 accident on private waters
PR	4	1	1	3	\$110,000.00	
SC	1	1	0	0	\$0.00	
TX	2	1	1	2	\$90,000.00	
WA	1	0	0	1	\$500,000.00	
<b>Nation</b>	<b>44</b>	<b>19</b>	<b>26</b>	<b>20</b>	<b>\$7,788,885.00</b>	

**Major Changes to the Publication**

In 2014, four of the statistics in the Executive Summary were changed to remove the records where values were unknown. To find information on the number of “unknown” cases excluded, please reference Tables 35 (on page 66), 22 (on page 46), 5 (on page 20), and 7 (on page 25).

In 2017, Table 37 was rearranged due to a change in data collection. On 1 January 2017, changes in regulation (33 CFR 174.19) necessitated revision to the Coast Guard’s data collection on registration, which took place in early 2017. Due to delays in transitioning to a new form, the Coast Guard accepted registration data on the previous registration collection form used and the proposed form. Since the forms did not cover the same information, the publication table was amended.

The glossary was updated to reflect new definitions in the Code of Federal Regulations (CFR).

As a result of changes in 33 CFR 174.19 that took effect 1 January 2017, a new term “paddlecraft” was introduced and defined as “a vessel powered only by its occupants, using a single or double bladed paddle as a lever without the aid of a fulcrum provided by oarlocks, thole pins, crutches, or similar arrangements”. As such, the definition limits the use of the term “paddlecraft” to non-motorized vessels. Consequently, any canoe or kayak with a motor has been classified as an “open motorboat” for accident reporting and registration purposes. Though the term “paddlecraft” exists in regulation, for the purposes of this publication, the subcategories of canoe, kayak, and standup paddleboard have been retained; these represent non-motorized vessels, and data can be combined to represent paddlecraft.

In 2018, Table 10 was amended to provide a breakdown of the victim’s role (operator, occupant, other/unknown). Examples of “other” include tuber, wakeboarder, water skier, kneeboarder, bystander, and swimmer.

In 2020, Table 4a was added to provide detail related to Figure 2. Figures 9a and 9b were added to provide a graphical depiction of information in Tables 26 and 27. Figures 12 and 16 were color-coded.

The Coast Guard released policy that will impact data collection beginning in calendar year 2024. The letter provides guidance on reporting thresholds, terms, and the scope of reporting. To view the policy, please visit <https://uscgboating.org/library/regulations/BSX-Policy-Letter-23-01-Recreational-Boating-Incident-Reporting-Ch-1.pdf>.

### **Accident Reporting as Required by Federal Law**

Under federal regulations (33 CFR Part 173; Subpart C – Casualty and Accident Reporting) the operator of any numbered vessel that was not required to be inspected or a vessel that was operated for recreational purposes is required to file a BAR when, as a result of an occurrence that involves the vessel or its equipment:

1. A person dies; or
2. A person disappears from the vessel under circumstances that indicate death or injury; or
3. A person is injured and requires medical treatment beyond first aid; or
4. Damage to vessels and other property totals \$2,000 or more; or
5. There is a complete loss of any vessel.

If the above conditions are met, the federal regulations state that the operator or owner must report their accident to a state reporting authority, abbreviated in this publication as “state.” The reporting authority can be either the state where the accident occurred, the state in which the vessel was numbered, or, if the vessel does not have a number, the state where the vessel was principally used. The owner must submit the report if the operator is deceased or unable to make the report.

The regulations also state the acceptable length of time in which the accident report must be submitted to the reporting authority. Boat operators or owners must submit:

1. Accident reports within 48 hours of an occurrence if:
  - a. A person dies within 24 hours of the occurrence; or
  - b. A person requires medical treatment beyond first aid; or
  - c. A person disappears from the vessel.
2. Accident reports within 10 days of an occurrence if there is damage to the vessel/property only.

The minimum reporting requirements are set by Federal regulation, but states are allowed to have more stringent requirements. For example, some states have a lower threshold for reporting damage to vessels and other property.

Federal Regulations (33 CFR 174.121) require accident report data to be forwarded to Coast Guard Headquarters within 30 days of receipt by a state or its agent.

The statistics in this publication cover boating accidents reported on waters of joint federal and state jurisdiction and exclusive state jurisdiction. Most states use BAR forms that are similar to the Coast Guard form. A copy of the Coast Guard BAR form used for this report is on pages 73-78.

### **Casualty and Accident Reporting Guidelines**

Casualty and accident reporting applies to each “vessel” used by its operator for recreational purposes or vessels that are required to be numbered and are not subject to inspection.

This publication reflects watercraft that have been deemed a “vessel.” Terms used to describe the various types of watercraft are: airboat, auxiliary sailboat, cabin motorboat, canoe, houseboat, inflatable boat, kayak, open motorboat, personal watercraft, pontoon, raft, rowboat, sailboat, and standup paddleboard. Reports received involving watercraft that have not been determined to be “vessels” to date, such as single unmodified innertubes, have not been included in the statistics in the main body of this report.

### **“Reportable” Boating Accidents**

A vessel is considered to be involved in a “boating accident” whenever a death, missing person, personal injury, property damage, or total vessel loss results from the vessel's operation, construction, seaworthiness, equipment, or machinery.

The following are examples of accident types that are used in this report:

- Grounding, capsizing, sinking, or flooding/swamping.
- Falls in or overboard a vessel.
- Persons ejected from a vessel.
- Fire or explosions that occur while underway and while anchored, moored or docked if the fire resulted from the vessel or vessel equipment.
- Water-skiing or other mishap involving a towable device.
- Collision with another vessel or object.
- Striking a submerged object.
- A person struck by a vessel, propeller, propulsion unit, or steering machinery.
- Carbon monoxide exposure.
- Electrocutation due to stray current related to a vessel.
- Casualties while swimming from a vessel that is not anchored, moored or docked.
- Casualties where natural causes served as a contributing factor in the death of an individual but the determined cause of death was drowning.
- Casualties from natural phenomena such as interaction with marine life (i.e. carp causes casualty to person) and interaction with nature (i.e. mountain side falls onto vessel causing casualties).
- Casualties where a person falls off an anchored vessel.
- Casualties that result when a person departs an anchored, disabled vessel to make repairs, such as unfouling an anchor or cleaning out the intake of a jet-propelled vessel.

### **“Non-Reportable” Boating Accidents**

Not every occurrence involving a vessel is considered within the scope of the National Recreational Boating Safety Program. The following occurrences involving a vessel may be required to be reported to the state, but for statistical purposes are excluded from this report and are considered “non-reportable” boating accidents:

- A person dies, is injured, or is missing as a result of self-inflicted wounds, alcohol poisoning, gunshot wounds, or the ingestion of drugs, controlled substances or poison.
- A person dies, is injured, or is missing as a result of assault by another person or persons while aboard a vessel.
- A person dies or is injured from natural causes while aboard a vessel where the vessel did not contribute to the casualty.
- A person dies, is injured, or is missing as a result of jumping, diving, or swimming for pleasure from an anchored, moored or docked vessel.
- A person dies, is injured, or is missing as a result of swimming to retrieve an object or a vessel that is adrift from its mooring or dock, having departed from a place of inherent safety, such as the shore or pier.
- Property damage occurs or a person dies, is injured, or is missing while preparing a vessel for launching or retrieving and the vessel is not on the water and capable / ready for its intended use.
- Property damage occurs or a person dies, is injured, or is missing as a result of a fire on shore or a

- pier that spreads to a vessel or vessels.
- Property damage occurs to a docked or moored vessel or a person dies, is injured, or is missing from such a vessel as a result of storms, or unusual tidal or sea conditions; or when a vessel gets underway in those conditions in an attempt to rescue persons or vessels.
- Property damage occurs to a docked or moored vessel due to lack of maintenance on the vessel or the structure to which it was moored.
- Property damage occurs to a docked or moored vessel due to theft or vandalism.
- Property damage occurs to, a person dies or is injured on, or a person is missing from a non-propelled residential platform or other watercraft used primarily as a residence that is not underway.
- Casualties that result from falls from or on docked vessels or vessels that are moored to a permanent structure.
- Casualties that result from a person climbing aboard an anchored vessel from the water or swimming near an anchored vessel (unless the casualty was related to carbon monoxide exposure or stray electric current).
- Fire or explosions on anchored, docked or moored boats where the cause of the fire was not attributed to the vessel or vessel equipment.
- Casualty or damage that results when the vehicle used for trailering the vessel fails.
- Casualties or damage that occur during accidents that only involve watercraft that have not been deemed a vessel.
- Casualties or damage that occur when the only vessel(s) involved are being used solely for governmental, commercial or criminal activity.
- Casualties or damage that occur when the only vessel(s) involved are not required to be numbered and are being used exclusively for racing (exclusion in 33 CFR 173.13(a)).
- Casualties or damage that occur when the only vessel(s) involved are foreign vessels and thus not subject to U.S. federal reporting requirements.

A list of “non-reportable” scenarios reported by the states and their associated casualty counts can be found in Table 3.



<b>Table 3 • NON-REPORTABLE SCENARIOS WITH THEIR CASUALTY COUNT</b>					
	Accidents	Deaths	Injuries	Vessels Losses	Damages
<b>Does not meet Coast Guard policy</b>					
◆ A person dies or is injured from natural causes while aboard a vessel where the vessel did not contribute to the casualty.	6	5	1	0	\$500.00
◆ A person dies, is injured, or is missing as a result of jumping, diving, or swimming for pleasure from an anchored, moored or docked vessel.	4	2	3	0	\$0.00
◆ A person dies, is injured, or is missing as a result of swimming to retrieve an object or a vessel that is adrift from its mooring or dock, having departed from a place of inherent safety, such as the shore or pier.	2	2	0	0	\$0.00
◆ Casualties or damage that occur during accidents that only involve watercraft that have not been deemed a vessel.	4	5	0	0	\$0.00
◆ Casualties or damage that occur when the only vessel(s) involved are being used solely for governmental, commercial or criminal activity.	90	14	49	7	\$1,258,106.54
◆ Casualties or damage that occur when the only vessel(s) involved are foreign vessels and thus not subject to U.S. federal reporting requirements.	1	0	0	0	\$200,000.00
◆ Casualties or damage that occur when the only vessel(s) involved are not required to be numbered and are being used exclusively for racing.	1	1	0	0	\$20,000.00
◆ Casualties that result from falls from or on docked vessels or vessels that are moored to a permanent structure.	3	1	2	0	\$0.00
◆ Fire or explosions on anchored, docked or moored boats where the cause of the fire was not attributed to the vessel or vessel equipment.	2	0	3	1	\$4,200.00
◆ Property damage occurs or a person dies, is injured, or is missing as a result of a fire on shore or a pier that spreads to a vessel or vessels.	2	0	0	6	\$610,000.00
◆ Property damage occurs or a person dies, is injured, or is missing while preparing a vessel for launching or retrieving and the vessel is not on the water and capable/ready for its intended use.	4	0	1	1	\$50,000.00
◆ Property damage occurs to a docked or moored vessel due to lack of maintenance on the vessel or the structure to which it was moored.	24	0	0	9	\$271,500.00
◆ Property damage occurs to a docked or moored vessel or a person dies, is injured, or is missing from such a vessel as a result of storms, or unusual tidal or sea conditions; or when a vessel gets underway in those conditions in an attempt to rescue persons.	17	0	0	7	\$314,000.00
<b>Does not meet federal reporting requirements</b>	<b>330</b>	<b>0</b>	<b>61</b>	<b>0</b>	<b>\$218,022.35</b>
<b>Total</b>	<b>490</b>	<b>30</b>	<b>120</b>	<b>31</b>	<b>\$2,946,328.89</b>

## Use of Statistics

The following are notes on using data on recreational boating accidents.

### 1) Normalizing data.

When analyzing recreational boating accident data, it is recommended that any researcher normalize it with a denominator.

The Coast Guard frequently uses recreational vessel registration as a denominator because of the availability of the data. The Coast Guard calculates a fatality rate expressed as the number of deaths per 100,000 registered recreational vessels. This measure is representative of the entire program (motorized and non-motorized activity) but necessitates a caveat that not all states register the same types of vessels (many do not register non-motorized vessels, which are represented in fatal accident data) and some states have longer boating seasons than others. Further, when examining a state fatality rate, it is important to note that the state fatality rate may include deaths from vessels that were registered by another state.

The Coast Guard also calculates a motorized fatality rate expressed as the number of deaths on motorized vessels per 100,000 registered motorized recreational vessels. While this measure is sound, it doesn't reflect all of recreational boating because it does not represent non-motorized activity.

The 2018 National Recreational Boating Safety Survey (NRBSS) estimated, by state, recreational boating exposure. These are expressed as: number of outings, boat days, boat hours, person boat days and person boat hours. Risk ratios were calculated by state in the NRBSS Exposure report and were expressed as the number of deaths per 100,000,000 person boat hours. The reports can be found on the Coast Guard's Boating Safety website at <https://uscgboating.org/statistics/national-recreational-boating-safety-survey.php>

The Coast Guard intends to conduct a National Recreational Boating Safety Survey in 2026.

### 2) Limitations on collection.

It is recommended that any researcher focus on fatal data since the confidence of this data is very high. The Coast Guard works with state marine agencies, other federal agencies, and news media aggregating services to identify boating incidents. Despite best efforts to document incidents, the Coast Guard is only confident in its capture of deceased victims since fatal accidents undoubtedly involve state or government oversight, and garner more attention in the news media.

Data on non-fatal accidents have a much lower confidence level. Non-fatal accidents are severely under-reported because boaters are unaware of reporting requirements or are unwilling to report. A 2006 study, "Recent Research on Recreational Boating Accidents and the Contribution of Boating Under the Influence," suggest that 20% of hospital-admitted injuries were not captured, and upwards of 93% of non-fatal, non-hospital admitted injuries were not captured in the data collection on boating accidents. The study is posted on the Coast Guard's website at [http://www.uscgboating.org/library/bui-study/BUI\\_Study\\_Final.pdf](http://www.uscgboating.org/library/bui-study/BUI_Study_Final.pdf).

There has been discussion about adjusting numbers to account for non-reporting, but results have not been published yet. The Coast Guard has studied alternate data sources including insurance claims to better gauge the gap between reported and unreported accidents. A May 2023 analysis of two states using data for years 2015-2018 suggested a significant degree of underreported damages and damage accidents. For every \$1 of damage in the Coast Guard's database, the data suggested that \$7.27-\$21.77 actually occurred. For every property damage accident in the Coast Guard's database, the data suggested that 12-21 accidents actually occurred. The data indicated a degree of variability among the two states investigated, which suggests that a wider study would be necessary to understand the full extent of underreporting in the nation. The authors also examined the degree of injury underreporting in one state. They found that for every moderate injury reported, there were likely 30.4 that actually occurred; for every more severe injury, likely 1.65 actually occurred.

In a collaborative project between the Washington State Department of Health, Washington State Parks, National Association of State Boating Law Administrators, and the Safe States Alliance, researchers concluded that 95% of non-fatal recreational boating injuries identified by syndromic surveillance were unable to be linked to reports to the Coast Guard.

3) Comparisons with other sources.

The data in this publication may differ from other sources due to a number of factors, including:

- a. Time period. The statistics in this publication are based on calendar year 2023 accident data submitted by states as of 8 March 2024 with subsequent updates as information is reviewed and standardized. This publication covers only accidents meeting the aforementioned reporting requirements.
- b. Geographic location. This publication reflects accidents that occurred on waters subject to the jurisdiction of the United States and on the high seas. Although the reporting of accidents that occur on private waters (such as a pond on a private property) are not required to be reported since states do not have jurisdiction, the Coast Guard includes data on private waters if the accidents satisfy the other requirements for inclusion. The rationale for doing so is that the National Recreational Boating Safety program could still impact individuals who boat on private waters. For those accidents that occur on private waters, the Coast Guard attributes the data to a state. For instance, if an accident occurred on a private pond in Georgia, the Coast Guard attributes the accident to Georgia.

Similarly, although the reporting of accidents that occur on federal waters within the boundaries of a state (for instance, Aberdeen Proving Grounds in Maryland), are not required to be reported by the states since state officials do not have jurisdiction, the Coast Guard includes data on federal waters if the accidents satisfy the other requirements for inclusion. The rationale for doing so is the same; the National Recreational Boating Safety program could still impact individuals who boat on federal waters. For those accidents that occur on federal waters, the Coast Guard attributes the data to a state. For instance, if an accident occurred on Aberdeen Proving Grounds, the Coast Guard attributes the accident to Maryland.

- c. Different reporting requirements. Some states have more stringent reporting requirements than the federal government. For instance, some states may require a person to report an accident that involved at least \$500 damage, whereas the federal threshold for reporting damage is \$2,000 or more. The data represented in the remaining tables in this report represent accidents that met federal reporting requirements.

4) Fatal accidents are accidents that involve at least one death.

An example of a fatal accident is a capsizing that resulted in three deaths. It was an accident that involved at least one death.

5) Disappearances.

Victims who have disappeared and are presumed dead are represented in the tallies of deaths.

# **ACCIDENT CAUSES & CONDITIONS**

## Explanation of Accident Causes and Conditions Section

The following nineteen tables and figures focus on the causes of accidents with a special focus on alcohol use, the operation and activity at the time of accident, weather and water conditions, vessel information, and the time of accidents.

### **Percent of Accidents that are Fatal by Month (Figure 1 & Table 4, Page 18)**

This table provides information about total accidents, fatal accidents, non-fatal accidents, and deaths. The figure focuses on the percent of fatal accidents by month.

### **Percent of Accidents that are Fatal by Time Period (Figure 2 & Table 4a, Page 19)**

This table and figure reflect the percent of accidents that are fatal by time period. Where data was known, the category in which accidents are more frequently fatal span the hours between 12:00 am and 2:30 am.

### **Primary Contributing Factor of Accidents & Casualties (Table 5, Page 20)**

The "contributing factors" of an accident are the causes of the accident. In the Coast Guard's national accident reporting database, there are allowances for up to four causes. This table reflects the first cause listed for all accidents, deaths, and injuries nationwide.

For the purposes of displaying information in a simplified manner, the Coast Guard divided the contributing factor categories into five larger categories: operation of vessel, loading of passengers or gear, failure of vessel or vessel equipment, environment, and miscellaneous. These five categories are situated in the leftmost column of the table and have the total number of accidents, deaths, and injuries associated with each category under the category name.

### **Machinery & Equipment Primary Contributing Factor of Accidents & Casualties (Table 6, Page 21)**

This table reflects the number of accidents, deaths, and injuries where machinery or equipment failure was listed as a first cause of the accident. The table also delineates the different types of failure that were listed.

### **Primary Contributing Factor of Accidents (Figure 3, Page 22)**

This figure reflects the first cause of accidents for all accidents nationwide.

### **Primary Contributing Factor of Deaths (Figure 4, Page 23)**

This figure reflects the first cause listed for all deaths.

### **Primary Contributing Factor of Injuries (Figure 5, Page 24)**

This figure reflects the first cause listed for all injuries.

### **Number of Vessels in Accidents by Vessel Type & Primary Contributing Factor (Table 7, Page 25)**

This table looks at the number of vessels involved in accidents by vessel type and the primary cause of the accident.

### **Alcohol Use as a Contributing Factor in Accidents & Casualties by State 2019-2023 (Table 8, Page 26)**

This table reflects a tally of all four causes of accidents listed for all national accidents, deaths, and injuries.

This table lists accidents where alcohol use by the vessel's occupants was listed as a direct or indirect cause of the accident. There are other cases in the national database where alcohol use is listed as being involved in the accident but it was not determined to be a cause of the accident.

**Vessel Operation at the Time of Accident (Table 9, Page 27)**

This table focuses on the vessel operation at the time of the accident. The table lists information about the number of vessels involved, the resulting number of deaths, and the resulting number of injuries.

**Vessel Activity at the Time of Accident (Table 10, Page 27)**

This table examines the vessel and victim activity at the time of the accident. The table provides information about the number of vessels involved, the resulting number of deaths, and the resulting number of injuries.

Please note that vessels used for commercial or government activity were included in this recreational boating statistics publication if they were involved in a multi-vessel accident that involved at least one recreational vessel.

Also note that racing was included as an activity because either the vessels involved in racing were not exempted from reporting requirements, or the vessels were involved in a multi-vessel accident that involved at least one recreational vessel.

**Weather & Water Conditions (Table 11, Page 28)**

This table documents some of the environmental characteristics of accidents. It focuses on accidents, deaths, and injuries by type of body of water, water conditions, wind level, visibility, and water temperature.

**Time Related Data (Table 12, Page 29)**

These three sections independently examine time-related information for accidents, deaths, and injuries. The top section documents the number of accidents, deaths, and injuries that occurred during a time frame. The middle section documents the number of accidents, deaths, and injuries that occurred during a given month. Finally, the bottom section documents the number of accidents, deaths, and injuries that occurred during a given day of the week.

Each section examines the national data separately and should not be combined to draw conclusions. For instance, one cannot use them to deduce that the majority of accidents occur from 4:31 pm to 6:30 pm in July on the weekends. However, you could deduce that 4:31 pm to 6:30 pm was the time frame during which the highest number of accidents occurred in calendar year 2023. Furthermore, the month with the highest number of accidents was July. Finally, the two days of the week with the greatest number of accidents were Saturday and Sunday.

**Vessel Information (Table 13, Page 30)**

This table documents some of the characteristics of vessels involved in accidents. It provides information about the number of accidents, deaths, and injuries by horsepower, year built, length, and hull material.

**Rental Status of Vessels Involved in Accidents (Table 14, Page 31)**

This table examines whether a vessel involved in an accident was rented. It also provides information on whether deaths and injuries occurred on rented vessels. Please note that some states only document if a vessel was rented; they do not indicate whether a vessel was “not rented”. As a result, the rental status of many vessels is “unknown”.

**Number & Percent of Deaths by Vessel Length (Figure 6 & Table 15, Page 32)**

This table focuses on the number of deaths by vessel length. Deaths are categorized into drownings and non-drownings. The table also provides a percentage of all deaths that were caused by drowning.

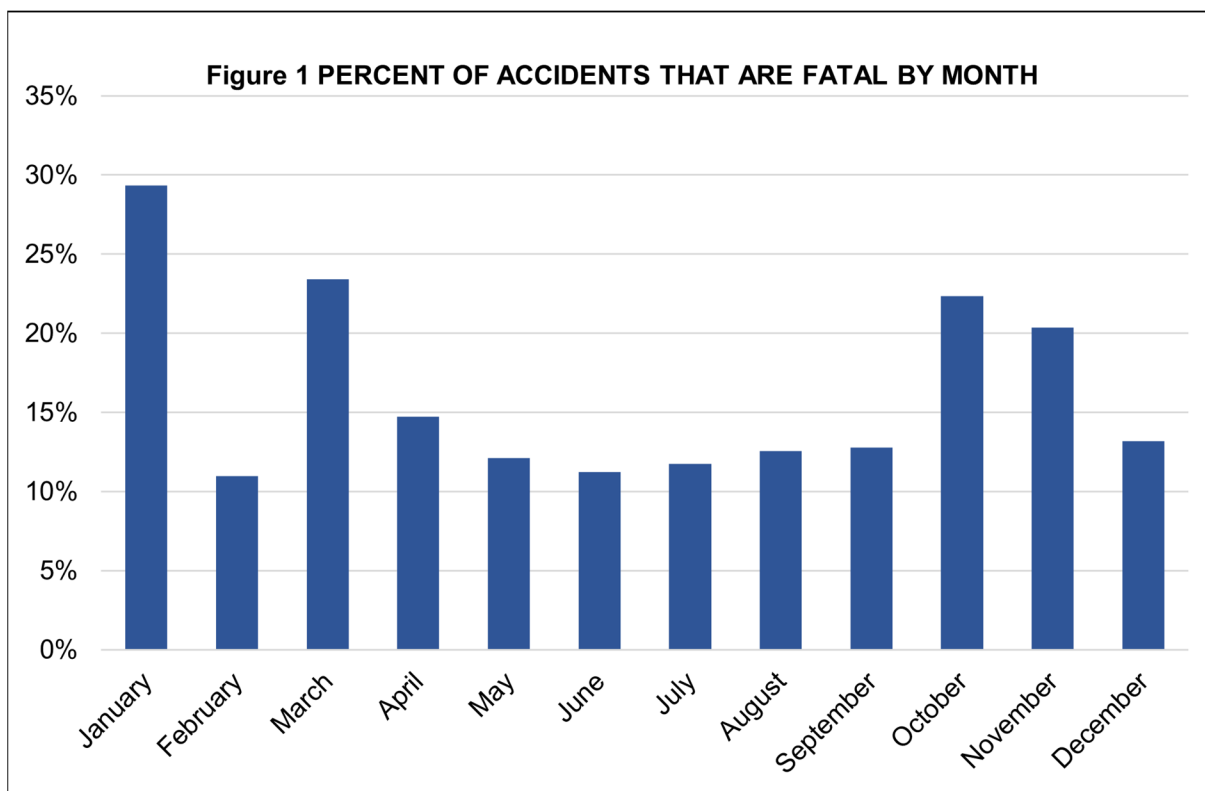
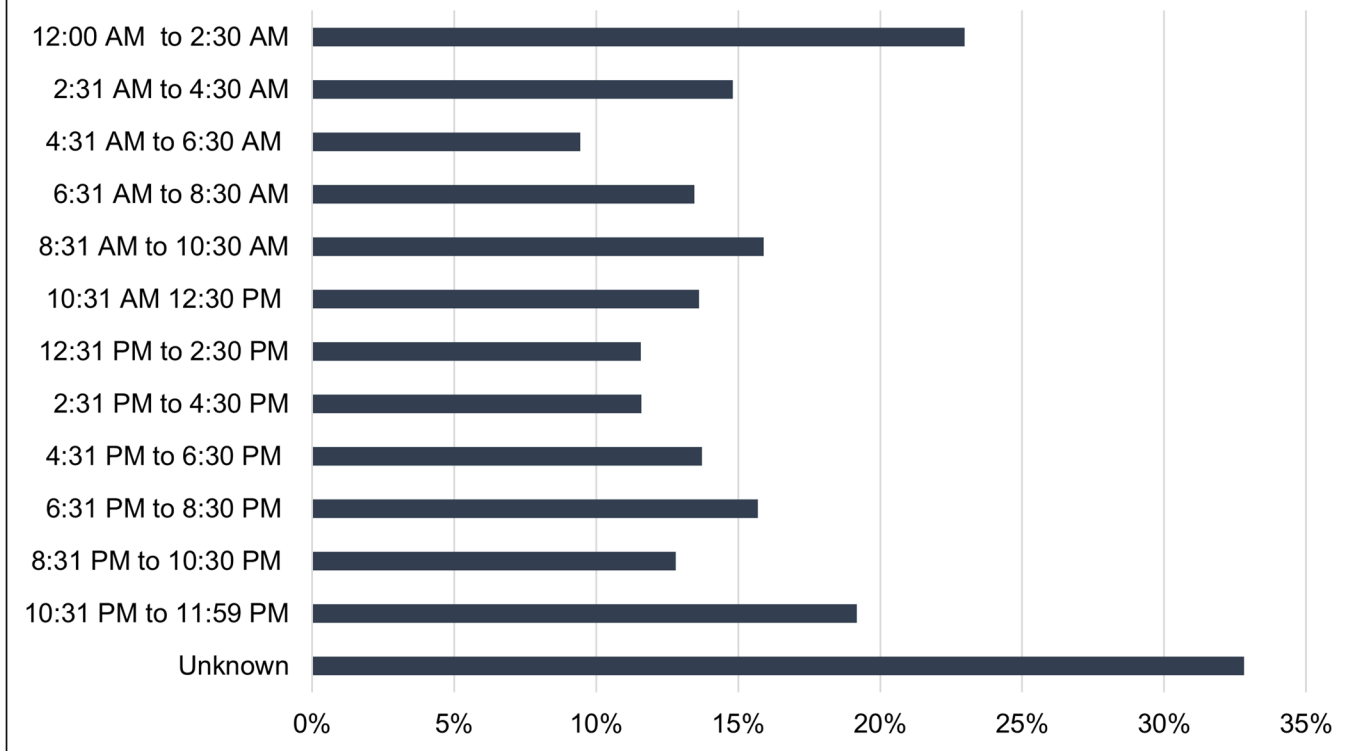


Table 4 - PERCENT OF ACCIDENTS THAT ARE FATAL BY MONTH					
Month	Fatal Accidents	Non-Fatal Accidents	Total Accidents	Percent of Accidents Resulting in Deaths	Total Deaths
January	27	65	92	29%	30
February	9	73	82	11%	9
March	33	108	141	23%	35
April	34	197	231	15%	38
May	56	406	462	12%	57
June	63	498	561	11%	64
July	110	826	936	12%	114
August	72	502	574	13%	78
September	47	321	368	13%	53
October	42	146	188	22%	47
November	24	94	118	20%	27
December	12	79	91	13%	12
<b>Total</b>	<b>529</b>	<b>3315</b>	<b>3844</b>	<b>14%</b>	<b>564</b>

**Figure 2 PERCENT OF ACCIDENTS THAT ARE FATAL BY TIME PERIOD**



**Table 4a - PERCENT OF ACCIDENTS THAT ARE FATAL BY TIME PERIOD**

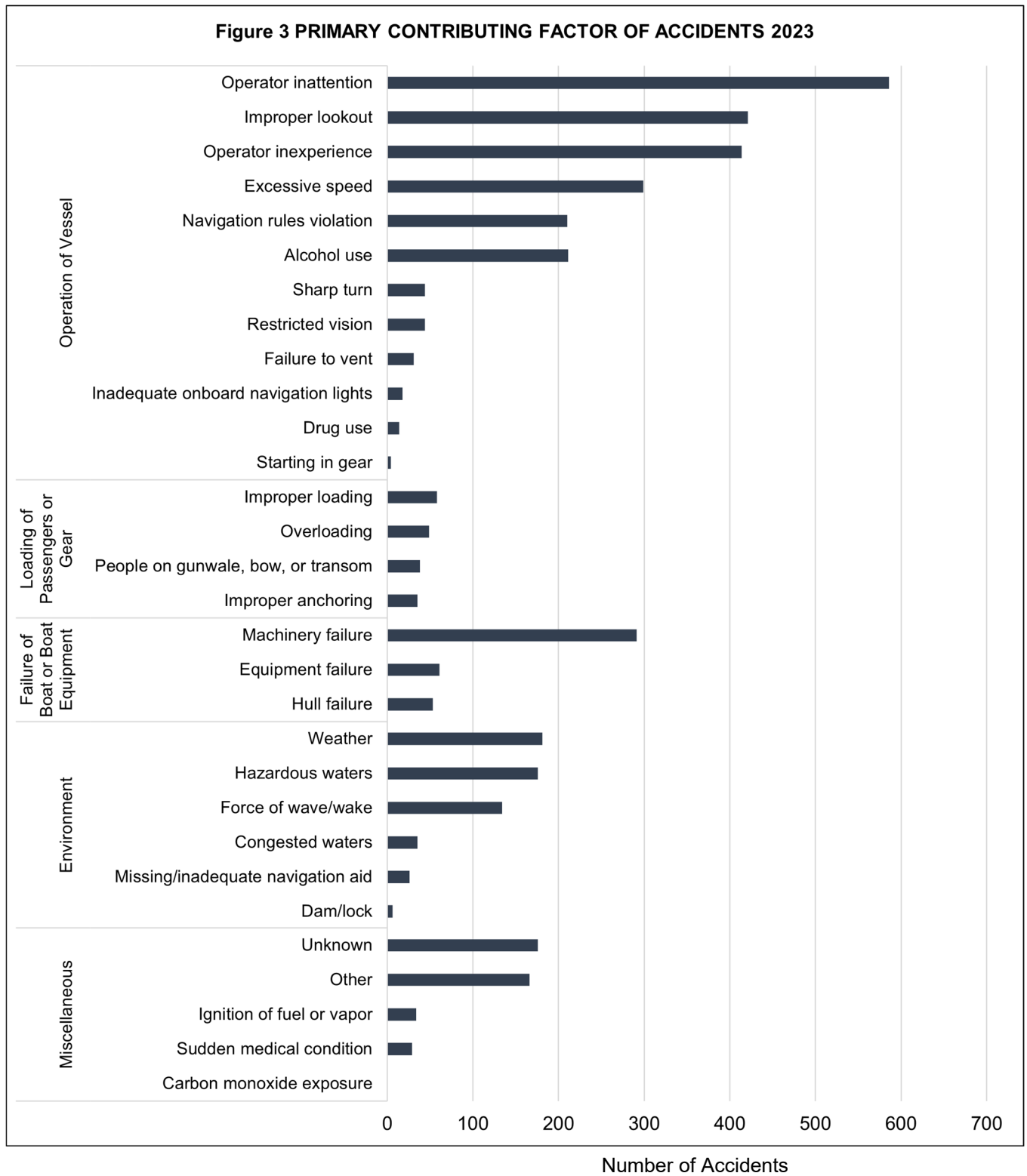
Time period	Fatal Accidents	Non-Fatal Accidents	Total Accidents	Percent of Accidents Resulting in Deaths	Total Deaths
12:00 AM to 2:30 AM	17	57	74	23%	18
2:31 AM to 4:30 AM	4	23	27	15%	4
4:31 AM to 6:30 AM	5	48	53	9%	5
6:31 AM to 8:30 AM	14	90	104	13%	14
8:31 AM to 10:30 AM	35	185	220	16%	42
10:31 AM 12:30 PM	61	387	448	14%	63
12:31 PM to 2:30 PM	71	542	613	12%	75
2:31 PM to 4:30 PM	92	702	794	12%	97
4:31 PM to 6:30 PM	101	635	736	14%	105
6:31 PM to 8:30 PM	67	360	427	16%	72
8:31 PM to 10:30 PM	27	184	211	13%	29
10:31 PM to 11:59 PM	14	59	73	19%	15
Unknown	21	43	64	33%	25
<b>All time periods</b>	<b>529</b>	<b>3315</b>	<b>3844</b>	<b>14%</b>	<b>564</b>



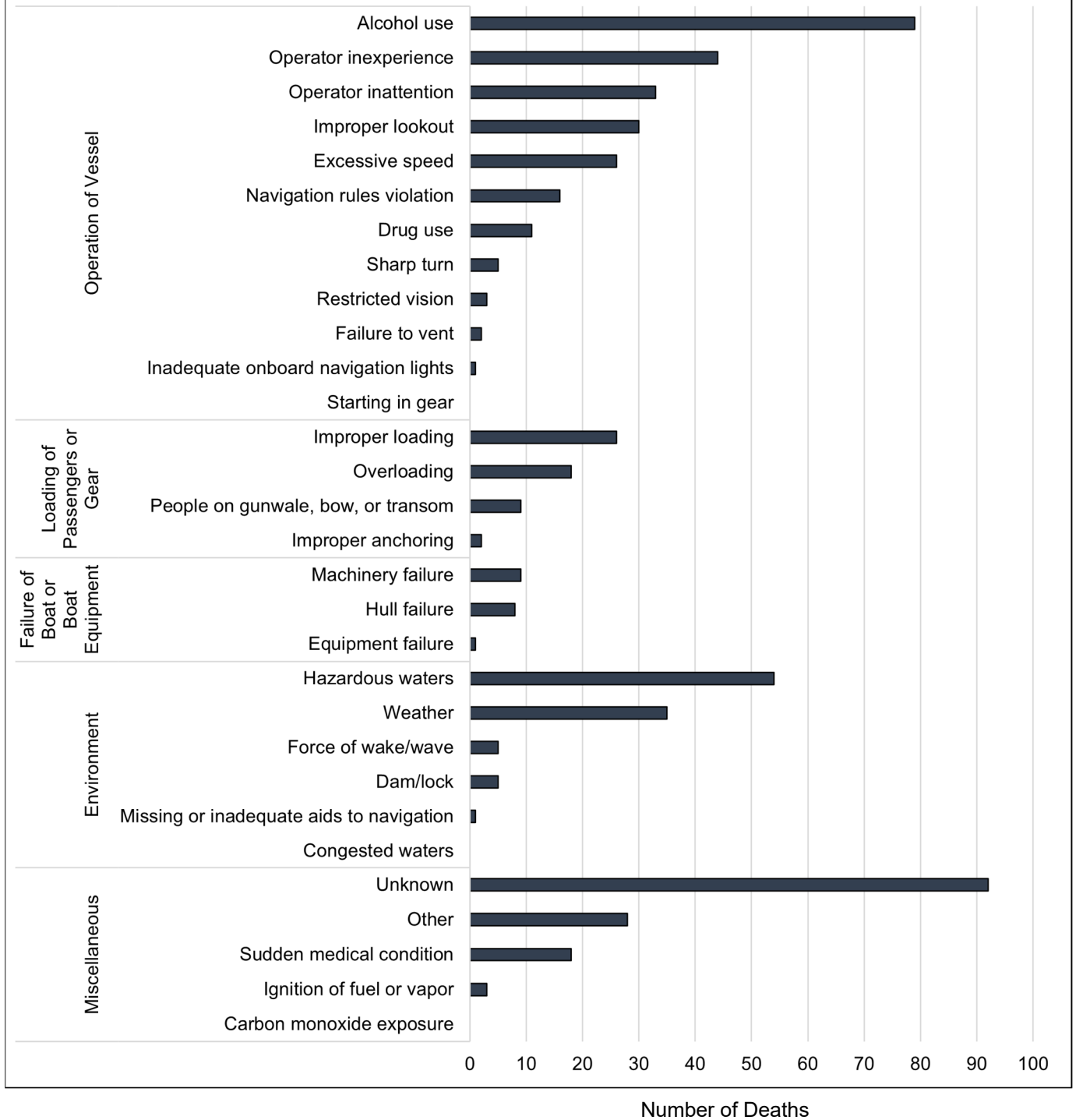
<b>Table 5 - PRIMARY CONTRIBUTING FACTOR OF ACCIDENTS &amp; CASUALTIES 2023</b>				
		Accidents	Deaths	Injuries
<b>Operation of Vessel</b> <b>2296 Accidents</b> <b>250 Deaths</b> <b>1492 Injuries</b>	Alcohol use	211	79	201
	Drug use	14	11	2
	Excessive speed	299	26	214
	Failure to vent	31	2	49
	Improper lookout	421	30	284
	Inadequate onboard navigation lights	18	1	14
	Navigation rules violation	210	16	134
	Operator inattention	586	33	323
	Operator inexperience	414	44	200
	Restricted vision	44	3	34
	Sharp turn	44	5	36
	Starting in gear	4	0	1
	<b>Loading of Passengers or Gear</b> <b>180 Accidents</b> <b>55 Deaths</b> <b>90 Injuries</b>	Improper anchoring	35	2
Improper loading		58	26	31
Overloading		49	18	28
People on gunwale, bow or transom		38	9	30
<b>Failure of Boat or Boat Equipment</b> <b>405 Accidents</b> <b>18 Deaths</b> <b>105 Injuries</b>	Equipment failure	61	1	20
	Hull failure	53	8	5
	Machinery failure	291	9	80
<b>Environment</b> <b>558 Accidents</b> <b>100 Deaths</b> <b>257 Injuries</b>	Congested waters	35	0	12
	Dam/lock	6	5	5
	Force of wave/wake	134	5	99
	Hazardous waters	176	54	77
	Missing/inadequate navigation aid	26	1	4
	Weather	181	35	60
<b>Miscellaneous</b> <b>405 Accidents</b> <b>141 Deaths</b> <b>182 Injuries</b>	Carbon monoxide exposure	0	0	0
	Ignition of fuel or vapor	34	3	35
	Sudden medical condition	29	18	8
	Other	166	28	94
	Unknown	176	92	45
<b>All categories combined</b>		<b>3844</b>	<b>564</b>	<b>2126</b>

<b>Table 6 • MACHINERY &amp; EQUIPMENT PRIMARY CONTRIBUTING FACTOR OF ACCIDENTS &amp; CASUALTIES 2023</b>				
		Accidents	Deaths	Injuries
Machinery Failure	Electrical system failure	45	1	5
	Engine failure	148	6	32
	Exhaust system failure	3	0	5
	Fuel system failure	10	0	12
	Shift failure	17	0	3
	Steering system failure	25	1	10
	Throttle failure	23	1	4
	Ventilation system failure	2	0	2
	Not specified	18	0	7
Equipment Failure	Auxiliary equipment failure	43	1	9
	Onboard navigation aid	0	0	0
	Sail dismasting	1	0	0
	Seat broke loose	5	0	6
	Other	6	0	5
	Not specified	6	0	0

**Figure 3 PRIMARY CONTRIBUTING FACTOR OF ACCIDENTS 2023**



**Figure 4 PRIMARY CONTRIBUTING FACTOR OF DEATHS 2023**



**Figure 5 PRIMARY CONTRIBUTING FACTOR OF INJURIES 2023**

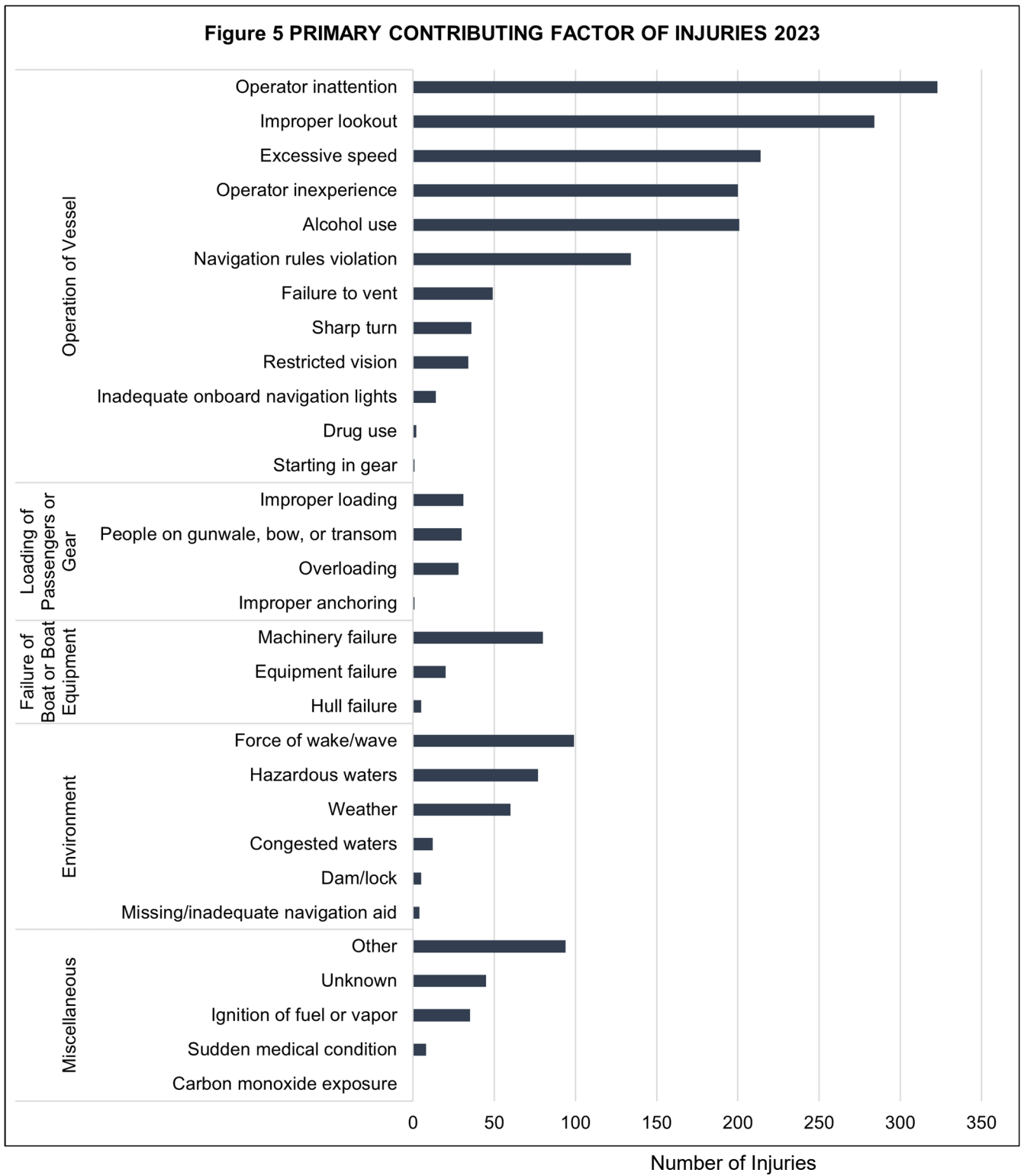


Table 7 - NUMBER OF VESSELS IN ACCIDENTS BY VESSEL TYPE & PRIMARY CONTRIBUTING FACTOR 2023	
<b>All vessels</b>	<b>5330 2760 556 1874 471 31 156 190 54 34 49 61 657 34 397 27 376 881 620 50 38 64 53 6 31 220 173 228</b>
Airboat	27 2 0 0 0 6 0 1 1 0 0 0 0 1 1 0 3 4 2 0 0 2 1 0 0 1 0
Auxiliary sailboat	230 5 0 1 0 4 3 0 2 16 1 29 1 27 4 13 53 22 1 7 1 0 0 17 3 14
Cabin motorboat	689 22 0 9 0 0 17 45 7 9 14 10 9 15 4 88 2 105 6 34 132 62 1 3 6 3 2 0 32 15 37
Canoe	56 3 0 0 0 1 0 0 0 0 8 0 0 1 6 3 0 0 2 7 4 1 0 0 0 1 6 2 9
Houseboat	69 0 0 0 0 3 2 3 1 1 0 0 0 17 0 5 7 7 0 2 0 0 0 0 6 1 12
Inflatable	32 3 0 0 1 0 0 1 0 0 16 0 0 1 0 1 0 1 2 2 1 0 0 0 0 1 1
Kayak	144 9 0 0 1 4 0 1 0 1 31 1 0 0 7 1 2 0 0 2 8 22 6 0 1 0 0 8 15 3 21
Open motorboat	2411 1380 27 3 5 45 191 19 81 88 36 20 12 30 309 24 174 16 146 399 207 33 23 31 29 4 16 112 117 76
Personal watercraft	995 37 0 5 1 4 2 167 4 37 14 2 2 0 4 157 0 28 0 114 179 183 0 0 4 15 0 1 7 12 16
Pontoon	470 44 0 12 0 0 3 37 0 13 5 3 1 1 7 50 3 29 0 32 79 83 2 10 6 3 0 3 16 12
Rowboat	25 3 0 0 0 0 1 0 1 0 1 1 0 0 1 3 0 0 2 3 4 1 0 0 0 2 0 0 2
Sail (only)	30 0 0 0 0 1 0 0 1 3 0 0 2 1 2 0 1 0 2 2 4 0 0 1 0 0 0 5 0 5
Sail (unknown)	5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 1 0 2
Standup paddleboard	17 2 0 0 0 0 0 0 1 2 0 0 0 0 0 0 1 2 4 0 0 0 0 0 0 0 1 1 3
Other	33 3 0 0 0 1 0 3 0 2 0 0 0 0 5 0 3 1 1 5 4 0 0 4 0 0 1 0 0
Unknown	97 5 0 1 0 0 0 13 0 6 4 0 0 1 0 7 1 10 0 18 4 6 1 0 0 1 0 0 1 18
Unknown	
Other	
Weather	
Sudden medical condition	
Starting in gear	
Sharp turn	
Restricted vision	
People on gunwale, bow or transom	
Overloading	
Operator inexperience	
Operator inattention	
Navigation rules violation	
Missing/inadequate navigation aid	
Machinery failure	
Inadequate onboard navigation lights	
Improper lookout	
Improper loading	
Improper anchoring	
Ignition of fuel or vapor	
Hull failure	
Hazardous waters	
Force of wave/wake	
Failure to vent	
Excessive speed	
Equipment failure	
Drug use	
Dam/lock	
Congested waters	
Carbon monoxide exposure	
Alcohol use	
All contributing factors	

Table 8 • ALCOHOL USE AS A CONTRIBUTING FACTOR IN ACCIDENTS & CASUALTIES BY STATE 2019-2023															
USA	Accidents					Deaths					Injuries				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
<b>USA</b>	<b>330</b>	<b>353</b>	<b>330</b>	<b>270</b>	<b>262</b>	<b>128</b>	<b>130</b>	<b>110</b>	<b>108</b>	<b>97</b>	<b>279</b>	<b>315</b>	<b>280</b>	<b>204</b>	<b>242</b>
AK	1	5	2	2	5	1	6	2	3	5	0	0	0	0	2
AL	12	11	7	9	7	8	2	1	1	3	12	4	6	4	6
AR	3	4	8	6	5	1	2	6	3	4	0	2	0	1	6
AZ	8	7	7	3	4	0	0	0	1	1	6	5	7	0	0
CA	16	21	18	13	16	6	10	3	2	2	18	24	15	11	11
CO	1	4	5	4	3	0	3	4	1	0	1	2	1	2	3
CT	6	0	1	2	2	1	0	1	2	1	1	0	0	1	0
DE	0	1	0	4	1	0	0	0	2	1	0	1	0	3	0
DC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FL	40	36	39	29	30	18	13	13	9	11	26	27	17	18	31
GA	7	11	9	7	4	3	0	4	6	2	2	27	16	12	3
HI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IA	4	8	5	4	8	1	2	0	1	3	6	4	2	1	5
ID	4	6	8	10	8	1	0	3	10	0	3	9	6	4	7
IL	9	6	6	2	7	8	4	4	0	2	6	2	1	4	11
IN	5	4	5	8	3	4	2	3	1	0	2	1	4	11	3
KS	2	0	1	1	2	1	0	0	0	0	3	0	1	2	7
KY	8	9	6	5	8	1	1	2	1	3	6	7	5	5	4
LA	8	10	16	9	5	3	2	8	5	2	8	21	20	7	4
MA	6	6	4	3	4	0	2	2	1	3	8	3	7	4	7
MD	14	17	13	10	2	9	3	1	2	1	10	21	14	13	7
ME	3	3	1	5	4	2	1	1	3	1	0	1	0	1	2
MI	17	14	10	8	12	5	4	3	2	6	13	12	4	3	5
MN	10	12	14	10	11	2	5	6	5	1	4	5	9	5	9
MO	14	13	10	6	5	4	2	2	4	1	18	20	9	4	17
MS	0	4	4	2	3	0	1	0	1	2	0	4	7	1	2
MT	1	1	2	3	2	1	0	2	2	1	0	1	0	2	2
NC	11	22	11	12	5	4	10	1	4	2	9	18	7	3	7
ND	0	2	2	0	2	0	0	0	0	0	0	3	3	0	2
NE	3	1	3	1	1	0	0	0	0	0	3	2	3	1	2
NH	1	1	2	2	0	0	0	2	0	0	1	1	0	0	0
NJ	2	1	5	4	5	2	0	1	1	1	0	0	15	7	4
NM	0	2	3	1	3	0	1	1	1	2	0	1	0	0	1
NV	1	1	1	2	2	0	1	0	1	2	0	0	1	1	2
NY	11	9	13	10	5	2	3	4	3	1	17	7	17	7	3
OH	11	12	12	10	4	2	9	4	2	1	11	9	9	7	2
OK	4	4	2	3	9	2	2	1	2	3	2	3	1	2	6
OR	5	4	3	3	2	4	2	1	1	1	3	1	2	2	1
PA	3	3	3	5	3	1	2	2	3	1	4	0	0	2	11
RI	0	2	2	2	1	0	0	0	1	0	0	3	4	1	1
SC	9	6	14	6	11	2	3	3	4	6	9	4	15	4	4
SD	1	1	0	2	1	0	1	0	0	0	4	0	0	0	0
TN	9	7	12	8	9	1	6	6	3	3	7	8	10	6	10
TX	27	29	18	14	11	11	8	7	2	4	33	35	21	18	20
UT	5	6	0	2	6	2	5	0	1	0	6	1	0	0	3
VA	6	7	1	4	3	4	4	0	3	0	1	4	1	1	2
VT	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
WA	17	6	8	5	3	9	3	2	3	2	14	6	5	4	1
WI	4	12	14	9	12	1	4	4	5	12	2	6	15	19	3
WV	1	2	0	0	1	1	1	0	0	0	0	0	0	0	0
WY	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
AS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CNMI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

<b>Table 9 • VESSEL OPERATION AT THE TIME OF ACCIDENT 2023</b>			
	<b>Vessels Involved</b>	<b>Deaths</b>	<b>Injuries</b>
<b>Totals</b>	<b>5330</b>	<b>564</b>	<b>2126</b>
At anchor	173	19	48
Being towed	34	0	3
Changing direction	596	37	290
Changing speed	449	29	211
Cruising	2214	152	1150
Docking/undocking	173	2	27
Drifting	500	151	180
Idling	39	0	24
Launching/loading	25	1	8
Rowing/paddling	182	117	59
Sailing	37	4	19
Tied to dock/moored	699	2	58
Towing	35	0	6
Trolling	18	1	8
Other	18	0	2
Unknown	138	49	33

<b>Table 10 • VESSEL ACTIVITY AT THE TIME OF ACCIDENT 2023</b>									
	<b>Vessels Involved</b>	<b>Deaths</b>				<b>Injuries</b>			
		<b>Total</b>	<b>Operator</b>	<b>Occupant</b>	<b>Other/ unknown role</b>	<b>Total</b>	<b>Operator</b>	<b>Occupant</b>	<b>Other/ unknown role</b>
<b>Totals</b>	<b>5330</b>	<b>564</b>	<b>365</b>	<b>167</b>	<b>32</b>	<b>2126</b>	<b>836</b>	<b>1018</b>	<b>272</b>
Boating/relaxation	3514	322	228	83	11	1466	653	771	42
Commercial	52	0	0	0	0	3	0	2	1
Fishing	576	145	91	50	4	251	115	123	13
Fueling	19	0	0	0	0	28	7	19	2
Government	7	0	0	0	0	0	0	0	0
Hunting	40	10	8	2	0	30	14	16	0
Racing	21	0	0	0	0	8	4	4	0
Repairs	56	4	3	1	0	26	15	9	2
Starting engine	48	3	1	2	0	39	10	21	8
Swimming/snorkeling	72	37	17	15	5	34	5	25	4
Towed watersports	250	18	2	6	10	224	3	22	199
Towing	50	0	0	0	0	9	4	5	0
Whitewater	25	20	11	7	2	6	4	1	1
Other	14	5	4	1	0	2	2	0	0
None; not in operation	563	0	0	0	0	0	0	0	0
Unknown	23	0	0	0	0	0	0	0	0



<b>Table 11 ▪ WEATHER AND WATER CONDITIONS 2023</b>				
		<b>Accidents</b>	<b>Deaths</b>	<b>Injuries</b>
		<b>3844</b>	<b>564</b>	<b>2126</b>
<b>TYPE OF BODY OF WATER</b>	Lakes, Ponds, Reservoirs, Dams, Gravel Pits	1726	271	1038
	Rivers, Streams, Creeks, Swamps, Bayous	933	198	511
	Bays, Inlets, Marinas, Sounds, Harbors, Channels, Canals, Sloughs, Coves	798	54	406
	Ocean/Gulf	282	31	130
	Great Lakes (not tributaries)	105	10	41
<b>WATER CONDITIONS</b>	Calm (waves less than 6")	2387	331	1355
	Choppy (waves >6" to 2')	986	108	553
	Rough (waves >2' to 6')	265	53	110
	Very Rough (waves larger than 6')	38	14	20
	Unknown	168	58	88
<b>WIND</b>	None	320	52	214
	Light (1 - 6 mph)	2266	304	1337
	Moderate (7 - 14 mph)	895	135	422
	Strong (15 - 25 mph)	219	36	91
	Storm (over 25 mph)	35	6	8
	Unknown	109	31	54
<b>VISIBILITY</b>	Poor - Day	52	11	31
	Poor - Night	94	14	63
	Poor - Unknown if day or night	2	1	1
	Fair - Day	196	42	77
	Fair - Night	124	29	92
	Fair- Unknown if day or night	2	1	0
	Good - Day	2862	366	1579
	Good - Night	349	55	205
	Good- Unknown if day or night	8	9	4
	Unknown - Day	105	23	48
	Unknown - Night	28	6	14
	Unknown - Unknown if day or night	22	7	12
<b>WATER TEMPERATURE</b>	39 degrees F and below	22	8	9
	40 - 49 degrees F	91	44	36
	50 - 59 degrees F	303	79	140
	60 - 69 degrees F	699	102	328
	70 - 79 degrees F	1232	124	682
	80 - 89 degrees F	912	99	581
	90 degrees F and above	52	8	35
	Unknown	533	100	315

<b>Table 12 • TIME RELATED DATA 2023</b>				
		<b>Accidents</b>	<b>Deaths</b>	<b>Injuries</b>
		<b>3844</b>	<b>564</b>	<b>2126</b>
<b>Time of Day</b>	12:00 AM to 2:30 AM	74	18	46
	2:31 AM to 4:30 AM	27	4	19
	4:31 AM to 6:30 AM	53	5	32
	6:31 AM to 8:30 AM	104	14	40
	8:31 AM to 10:30 AM	220	42	122
	10:31 AM 12:30 PM	448	63	209
	12:31 PM to 2:30 PM	613	75	322
	2:31 PM to 4:30 PM	794	97	442
	4:31 PM to 6:30 PM	736	105	423
	6:31 PM to 8:30 PM	427	72	256
	8:31 PM to 10:30 PM	211	29	143
	10:31 PM to 11:59 PM	73	15	46
	Unknown	64	25	26
	<b>Month of Year</b>	January	92	30
February		82	9	54
March		141	35	74
April		231	38	115
May		462	57	216
June		561	64	317
July		936	114	568
August		574	78	363
September		368	53	200
October		188	47	82
November		118	27	54
December		91	12	40
<b>Day of Week</b>	Sunday	892	128	531
	Monday	400	56	190
	Tuesday	351	57	180
	Wednesday	277	57	107
	Thursday	305	49	154
	Friday	469	81	259
	Saturday	1150	136	705

<b>Table 13 - VESSEL INFORMATION 2023</b>				
		<b>Vessels Involved</b>	<b>Deaths</b>	<b>Injuries</b>
		<b>5330</b>	<b>564</b>	<b>2126</b>
<b>Hull Material</b>	Aluminum	1040	156	434
	Fiberglass	3760	229	1555
	Plastic	205	102	84
	Rubber/Vinyl/Canvas	58	40	16
	Steel	45	1	6
	Wood	39	5	3
	Other	7	2	7
	Unknown	176	29	21
<b>Horsepower</b>	No Engine	304	189	99
	10 hp or less	92	26	42
	11 - 25 hp	109	16	51
	26 - 75 hp	411	50	165
	76 - 150 hp	1109	86	504
	151 - 250 hp	794	52	359
	Over 250 hp	1063	37	381
	Unknown	1448	108	525
<b>Year Built</b>	2023	346	29	141
	2022	394	28	176
	2020 - 2021	498	51	209
	2018- 2019	351	18	138
	2016 - 2017	275	31	100
	2010 - 2015	480	34	237
	Prior to 2010	2516	231	1016
	Unknown	470	142	109
<b>Length</b>	Less than 16 feet	1411	244	708
	16 feet to <26 feet	2373	223	1029
	26 feet to <40 feet	765	29	253
	40 feet to 65 feet	356	3	54
	More than 65 feet	93	0	4
	Unknown	332	65	78

**Table 14 - RENTAL STATUS OF VESSELS INVOLVED IN ACCIDENTS**

	Vessels			Deaths			Injuries					
	# of Vessels	Rented	Not Rented	Unknown if rented	# of Deaths	Rented	Not rented	Unknown if rented	# of Injuries	Rented	Not rented	Unknown if rented
<b>All Vessels</b>	<b>5330</b>	<b>607</b>	<b>3902</b>	<b>821</b>	<b>564</b>	<b>50</b>	<b>407</b>	<b>107</b>	<b>2126</b>	<b>289</b>	<b>1557</b>	<b>280</b>
Airboat	27	0	25	2	3	0	3	0	16	0	15	1
Auxiliary sailboat	230	5	194	31	9	0	7	2	34	2	19	13
Cabin motorboat	689	9	596	84	20	0	18	2	156	0	138	18
Canoe	56	5	44	7	43	5	33	5	20	1	16	3
Houseboat	69	12	45	12	1	1	0	0	20	6	14	0
Inflatable	32	1	21	10	23	0	14	9	7	1	6	0
Kayak	144	16	94	34	95	8	63	24	44	7	28	9
Open motorboat	2411	132	1964	315	247	10	193	44	1117	76	900	141
Personal watercraft	995	286	584	125	47	9	31	7	527	143	322	62
Pontoon	470	134	243	93	41	16	21	4	140	48	74	18
Rowboat	25	1	21	3	11	0	10	1	5	1	4	0
Sailboat (only)	30	2	24	4	3	0	2	1	18	2	15	1
Sailboat (unknown)	5	0	0	5	0	0	0	0	1	0	0	1
Standup paddleboard	17	1	11	5	11	0	9	2	5	1	2	2
Other	33	2	18	13	3	1	2	0	3	0	2	1
Unknown	97	1	18	78	7	0	1	6	13	1	2	10

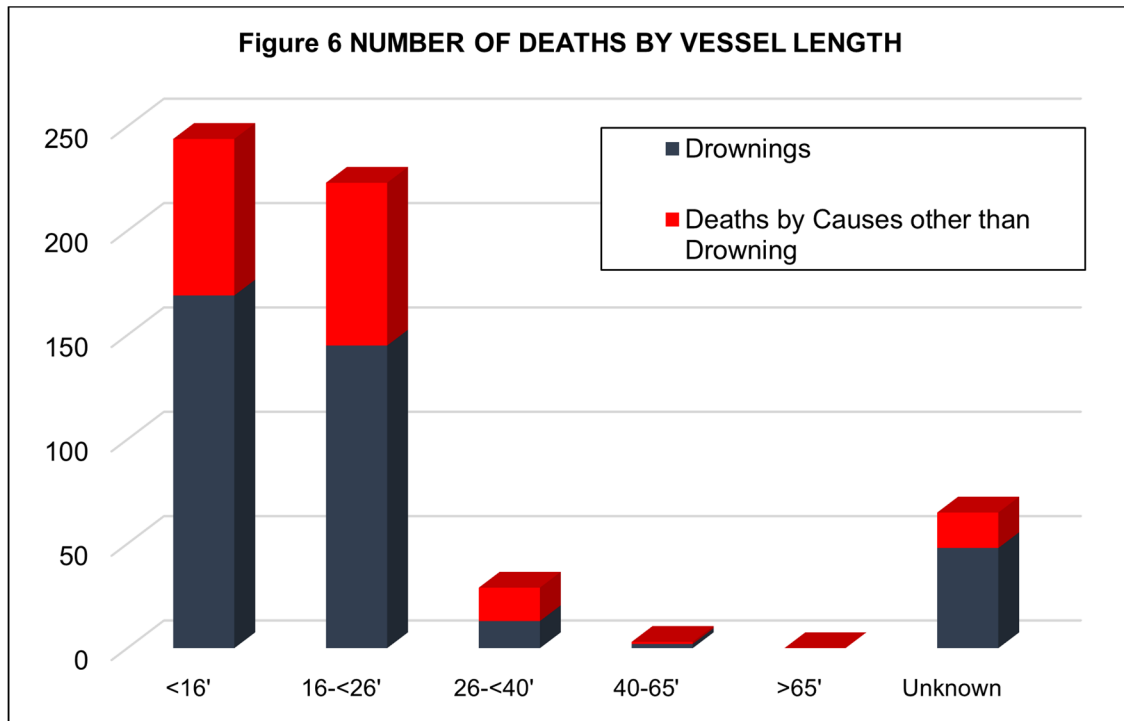


Table 15 - NUMBER & PERCENT OF DEATHS BY VESSEL LENGTH				
Length	Drownings	Deaths by Causes other than Drowning	Total Deaths	Percent of Deaths from Drowning
<16'	169	75	244	69%
16-<26'	145	78	223	65%
26-<40'	13	16	29	45%
40-65'	2	1	3	67%
>65'	0	0	0	0%
Unknown	48	17	65	74%
<b>Total</b>	<b>377</b>	<b>187</b>	<b>564</b>	<b>67%</b>

# **ACCIDENT TYPES**

### Explanation of Accident Types Section

The following section contains six tables that examine data related to the events in accidents (termed "accident types"). The tables focus on these events and break down information by state, vessel type, vessel length, engine type, and propulsion.

In the Coast Guard's national database, there are four fields that can be used to define the series of events in an accident. By events, we mean the series of occurrences during an accident. If a wave broke over a vessel causing it to take on water, capsize, and eject its occupant, the Coast Guard would categorize this accident by three events. First, there was a flooding/swamping. Second, there was a capsizing. Third, there was an ejection.

With the exception of one table, the tables and figures in this report focus only on the first event in the sequence. The rationale for providing only the first accident type is to keep the tables simplistic; if we added the second, third, and fourth events in the boating sequence, our accident, casualty, and damage totals would not match up because they would be double-counting the accidents, casualties, and damages for cases that had more than one event.

#### **Accident, Vessel & Casualty Numbers by Primary Accident Type (Table 16, Page 36)**

This table focuses on the first event in a boating accident and provides information on the number of accidents, vessels, and casualties attributed to that first event. The deaths section is also separated by the categories drownings and non-drownings.

#### **Five-year Summary of Frequency of Events in Accidents & Casualties Nationwide (Table 17, Pages 37-40)**

As mentioned in the second paragraph, there are four fields that can be used to define the series of events in an accident. This table focuses on the first three events in an accident and the number of casualties associated with each event. The Coast Guard leaves out the fourth because it is not a standardized field.

Using the example in the opening paragraphs, the flooding/swamping would fall under the intersection of the column "First Event in an Accident" and the row "Flooding/swamping". The capsizing would be marked under the column "Second Event in an Accident" and the row "Capsizing". Finally, the ejection would be marked under the column "Third Event in an Accident" and the row "Ejected from Vessel".

This table focuses on the frequency that these events occurred nationally and the total number of deaths that were associated with each accident type. If we turn back to our example and focus on deaths as a result of flooding/swamping, we see that there were 386 accidents where flooding/swamping was the first event in the boating accident. There were 44 deaths associated with this first event type. However, there were other accidents that involved a flooding/swamping as a second or third occurrence. There were 255 accidents and 14 deaths associated with flooding/swamping as a second event and 60 accidents and 9 deaths associated with flooding/swamping as a third event. All combined, you get the sixth column of the table that looks at how many deaths were associated with an event that occurred either as the first, second, or third occurrence in an accident. Please note that in this table deaths are not separated by first, second and third event. In the example, there were 701 accidents and 67 deaths associated with flooding/swamping as a first, second, or third event.

This table can be difficult to understand, especially when the reader is under the expectation that the tallies of the casualty columns will equal the numbers published at the front of this report that reference the number of reportable accidents and deaths.

#### **Number of Vessels in Accidents by Vessel Length & Primary Accident Type (Table 18, Page 41)**

This table displays the types of accidents by the length of vessel. The table lists vessel length by foot for vessels of lengths 4 ft-39 ft. After 39 ft, information is categorized in ranges. This table also provides information about the number of casualties and vessels associated by length of vessel.

**Number of Vessels in Accidents by Vessel Type & Primary Accident Type (Table 19, Page 42)**

This table examines the first event of a boating accident for all vessels involved in an accident. It also provides information about the casualties associated with each vessel type.

**Number of Vessels in Accidents by Primary Accident Type & Propulsion Type (Table 20, Page 43)**

This table provides information about the number of vessels involved in accidents by primary accident type and propulsion type.

**Number of Vessels with Propellers by Primary Accident Type & Engine Type (Table 21, Page 43)**

This table provides information about the number of casualties and vessels associated by primary accident type and engine type. This table is a subset of information from Table 20 and represents all vessels propelled by a propeller.



**Table 16 - ACCIDENT, VESSEL & CASUALTY NUMBERS BY PRIMARY ACCIDENT TYPE 2023**

	Accidents	Vessels Involved	Drowning Deaths	Other Deaths	Total Deaths	Total Injuries	Damages
<b>All Accident Types</b>	<b>3844</b>	<b>5330</b>	<b>377</b>	<b>187</b>	<b>564</b>	<b>2126</b>	<b>\$63,418,453.41</b>
Capsizing	234	249	105	27	132	103	\$1,727,082.00
Carbon monoxide poisoning	4	4	0	2	2	13	\$0.00
Collision with fixed object	449	539	27	27	54	288	\$11,038,460.11
Collision with floating object	51	53	3	2	5	16	\$812,505.06
Collision with commercial vessel	31	63	4	4	8	39	\$643,120.00
Collision with governmental vessel	6	12	0	0	0	0	\$69,620.00
Collision with recreational vessel	1053	2216	7	34	41	523	\$11,423,152.84
Collision with submerged object	187	189	10	2	12	53	\$5,532,340.40
Departed vessel	113	124	53	4	57	56	\$117,700.00
Ejected from vessel	150	166	21	9	30	132	\$665,850.00
Electrocution	3	3	0	1	1	3	\$150.00
Fall in vessel	134	151	1	2	3	143	\$544,363.00
Falls overboard	227	242	95	44	139	92	\$87,359.00
Fire/explosion (fuel)	117	121	1	2	3	113	\$4,035,964.23
Fire/explosion (non-fuel)	73	85	0	0	0	8	\$4,930,273.00
Fire/explosion (unknown origin)	33	81	0	0	0	7	\$6,645,725.00
Flooding/swamping	386	412	34	10	44	90	\$7,159,849.80
Grounding	359	366	4	11	15	206	\$7,835,088.97
Person struck by propeller	35	38	0	2	2	33	\$0.00
Person struck by vessel	18	20	0	0	0	18	\$380.00
Sinking	0	0	0	0	0	0	\$0.00
Skier mishap	157	167	12	3	15	165	\$9,350.00
Sudden medical condition	0	0	0	0	0	0	\$0.00
Other	24	29	0	1	1	25	\$140,120.00

Table 17 • FREQUENCY OF EVENTS IN ACCIDENTS & CASUALTIES NATIONWIDE							
	First Event in an Accident	Second Event in an Accident	Third Event in an Accident	Total Times Event Occurred in all Accidents	Deaths Associated with Event in all Accidents	Injuries Associated with Event in all Accidents	Damages Associated with Event in all Accidents
<b>2023</b>							
Capsizing	234	229	49	512	190	230	\$6,048,938.00
Carbon monoxide poisoning	4	1	0	5	2	18	\$0.00
Collision with fixed object	449	89	10	548	61	345	\$12,921,092.33
Collision with floating object	51	2	1	54	5	19	\$849,939.06
Collision with commercial vessel	31	0	0	31	8	39	\$643,120.00
Collision with governmental vessel	6	1	0	7	0	0	\$73,580.00
Collision with recreational vessel	1053	62	5	1120	43	562	\$12,851,480.84
Collision with submerged object	187	1	1	189	12	53	\$5,576,340.40
Departed vessel	113	47	27	187	69	84	\$3,147,977.00
Ejected from vessel	150	533	249	932	286	786	\$9,379,573.91
Electrocution	3	3	0	6	1	8	\$5,350.00
Fall in vessel	134	221	34	389	21	531	\$5,271,639.38
Falls overboard	227	36	12	275	149	124	\$1,016,149.00
Fire/explosion (fuel)	117	3	0	120	3	114	\$6,661,964.23
Fire/explosion (non-fuel)	73	4	1	78	0	8	\$5,079,273.00
Fire/explosion (unknown origin)	33	1	0	34	0	7	\$6,647,725.00
Flooding/swamping	386	255	60	701	67	186	\$22,369,100.76
Grounding	359	55	13	427	21	248	\$9,802,359.77
Person struck by propeller	35	83	27	145	23	133	\$120,150.00
Person struck by vessel	18	167	31	216	32	263	\$1,515,005.00
Sinking	0	120	85	205	9	55	\$7,009,901.00
Skier mishap	157	10	3	170	16	183	\$33,050.00
Sudden medical condition	0	3	0	3	2	2	\$0.00
Other	24	8	1	33	2	33	\$155,120.00
Unknown	0	0	0	0	0	0	\$0.00
<b>2022</b>							
Capsizing	234	197	52	483	178	212	\$4,369,238.01
Carbon monoxide poisoning	3	1	0	4	1	5	\$0.00
Collision with fixed object	477	95	13	585	59	366	\$11,531,388.91
Collision with floating object	57	1	1	59	9	29	\$1,110,007.45
Collision with commercial vessel	22	0	2	24	7	37	\$719,267.00
Collision with governmental vessel	10	5	0	15	1	4	\$135,815.55
Collision with recreational vessel	1085	75	2	1162	42	531	\$17,721,991.61
Collision with submerged object	203	2	0	205	10	74	\$4,535,212.55

Table 17 Continued - FREQUENCY OF EVENTS IN ACCIDENTS & CASUALTIES NATIONWIDE							
	First Event in an Accident	Second Event in an Accident	Third Event in an Accident	Total Times Event Occurred in all Accidents	Deaths Associated with Event in all Accidents	Injuries Associated with Event in all Accidents	Damages Associated with Event in all Accidents
<b>2022 continued</b>							
Departed vessel	116	78	18	212	97	96	\$4,312,791.00
Ejected from vessel	172	580	232	984	294	883	\$10,139,037.16
Electrocution	0	0	0	0	0	0	\$0.00
Fall in vessel	126	217	53	396	25	566	\$7,620,353.09
Falls overboard	260	33	5	298	187	125	\$664,085.00
Fire/explosion (fuel)	130	2	1	133	3	113	\$6,627,421.00
Fire/explosion (non-fuel)	66	2	1	69	0	11	\$4,237,594.00
Fire/explosion (unknown origin)	36	0	0	36	2	10	\$4,332,258.00
Flooding/swamping	422	184	43	649	98	182	\$14,198,552.00
Grounding	350	77	22	449	24	270	\$10,245,390.50
Person struck by propeller	33	110	30	173	41	182	\$662,416.68
Person struck by vessel	24	181	23	228	30	264	\$1,821,244.02
Sinking	0	117	55	172	27	30	\$9,659,246.00
Skier mishap	183	3	0	186	17	199	\$71,509.00
Sudden medical condition	0	0	0	0	0	0	\$0.00
Other	31	9	1	41	4	38	\$858,100.00
Unknown	0	0	0	0	0	0	\$0
<b>2021</b>							
Capsizing	264	279	55	598	210	226	\$5,264,097.00
Carbon monoxide poisoning	8	0	0	8	6	13	\$15,000.00
Collision with fixed object	508	79	9	596	46	447	\$9,087,710.10
Collision with floating object	49	4	0	53	7	26	\$813,450.00
Collision with commercial vessel	18	0	0	18	9	21	\$160,545.00
Collision with governmental vessel	10	3	0	13	0	4	\$170,001.00
Collision with recreational vessel	1226	64	5	1295	33	768	\$14,259,172.64
Collision with submerged object	209	3	0	212	11	80	\$3,772,330.49
Departed vessel	158	114	47	319	130	134	\$3,428,406.00
Ejected from vessel	189	568	229	986	280	927	\$8,836,437.81
Electrocution	0	1	0	1	1	0	\$1,000.00
Fall in vessel	149	226	47	422	16	597	\$5,285,969.39
Falls overboard	273	47	11	331	188	137	\$430,254.00
Fire/explosion (fuel)	138	2	0	140	1	117	\$6,386,889.38
Fire/explosion (non-fuel)	93	1	1	95	5	18	\$6,085,373.00
Fire/explosion (unknown origin)	38	1	0	39	2	4	\$5,417,050.00
Flooding/swamping	461	222	84	767	81	235	\$26,484,046.00

Table 17 Continued - FREQUENCY OF EVENTS IN ACCIDENTS & CASUALTIES NATIONWIDE							
<b>2021 continued</b>	First Event in an Accident	Second Event in an Accident	Third Event in an Accident	Total Times Event Occurred in all Accidents	Deaths Associated with Event in all Accidents	Injuries Associated with Event in all Accidents	Damages Associated with Event in all Accidents
Grounding	308	72	26	406	23	242	\$13,613,056.42
Person struck by propeller	45	112	31	188	24	191	\$141,670.00
Person struck by vessel	30	201	30	261	20	328	\$1,296,933.91
Sinking	0	132	114	246	16	41	\$9,299,622.00
Skier mishap	213	13	1	227	11	257	\$26,050.00
Sudden medical condition	3	2	1	6	1	5	\$0.00
Other	49	11	0	60	2	51	\$1,491,335.00
Unknown	0	0	0	0	0	0	\$0.00
<b>2020</b>							
Capsizing	309	315	72	696	226	284	\$6,195,036.34
Carbon monoxide poisoning	15	0	0	15	5	41	\$2,000.00
Collision with fixed object	542	93	19	654	69	445	\$7,027,142.79
Collision with floating object	82	4	0	86	5	28	\$966,005.00
Collision with commercial vessel	15	1	1	17	2	10	\$195,005.00
Collision with governmental vessel	10	2	0	12	0	3	\$92,600.00
Collision with recreational vessel	1379	89	10	1478	68	854	\$14,437,120.93
Collision with submerged object	149	1	0	150	6	51	\$2,810,220.14
Departed vessel	171	97	19	287	119	130	\$2,153,967.00
Ejected from vessel	248	717	475	1440	351	1186	\$9,893,195.46
Electrocution	3	1	0	4	2	5	\$20,950.00
Fall in vessel	169	259	54	482	22	691	\$4,360,490.00
Falls overboard	335	49	5	389	200	189	\$408,911.00
Fire/explosion (fuel)	176	1	2	179	3	171	\$7,505,475.00
Fire/explosion (non-fuel)	87	3	1	91	8	24	\$6,350,364.88
Fire/explosion (unknown origin)	53	0	0	53	0	21	\$5,323,450.00
Flooding/swamping	589	343	75	1007	117	284	\$24,329,920.03
Grounding	484	80	34	598	34	319	\$12,528,222.55
Person struck by propeller	55	148	44	247	39	241	\$511,850.00
Person struck by vessel	30	314	26	370	54	442	\$1,717,942.00
Sinking	0	112	99	211	40	62	\$7,737,499.00
Skier mishap	303	28	2	333	22	353	\$142,285.00
Sudden medical condition	0	0	0	0	0	0	\$0.00
Other	61	12	1	74	4	60	\$557,601.00
Unknown	0	0	0	0	0	0	\$0.00

<b>Table 17 Continued - FREQUENCY OF EVENTS IN ACCIDENTS &amp; CASUALTIES NATIONWIDE</b>							
<b>2019</b>	First Event in an Accident	Second Event in an Accident	Third Event in an Accident	Total Times Event Occurred in all Accidents	Deaths Associated with Event in all Accidents	Injuries Associated with Event in all Accidents	Damages Associated with Event in all Accidents
Capsizing	242	240	50	532	185	234	\$6,672,595.09
Carbon monoxide poisoning	12	1	0	13	5	32	\$650.00
Collision with fixed object	493	101	13	607	53	380	\$11,611,781.57
Collision with floating object	68	7	3	78	14	30	\$1,124,094.75
Collision with commercial vessel	21	3	2	26	2	19	\$381,306.78
Collision with governmental vessel	8	0	0	8	0	4	\$56,200.00
Collision with recreational vessel	1071	83	15	1169	47	690	\$12,097,263.60
Collision with submerged object	134	1	0	135	9	59	\$1,675,134.20
Departed vessel	97	41	7	145	73	69	\$333,423.01
Ejected from vessel	181	555	347	1083	277	910	\$10,425,432.09
Electrocution	0	2	0	2	0	5	\$30,000.00
Fall in vessel	131	252	43	426	26	637	\$7,903,634.68
Falls overboard	299	27	7	333	194	151	\$143,451.19
Fire/explosion (fuel)	134	5	0	139	0	107	\$4,123,621.71
Fire/explosion (non-fuel)	59	3	2	64	2	16	\$6,496,195.00
Fire/explosion (unknown origin)	46	0	0	46	3	9	\$6,499,679.00
Flooding/swamping	399	246	58	703	76	206	\$16,930,794.83
Grounding	413	56	20	489	25	294	\$6,792,155.24
Person struck by propeller	39	101	31	171	35	155	\$100,402.19
Person struck by vessel	19	225	25	269	34	338	\$956,315.00
Sinking	0	86	70	156	18	37	\$7,901,198.44
Skier mishap	259	13	0	272	13	301	\$33,833.01
Sudden medical condition	0	2	0	2	1	1	\$0.00
Other	43	11	3	57	5	55	\$68,550.00
Unknown	0	0	0	0	0	0	\$0.00

**Table 18 - NUMBER OF VESSELS IN ACCIDENTS BY VESSEL LENGTH & PRIMARY ACCIDENT TYPE**

	Total vessels involved	Capsizing	Carbon monoxide poisoning	Collision with fixed object	Collision with floating object	Collision with commercial vessel	Collision with governmental vessel	Collision with recreational vessel	Collision with submerged object	Departed vessel	Ejected from vessel	Electrocution	Falls overboard	Falls overboard	Fire/explosion (fuel)	Fire/explosion (non-fuel)	Fire/explosion (unknown)	Flooding/ swamping	Grounding	Person struck by propeller	Person struck by vessel	Sinking	Skier mishap	Sudden medical condition	Other	Unknown	Drownings	Other Deaths	Total Deaths	Injuries
<b>All lengths</b>	<b>5330</b>	<b>249</b>	<b>4</b>	<b>539</b>	<b>53</b>	<b>63</b>	<b>12</b>	<b>2216</b>	<b>189</b>	<b>124</b>	<b>166</b>	<b>3</b>	<b>151</b>	<b>242</b>	<b>121</b>	<b>85</b>	<b>81</b>	<b>412</b>	<b>366</b>	<b>38</b>	<b>20</b>	<b>0</b>	<b>167</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>377</b>	<b>187</b>	<b>564</b>	<b>2126</b>
3 feet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 feet	3	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5 feet	4	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
6 feet	5	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	2	4
7 feet	15	2	0	3	0	0	0	4	0	3	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	4	6
8 feet	55	6	0	2	0	0	0	24	0	2	3	0	2	8	1	0	5	1	0	0	0	0	0	0	1	0	10	3	13	22
9 feet	62	3	0	6	0	0	0	35	3	0	5	0	2	4	0	0	3	1	0	0	0	0	0	0	0	0	11	2	13	35
10 feet	373	36	0	28	0	2	0	199	4	6	26	0	8	25	4	1	1	10	10	1	3	0	8	0	1	0	47	16	63	201
11 feet	489	17	0	26	3	5	0	281	8	8	45	1	15	31	1	3	1	15	14	1	3	0	11	0	0	0	15	19	34	243
12 feet	146	26	0	9	0	2	0	50	7	1	9	0	4	23	1	0	0	10	2	2	0	0	0	0	0	0	34	14	48	70
13 feet	32	5	0	4	1	0	0	8	1	0	3	0	1	4	0	0	0	4	1	0	0	0	0	0	0	0	8	2	10	16
14 feet	111	11	0	9	2	1	0	14	7	4	5	0	1	14	1	1	0	32	7	0	0	0	0	0	2	0	25	9	34	49
15 feet	116	12	0	6	3	0	0	25	16	0	5	0	2	9	2	0	0	26	7	0	0	0	2	0	1	0	14	8	22	58
Under 16 ft	1411	119	0	93	9	10	0	644	46	24	102	1	36	121	10	5	2	109	44	4	6	0	21	0	5	0	169	75	244	708
16 feet	194	21	0	32	6	0	0	35	14	6	3	1	4	14	3	2	0	26	19	1	1	0	6	0	0	0	28	10	38	96
17 feet	225	9	0	18	2	3	0	72	20	3	10	0	5	9	6	2	1	40	15	2	1	0	6	0	1	0	24	11	35	103
18 feet	258	10	0	29	7	1	2	77	6	6	9	0	7	15	6	4	2	30	31	3	0	0	13	0	0	0	20	14	34	112
19 feet	201	6	0	22	3	0	0	74	8	5	7	0	9	7	8	3	1	18	14	0	0	0	15	0	1	0	10	6	16	99
20 feet	329	10	1	40	3	2	0	118	15	17	6	1	9	11	11	4	3	33	22	3	1	0	18	0	1	0	25	13	38	107
21 feet	289	1	1	22	4	2	2	117	11	9	3	0	11	8	7	12	21	29	2	1	0	17	0	2	0	11	3	14	126	
22 feet	277	4	0	28	1	1	3	116	11	7	2	0	9	3	10	6	2	16	27	6	0	0	23	0	2	0	11	4	15	128
23 feet	214	3	0	28	2	1	0	87	10	9	1	0	15	8	3	1	2	13	19	2	1	0	8	0	1	0	5	7	12	99
24 feet	221	3	0	19	2	0	0	104	5	8	2	0	6	6	8	4	2	11	17	5	3	0	14	0	2	0	5	4	9	83
25 feet	165	1	0	18	2	5	1	64	4	5	2	0	3	7	2	5	0	10	19	4	1	0	9	0	3	0	6	6	12	76
16 ft to less than 26 ft	2373	68	2	256	32	15	8	864	104	75	45	2	78	88	64	38	25	218	212	28	9	0	129	0	13	0	145	78	223	1029
26 feet	116	3	1	11	1	1	0	53	3	4	1	0	1	3	7	2	0	8	10	1	1	0	4	0	1	0	4	3	7	42
27 feet	89	2	0	13	0	2	2	32	5	1	0	0	4	4	2	1	2	5	9	1	1	0	3	0	0	0	4	1	5	19
28 feet	70	0	0	6	0	0	0	32	4	1	0	0	3	1	3	2	2	6	8	0	0	0	2	0	0	0	0	2	2	35
29 feet	47	1	0	8	1	0	0	20	1	1	0	0	2	0	2	3	1	2	4	0	0	0	1	0	0	0	1	0	1	17
30 feet	79	1	0	15	2	0	0	30	2	0	0	0	4	1	3	3	2	6	8	1	0	0	0	0	1	0	0	1	1	24
31 feet	39	0	0	4	0	0	0	20	2	0	0	0	1	1	4	2	1	2	2	0	0	0	0	0	0	0	2	0	2	12
32 feet	59	1	0	11	0	1	0	21	2	1	0	0	3	1	2	2	2	5	7	0	0	0	0	0	0	0	1	2	3	22
33 feet	32	1	0	1	1	1	0	16	0	0	1	0	1	0	2	1	0	3	3	0	0	0	0	0	1	0	0	2	2	4
34 feet	43	0	0	4	0	3	1	19	3	0	0	0	1	0	3	2	2	0	5	0	0	0	0	0	0	0	0	4	4	12
35 feet	41	0	0	1	1	1	0	23	1	1	0	0	0	0	1	4	3	0	4	0	0	0	0	0	1	0	0	0	0	5
36 feet	34	0	0	8	0	0	0	12	0	0	0	0	0	0	3	1	4	2	2	1	0	0	0	0	1	0	0	0	0	19
37 feet	43	0	0	7	0	1	0	23	1	1	0	0	0	0	1	2	0	2	5	0	0	0	0	0	0	0	1	0	1	12
38 feet	50	0	0	3	0	1	0	26	2	0	2	0	0	0	1	2	3	3	6	0	0	0	1	0	0	0	0	0	0	27
39 feet	23	0	0	4	1	0	1	8	1	0	1	0	0	1	0	1	2	1	1	0	0	0	0	0	1	0	0	1	1	3
26 ft to less than 40 ft	765	9	1	96	7	11	4	335	27	10	5	0	20	12	34	28	24	45	74	4	2	0	11	0	6	0	13	16	29	253
40 ft to 65 ft	356	2	1	50	3	9	0	197	9	2	0	0	5	3	9	13	16	14	22	0	0	0	0	0	1	0	2	1	3	54
Over 65 ft	93	0	0	16	0	12	0	46	3	0	0	0	1	0	1	0	6	2	4	0	0	0	0	0	2	0	0	0	4	
Unknown	332	51	0	28	2	6	0	130	0	13	14	0	11	18	3	1	8	24	10	2	3	0	6	0	2	0	48	17	65	78





Accident Types

Table 20 - NUMBER OF VESSELS IN ACCIDENTS BY PRIMARY ACCIDENT TYPE & PROPULSION TYPE			
Injuries			2126
Total deaths			564
Other deaths			187
Drownings			377
Unknown			0
Other			29
Sudden medical condition			0
Skier mishap			167
Sinking			0
Person struck by vessel			20
Person struck by propeller			38
Grounding			366
Flooding/swamping			412
Fire/explosion (unknown origin)			81
Fire/explosion (non-fuel)			85
Fire/explosion (fuel)			121
Falls overboard			242
Fall in vessel			151
Electrocution			3
Ejected from vessel			166
Departed vessel			124
Collision with submerged object			189
Collision with recreational vessel			2216
Collision with governmental vessel			12
Collision with commercial vessel			63
Collision with floating object			53
Collision with fixed object			539
Carbon monoxide			4
Capsizing			249
Total vessels involved			5330
	Air Thrust		28
	Manual		273
	Propeller		3733
	Sail		31
	Water Jet		1134
	Unknown		131

Table 21 - NUMBER OF VESSELS WITH PROPELLERS BY PRIMARY ACCIDENT TYPE & ENGINE TYPE			
Injuries			303
Total deaths			25
Other deaths			15
Drownings			10
Unknown			0
Other			5
Sudden medical condition			0
Skier mishap			54
Sinking			0
Person struck by vessel			4
Person struck by propeller			25
Grounding			95
Flooding/swamping			66
Fire/explosion (unknown origin)			29
Fire/explosion (non-fuel)			35
Fire/explosion (fuel)			58
Falls overboard			8
Fall in vessel			22
Electrocution			0
Ejected from vessel			9
Departed vessel			13
Collision with submerged object			36
Collision with recreational vessel			421
Collision with governmental vessel			2
Collision with commercial vessel			18
Collision with floating object			11
Collision with fixed object			110
Carbon monoxide			4
Capsizing			6
Total vessels involved			1006
	Engine Type		
	Inboard		2215
	Outboard		71
	Pod drive		0
	Stern drive		3
	Unknown		4



**OPERATOR &  
PASSENGER  
INFORMATION**

## Explanation of Operator/Passenger Information Section

The following section contains eleven tables and figures that examine data relating to the operators and passengers in accidents. Information is displayed by age, boating safety instruction, type of injury, and cause of death.

### **Operator Information (Table 22, Page 46)**

This table provides information about the operator. Information covers a variety of topics including age, operator's experience, number of people onboard the vessel, and the boating safety instruction level of the operator.

Examples of "other" boating safety instruction include licenses issued by the Coast Guard, military training, police academy training, rental operator training, commercially-available courses, and camp training. Informal training signifies that the operator did not receive formal instruction, but rather learned from experience.

### **Number of Deaths by Type of Operator Boating Instruction (Table 23 & Figure 7, Page 47)**

This table and accompanying figure focus on boating safety instruction for those operators who had a person die on their vessel. The table and figure both focus on instruction provided by the U.S. Coast Guard Auxiliary, U.S. Power Squadrons, American Red Cross, and state sources. The figure examines only deaths where the operator instruction was known.

### **Number of Deaths by Vessel Type (Table 24 & Figure 8, Page 48)**

This table documents deaths by vessel type with a focus on drownings. It also provides the percentage of deaths by drowning by type of vessel.

### **Percentage of Deaths by Vessel Type, 2009-2023 (Figure 9 & Table 25, Page 49)**

This table and accompanying figure focus on the percentage of deaths that occurred on each vessel type over the years. The figure may be interpreted by measuring the upper and lower bounds of the color-coded vessel type to obtain the percentage of deaths attributed to that vessel type within the year.

Please note that the percentages in the table have been rounded up.

### **Number of Deceased Victims by Age & Vessel Type (Table 26 and Figure 9a, Pages 50 and 51)**

This table documents the age of fatal accident victims by vessel type, and delineates the number of drownings, non-drownings, and total deaths by age. The accompanying figure charts the percent of deceased victims by age group and vessel type.

### **Percent of Injured Victims by Age & Vessel Type (Figure 9b and Table 27, Pages 51 and 52)**

This figure charts the percent of injured victims by age group and vessel type, and the accompanying table documents the age of injured victims by vessel type.

### **Nature of Primary Injury Type by Area of Injury 2023 (Table 28, Page 53)**

This table focuses on the nature and area of the primary injury of injured victims.

### **Number of Injured Victims under Age 18 by Age Group and Injury Type on Personal Watercraft, 2023 (Figure 10, Page 53)**

This figure focuses on the number of injured victims from personal watercraft for specific age groups and by type of injury.

<b>Table 22 • OPERATOR INFORMATION 2023</b>				
		Vessels Involved	Deaths	Injuries
		<b>5330</b>	<b>564</b>	<b>2126</b>
<b>Age of Operator</b>	12 years and under	26	1	18
	13 to 18 years	310	30	158
	19 to 25 years	484	53	277
	26 to 35 years	625	60	339
	36 to 55 years	1527	184	715
	Over 55 years	1282	204	491
	Unknown	307	25	92
	No operator	769	7	36
<b>Operator's Experience</b>	No Experience	61	6	34
	Under 10 hours	487	59	222
	10 to 100 hours	1003	81	496
	101 to 500 hours	1443	114	703
	Over 500 Hours	458	28	211
	Unknown	1109	269	424
	No Operator	769	7	36
<b>Number of Persons on Board</b>	None	418	0	0
	One	1693	240	499
	Two	1355	183	615
	Three	508	56	272
	Four	367	31	198
	Five	190	15	135
	Six	143	6	95
	Seven	108	10	74
	Eight	85	4	65
	Nine	52	4	56
	Ten	31	1	32
	More than 10	70	11	60
	Unknown	310	3	25
	<b>Education of Operator</b>	American Red Cross	1	0
Informal		127	13	55
Internet Course		96	5	50
State Course		924	38	459
US Power Squadrons		31	1	6
USCG Auxiliary		76	1	20
Other		94	2	39
No Education		1743	202	850
Unknown		1469	295	611
No Operator		769	7	36

**BOATING SAFETY INSTRUCTION**

<b>Table 23 • NUMBER OF DEATHS BY TYPE OF OPERATOR BOATING INSTRUCTION 2023</b>	
Type of Boating Instruction	Deaths
American Red Cross	0
Informal	13
Internet Course	5
State Course	38
US Power Squadrons	1
USCG Auxiliary	1
Other	2
No Education	202
<b>Total Deaths - Known Operator Instruction</b>	<b>262</b>
<b>Total Deaths - Unknown Operator Instruction</b>	<b>295</b>
<b>Total Deaths - No Operator</b>	<b>7</b>
<b>Total Deaths - Known &amp; Unknown Operator Instruction</b>	<b>564</b>

**Figure 7 PERCENT OF DEATHS BY KNOWN OPERATOR INSTRUCTION, 2023**

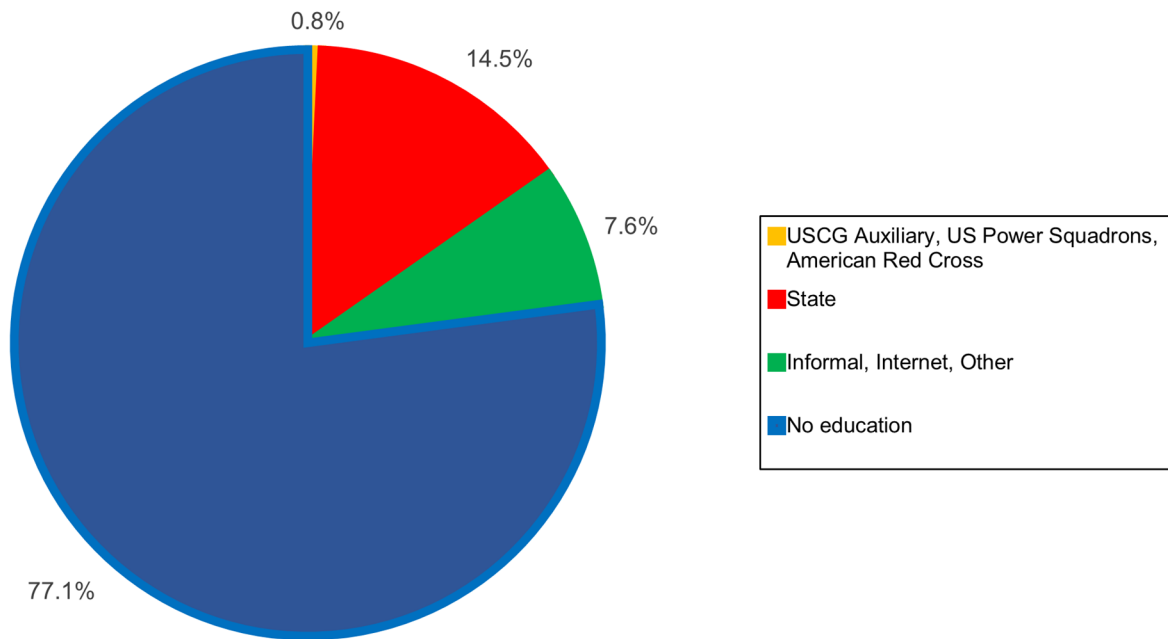


Table 24 • NUMBER OF DEATHS BY VESSEL TYPE 2023				
Vessel type	Drownings	Deaths by Causes other than Drowning	Total Deaths	Percentage of Deaths from Drowning
Airboat	3	0	3	100%
Auxiliary Sailboat	6	3	9	67%
Cabin Motorboat	12	8	20	60%
Canoe	36	7	43	84%
Houseboat	1	0	1	100%
Inflatable	21	2	23	91%
Kayak	72	23	95	76%
Open Motorboat	149	98	247	60%
Personal Watercraft	15	32	47	32%
Pontoon	35	6	41	85%
Rowboat	8	3	11	73%
Sailboat (only)	1	2	3	33%
Sailboat (unknown)	0	0	0	0%
Standup paddleboard	10	1	11	91%
Other	3	0	3	100%
Unknown	5	2	7	71%
<b>Total</b>	<b>377</b>	<b>187</b>	<b>564</b>	<b>67%</b>

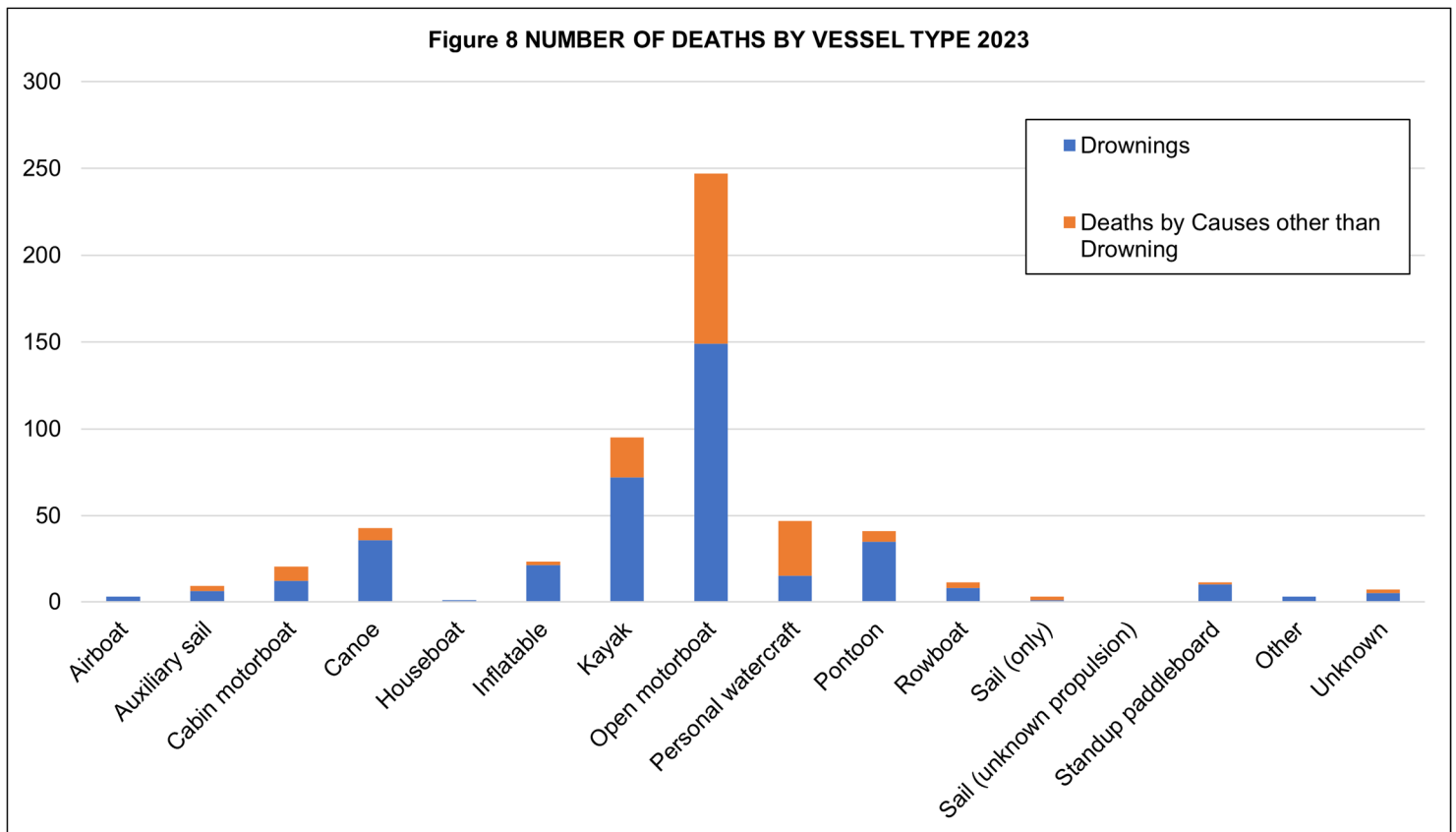


Figure 9 PERCENT OF DEATHS BY VESSEL TYPE, 2009-2023

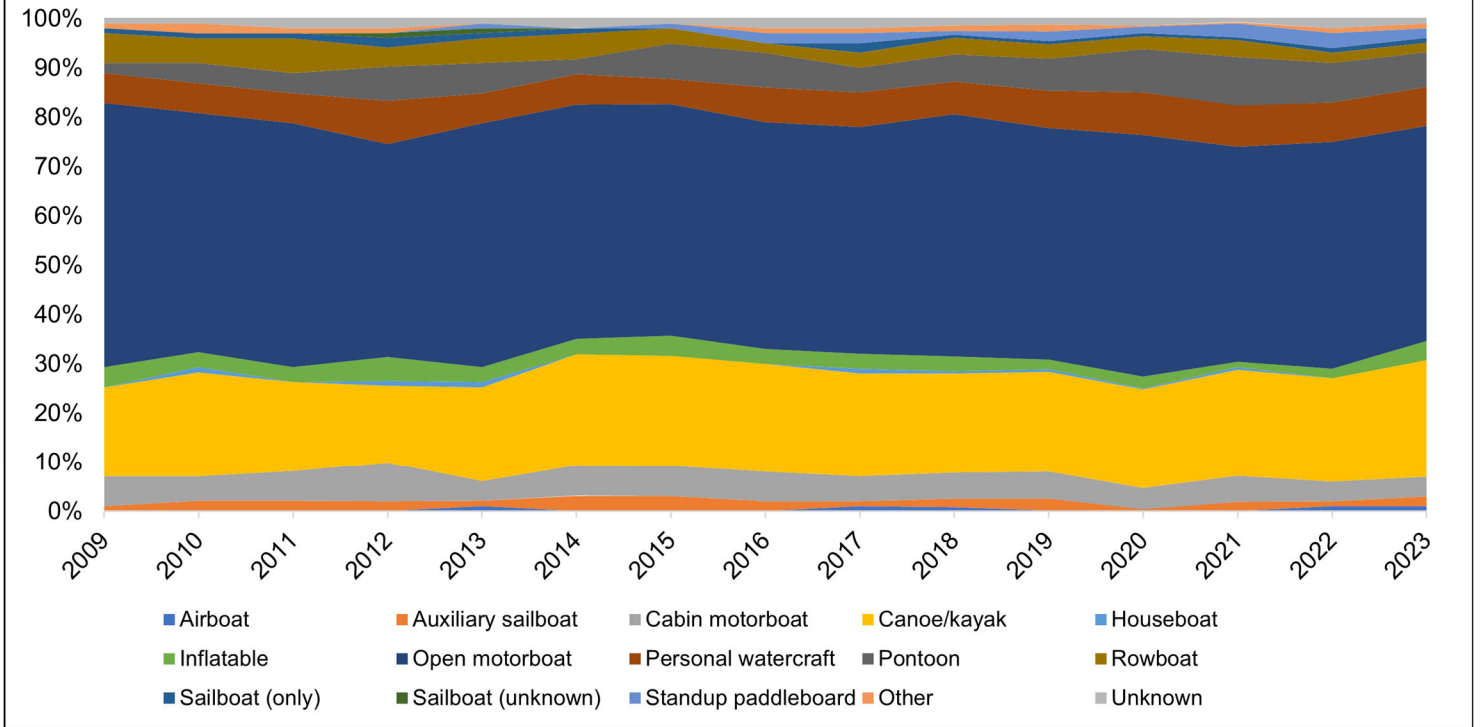


Table 25 - PERCENT OF DEATHS BY VESSEL TYPE, 2009-2023

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Airboat	0%	0%	0%	0%	1%	0%	0%	0%	1%	1%	0%	0%	0%	1%	1%
Auxiliary sailboat	1%	2%	2%	2%	1%	3%	3%	2%	1%	2%	2%	0%	2%	1%	2%
Cabin motorboat	6%	5%	6%	8%	4%	6%	6%	6%	5%	5%	6%	4%	5%	4%	4%
Canoe/kayak	18%	21%	18%	16%	19%	22%	22%	22%	21%	20%	20%	20%	22%	21%	24%
Houseboat	0%	1%	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%
Inflatable	4%	3%	3%	5%	3%	3%	4%	3%	3%	3%	2%	2%	1%	2%	4%
Open motorboat	53%	48%	49%	44%	49%	46%	46%	46%	46%	49%	47%	49%	44%	46%	44%
Personal watercraft	6%	6%	6%	9%	6%	6%	5%	7%	7%	7%	8%	9%	8%	8%	8%
Pontoon	2%	4%	4%	7%	6%	3%	7%	7%	5%	6%	7%	9%	10%	8%	7%
Rowboat	6%	5%	7%	4%	5%	5%	3%	2%	3%	3%	3%	3%	3%	2%	2%
Sailboat (only)	1%	1%	1%	2%	1%	1%	0%	0%	2%	1%	1%	1%	1%	1%	1%
Sailboat (unknown)	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Standup paddleboard	0%	0%	0%	0%	1%	0%	1%	2%	2%	1%	2%	1%	3%	3%	2%
Other	1%	2%	1%	1%	0%	0%	0%	1%	1%	1%	1%	0%	0%	1%	1%
Unknown	1%	1%	2%	2%	1%	2%	1%	2%	2%	1%	1%	1%	1%	2%	1%

Table 26 • NUMBER OF DECEASED VICTIMS BY AGE AND VESSEL TYPE 2023																			
Age of Deceased Victim	Type of Vessel															Drownings	Other deaths	Total deaths	
	Airboat	Auxiliary sailboat	Cabin motorboat	Canoe	Houseboat	Inflatable	Kayak	Open motorboat	Personal watercraft	Pontoon	Rowboat	Sailboat (only)	Sailboat (unknown)	Standup paddleboard	Other				Unknown
<b>Total</b>	<b>3</b>	<b>9</b>	<b>20</b>	<b>43</b>	<b>1</b>	<b>23</b>	<b>95</b>	<b>247</b>	<b>47</b>	<b>41</b>	<b>11</b>	<b>3</b>	<b>0</b>	<b>11</b>	<b>3</b>	<b>7</b>	<b>377</b>	<b>187</b>	<b>564</b>
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1	2
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	1	2	3
12	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	3	3
0-12	0	0	0	0	0	1	0	7	1	0	1	0	0	1	0	0	2	9	11
13 - 19	0	2	0	2	0	0	5	13	13	4	3	0	0	2	0	0	28	16	44
20 - 29	0	0	4	10	0	3	26	26	8	3	1	0	0	0	0	1	61	21	82
30 - 39	1	0	3	4	1	3	18	27	6	8	1	0	0	1	1	2	60	16	76
40 - 49	0	1	0	7	0	3	15	40	5	7	2	1	0	4	1	0	57	29	86
50 - 59	0	4	4	3	0	2	9	38	8	8	0	0	0	2	0	0	48	30	78
60 - 69	1	1	6	9	0	9	15	47	5	7	2	2	0	1	0	1	71	35	106
70 - 79	1	1	3	6	0	1	4	40	0	4	0	0	0	0	1	2	39	24	63
80 and Over	0	0	0	2	0	1	1	8	1	0	1	0	0	0	0	1	11	4	15
Unknown	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	3

Figure 9a PERCENT OF DECEASED VICTIMS BY AGE AND VESSEL TYPE 2023

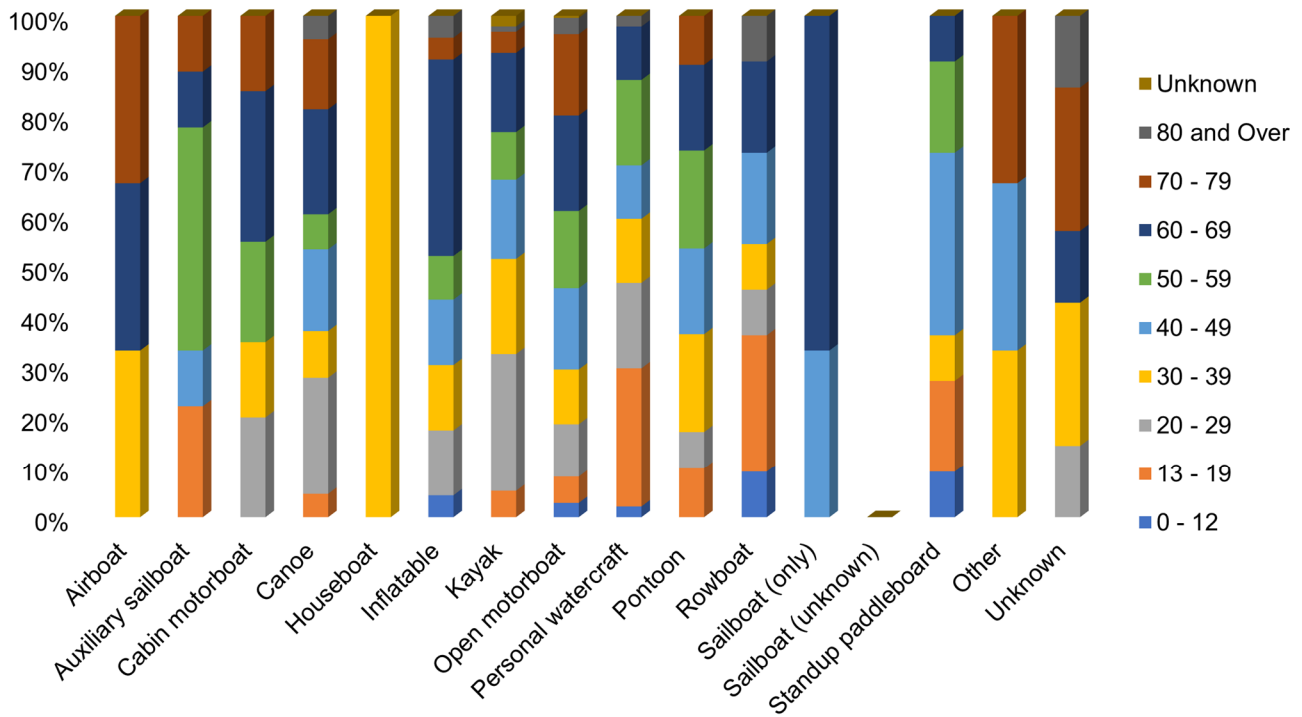


Figure 9b PERCENT OF INJURED VICTIMS BY AGE AND VESSEL TYPE 2023

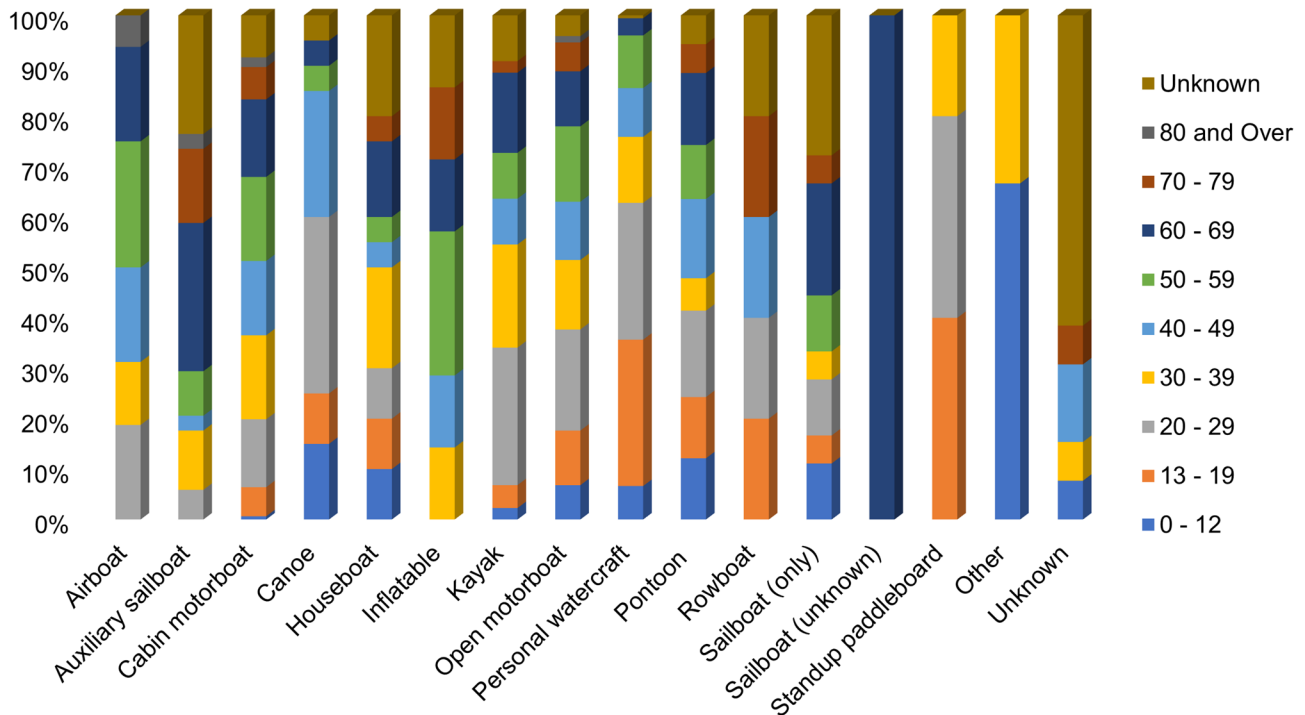
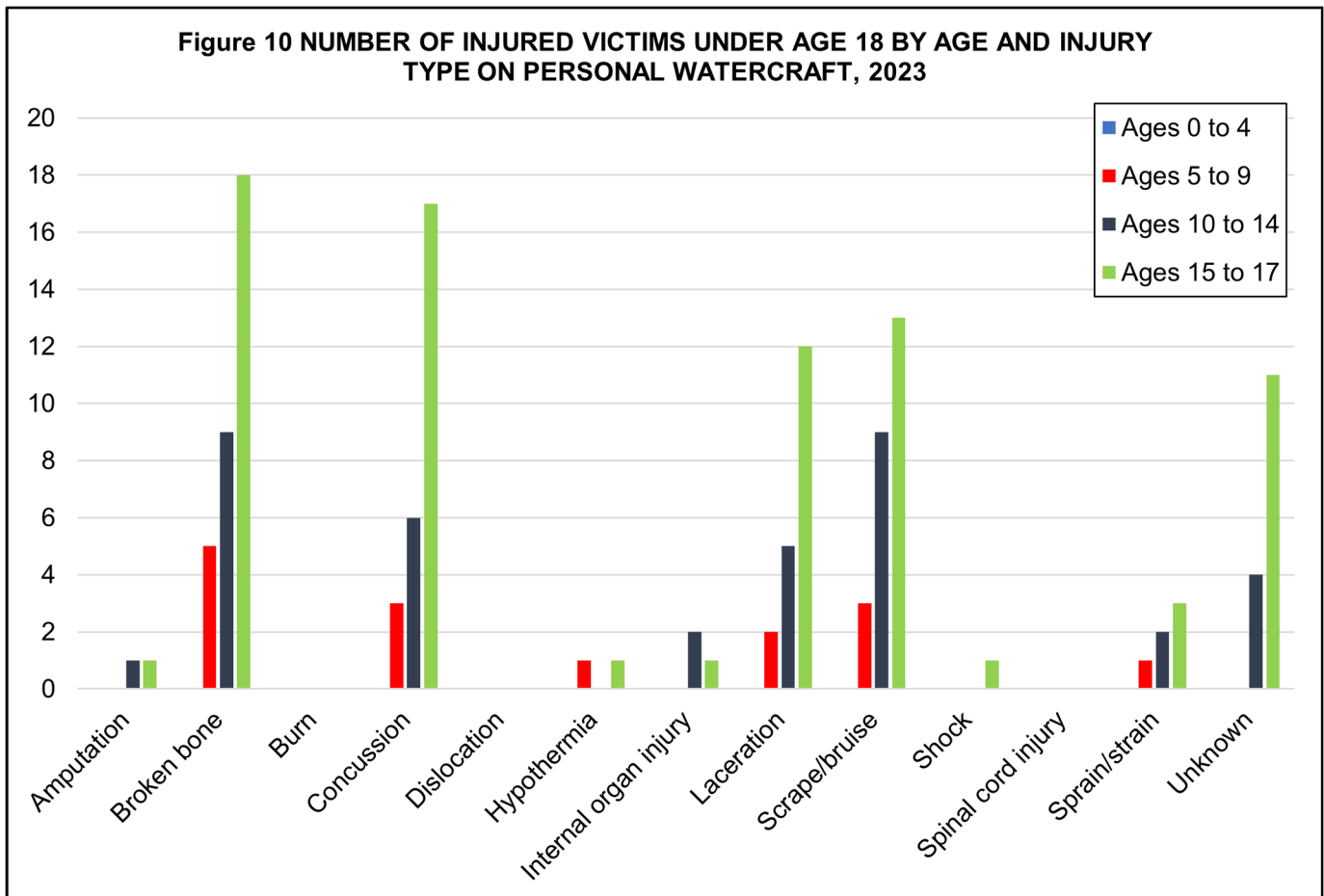




Table 27 - NUMBER OF INJURED VICTIMS BY AGE AND VESSEL TYPE 2023																	
Age of Injured Victim	Total Injuries	Airboat	Auxiliary sailboat	Cabin motorboat	Canoe	Houseboat	Inflatable	Kayak	Open motorboat	Personal watercraft	Pontoon	Rowboat	Sailboat (only)	Sailboat (unknown)	Standup paddleboard	Other	Unknown
<b>Total</b>	<b>2126</b>	<b>16</b>	<b>34</b>	<b>156</b>	<b>20</b>	<b>20</b>	<b>7</b>	<b>44</b>	<b>1117</b>	<b>527</b>	<b>140</b>	<b>5</b>	<b>18</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>13</b>
0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
1	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
2	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
4	4	0	0	0	0	0	0	0	2	0	1	0	0	0	0	1	0
5	7	0	0	0	0	1	0	0	5	1	0	0	0	0	0	0	0
6	10	0	0	0	0	0	0	0	9	1	0	0	0	0	0	0	0
7	10	0	0	0	0	0	0	0	5	3	1	0	0	0	0	0	1
8	18	0	0	0	0	0	0	0	10	5	2	0	0	0	0	1	0
9	17	0	0	0	0	0	0	0	8	5	4	0	0	0	0	0	0
10	13	0	0	1	1	0	0	0	6	4	1	0	0	0	0	0	0
11	23	0	0	0	1	1	0	0	10	6	4	0	1	0	0	0	0
12	26	0	0	0	1	0	0	1	9	10	4	0	1	0	0	0	0
0 - 12	140	0	0	1	3	2	0	1	76	35	17	0	2	0	0	2	1
13 - 19	310	0	0	9	2	2	0	2	121	153	17	1	1	0	2	0	0
20 - 29	443	3	2	21	7	2	0	12	224	143	24	1	2	0	2	0	0
30 - 39	282	2	4	26	0	4	1	9	154	69	9	0	1	0	1	1	1
40 - 49	243	3	1	23	5	1	1	4	129	51	22	1	0	0	0	0	2
50 - 59	280	4	3	26	1	1	2	4	167	55	15	0	2	0	0	0	0
60 - 69	214	3	10	24	1	3	1	7	122	18	20	0	4	1	0	0	0
70 - 79	93	0	5	10	0	1	1	1	64	0	8	1	1	0	0	0	1
80 and Over	19	1	1	3	0	0	0	0	14	0	0	0	0	0	0	0	0
Unknown	102	0	8	13	1	4	1	4	46	3	8	1	5	0	0	0	8

Table 28 - NATURE OF PRIMARY INJURY TYPE BY AREA OF INJURY 2023										
	All Areas	Arm	Body	Foot	Hand	Head	Leg	Neck	Trunk	Unknown
<b>All primary injury types</b>	<b>2126</b>	<b>179</b>	<b>214</b>	<b>89</b>	<b>79</b>	<b>536</b>	<b>437</b>	<b>43</b>	<b>384</b>	<b>165</b>
Amputation	27	3	0	5	13	0	5	0	0	1
Broken bone	383	34	0	26	21	51	135	5	98	13
Burn	91	12	19	2	4	7	25	0	4	18
Carbon monoxide	18	0	18	0	0	0	0	0	0	0
Concussion	223	0	0	0	0	223	0	0	0	0
Dislocation	41	28	0	1	1	0	10	0	1	0
Electric shock	2	0	2	0	0	0	0	0	0	0
Hypothermia	128	0	128	0	0	0	0	0	0	0
Internal organ injury	92	0	0	0	0	6	0	0	85	1
Laceration	486	46	7	25	26	178	149	4	24	27
Scrape/bruise	295	31	20	10	5	56	68	10	45	50
Shock	12	0	12	0	0	0	0	0	0	0
Spinal cord Injury	54	0	0	0	0	0	0	7	47	0
Sprain/strain	93	14	7	14	8	2	17	12	17	2
Other	3	0	0	0	0	1	0	0	0	2
Unknown	178	11	1	6	1	12	28	5	63	51



# **CASUALTY DATA**

## Explanation of Casualty Data Section

This section contains fifteen tables and figures that examine data relating to the victims in boating accidents. The following pages focus on historical casualty information, casualty-vessel information, and state-specific casualty information.

### **Deaths, Injuries & Accidents by Year, 2004-2023 (Figure 11 & Table 29, Page 56)**

This figure and table document the number of accidents and casualties from 2004-2023.

### **Accident, Casualty & Damage Data by State (Table 30, Page 57)**

This table provides accident, casualty, and damage information by state for the year 2023. Accidents are broken down into three levels of severity— fatal accidents, non-fatal injury accidents, and property damage only accidents. Please note that under this categorization, accidents are represented by their greatest severity. If an accident resulted in one death, two injured victims, and \$5,000 damages, the accident would be represented under the fatal accident column under the greater “Number of Accidents” heading. The death, injured victims, and damages would be represented in the totals under the “Persons Involved” and “Damages” headings.

### **Distribution of Recreational Boating Deaths by State (Figure 12, Page 58)**

This figure provides the percentage that each state contributed to the national death count. So, for instance, Michigan had 21 deaths. Out of the total national death count of 564, Michigan contributed 3.7% ( $(21/564) \times 100$ ) of deaths to the national count. Please note that percentages have been rounded.

### **Fatal Accidents by Location (Figures 12a-c, Pages 59-60)**

These figures plot the location of fatal accidents in four different regions. 12a represents the continental United States and Puerto Rico. 12b represents Alaska. 12c represents Hawaii. In many cases, the location was plotted using coordinates. When coordinates were not available, other fields such as the name of body of water, nearest city or town, county, and the narrative were used to approximate the location. The size of the plot correlates to the number of deaths in the fatal accident.

### **Annual Recreational Boating Fatality Rates, 2004-2023 (Figure 13 & Table 31, Page 61)**

This table and accompanying figure provide two fatality rates for years 2004-2023. The fatality rate is calculated by dividing the number of fatalities by the total national vessel registration. The Coast Guard then multiplied by a factor of 100,000 to arrive at the number of deaths per 100,000 registered vessels. The fatality rate takes into account all fatalities and all recreational registration data collected. The motorized fatality rate takes into account only fatalities that occurred on motorized vessels and only motorized recreational vessels registered.

### **States Coded by their 2023 Fatality Rate (Figure 14, Page 62)**

This figure displays states that are color-coded depending on their fatality rate which is expressed as the number of deaths that occurred in that state per 100,000 vessels that the state registered. It is important to note that not all states register the same types of vessels which could skew the fatality rates provided. Please see Table 38, Recreational Registration Data by State 2022-2023 to view the Scope of each state’s registration system. Further, when examining a state fatality rate, it is important to note that the state fatality rate may include deaths from vessels that were registered in another state.

### **Five-year Summary of Selected Accident Data by State, 2019-2023 (Table 32, Page 63)**

This table examines the number of accidents, fatal accidents, and fatalities by state for years 2019-2023.

### **Number of Accidents by Primary Accident Type & State (Table 33, Page 64-65)**

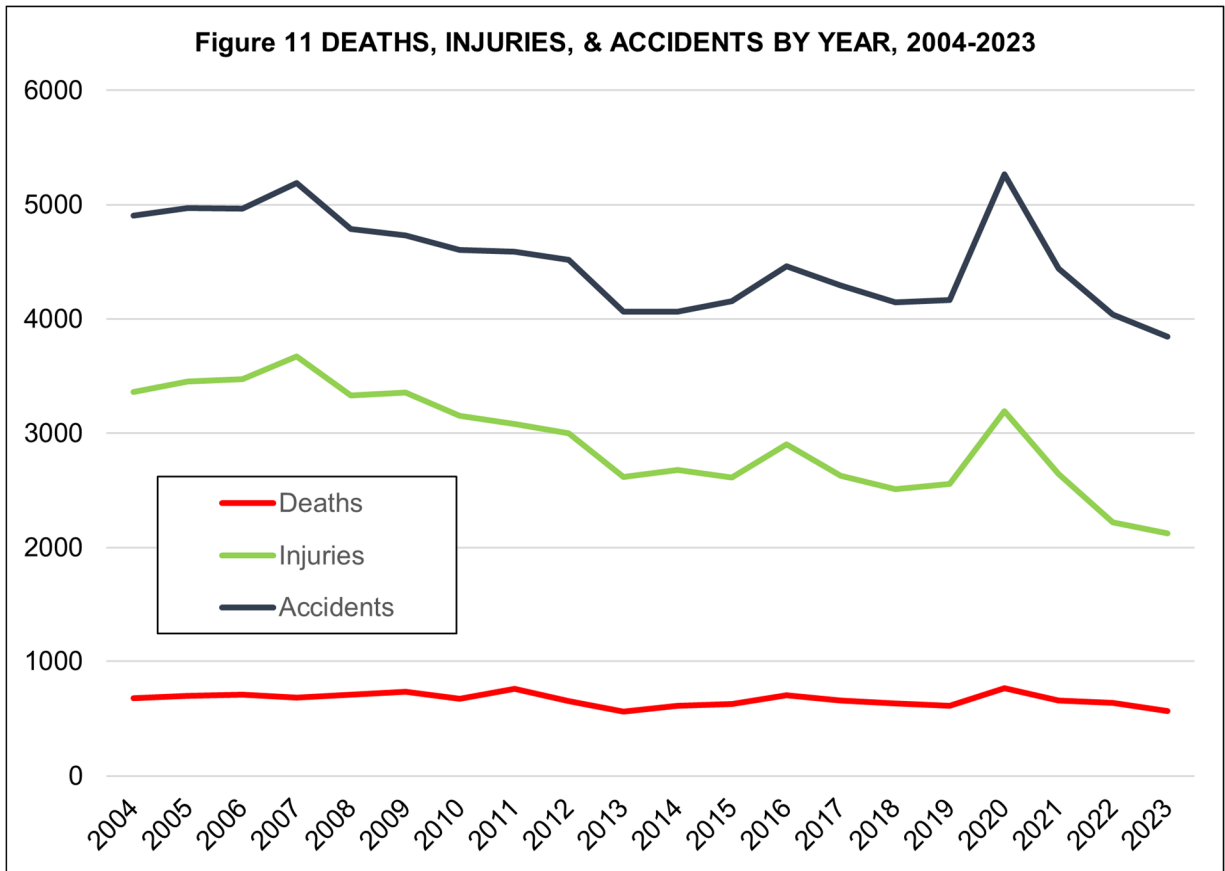
This table documents the first accident event by state. It also provides information about the total number of accidents and casualties by state.

### **Number of Injured Victims by Primary Injury & Vessel Type (Table 34, Page 66)**

This table displays the number of injured victims by primary injury and vessel type.

### **Number of Fatal Victims by Life Jacket Wear, Cause of Death, & Vessel Type (Table 35, Page 66)**

This table displays the number of fatal victims by vessel type and cause of death. The table also provides information on whether the deceased victim was wearing a life jacket.



**Table 29 - DEATHS, INJURIES, & ACCIDENTS BY YEAR, 2004-2023**

Year	Deaths	Injuries	Accidents
2004	676	3363	4904
2005	697	3451	4969
2006	710	3474	4967
2007	685	3673	5191
2008	709	3331	4789
2009	736	3358	4730
2010	672	3153	4604
2011	758	3081	4588
2012	651	3000	4515
2013	560	2620	4062
2014	610	2678	4064
2015	626	2613	4158
2016	701	2903	4463
2017	658	2629	4291
2018	633	2511	4145
2019	613	2559	4168
2020	767	3191	5265
2021	658	2641	4439
2022	636	2222	4040
2023	564	2126	3844

Table 30 • ACCIDENT, CASUALTY &amp; DAMAGE DATA BY STATE 2023

	Number of Accidents			Property Damage	Persons Involved		Damages
	Total	Fatal	Non-Fatal Injury		Deaths	Injured	
Totals	3844	529	1455	1860	564	2126	\$63,418,453.41
AK	26	18	5	3	21	13	\$128,600.00
AL	58	11	21	26	12	32	\$560,272.00
AR	61	8	24	29	9	35	\$1,037,475.00
AZ	95	7	42	46	9	55	\$1,104,600.00
CA	339	30	111	198	33	164	\$4,633,627.00
CO	35	15	10	10	15	14	\$108,794.50
CT	28	5	12	11	6	20	\$975,705.79
DC	4	1	0	3	1	0	\$87,200.00
DE	19	1	3	15	1	7	\$537,440.00
FL	619	54	243	322	56	368	\$14,872,216.00
GA	101	16	46	39	16	58	\$2,257,347.95
HI	14	3	1	10	3	1	\$171,950.00
IA	37	6	16	15	7	20	\$189,928.00
ID	48	7	23	18	7	34	\$444,370.88
IL	70	11	23	36	13	40	\$707,704.00
IN	37	4	14	19	4	20	\$280,467.00
KS	27	2	16	9	2	26	\$246,402.00
KY	45	7	12	26	8	22	\$1,512,593.72
LA	94	7	46	41	7	69	\$4,332,039.89
MA	41	9	14	18	9	25	\$590,830.00
MD	116	10	47	59	10	70	\$1,833,016.52
ME	25	4	10	11	4	11	\$2,220,920.78
MI	82	20	20	42	21	26	\$939,354.00
MN	68	9	33	26	9	46	\$642,112.52
MO	122	6	50	66	6	88	\$1,419,880.00
MS	31	7	14	10	7	26	\$434,885.00
MT	10	3	3	4	3	7	\$54,100.00
NC	155	19	57	79	20	80	\$1,781,755.72
ND	16	2	6	8	2	7	\$31,800.00
NE	8	1	4	3	1	5	\$47,500.00
NH	40	5	16	19	5	19	\$198,842.48
NJ	131	7	41	83	7	53	\$2,759,086.09
NM	17	8	5	4	8	7	\$102,050.00
NV	34	6	18	10	8	22	\$128,300.00
NY	105	17	27	61	18	40	\$1,074,722.00
OH	92	10	31	51	10	39	\$864,426.00
OK	58	11	30	17	11	43	\$502,000.00
OR	60	11	24	25	13	35	\$480,671.00
PA	48	7	27	14	8	41	\$208,599.00
RI	31	1	14	16	1	15	\$570,757.53
SC	156	23	44	89	24	65	\$1,399,217.90
SD	23	2	10	11	2	12	\$118,541.13
TN	117	21	45	51	22	68	\$2,974,609.00
TX	189	33	86	70	33	132	\$1,398,271.65
UT	51	3	23	25	3	28	\$1,600,500.00
VA	58	7	24	27	8	35	\$332,733.83
VT	5	1	2	2	1	2	\$28,300.00
WA	52	23	11	18	23	14	\$723,050.00
WI	116	24	40	52	28	49	\$1,971,037.53
WV	8	2	3	3	2	5	\$67,150.00
WY	7	1	5	1	1	8	\$57,500.00
AS	0	0	0	0	0	0	\$0.00
CNMI	4	0	0	4	0	0	\$82,000.00
GU	2	0	1	1	0	2	\$318,200.00
PR	4	1	1	2	1	1	\$110,000.00
VI	0	0	0	0	0	0	\$0.00
Atlantic Ocean*	4	2	0	2	5	0	\$1,098,000.00
Gulf of Mexico*	0	0	0	0	0	0	\$0.00
Pacific Ocean*	1	0	1	0	0	2	\$65,000.00

\*1997 was the first year statistics were compiled for accidents that occurred three or more miles offshore in the Atlantic Ocean and Pacific Ocean and nine or more miles in the Gulf of Mexico.

Figure 12 - DISTRIBUTION OF 2023 DEATHS BY STATE

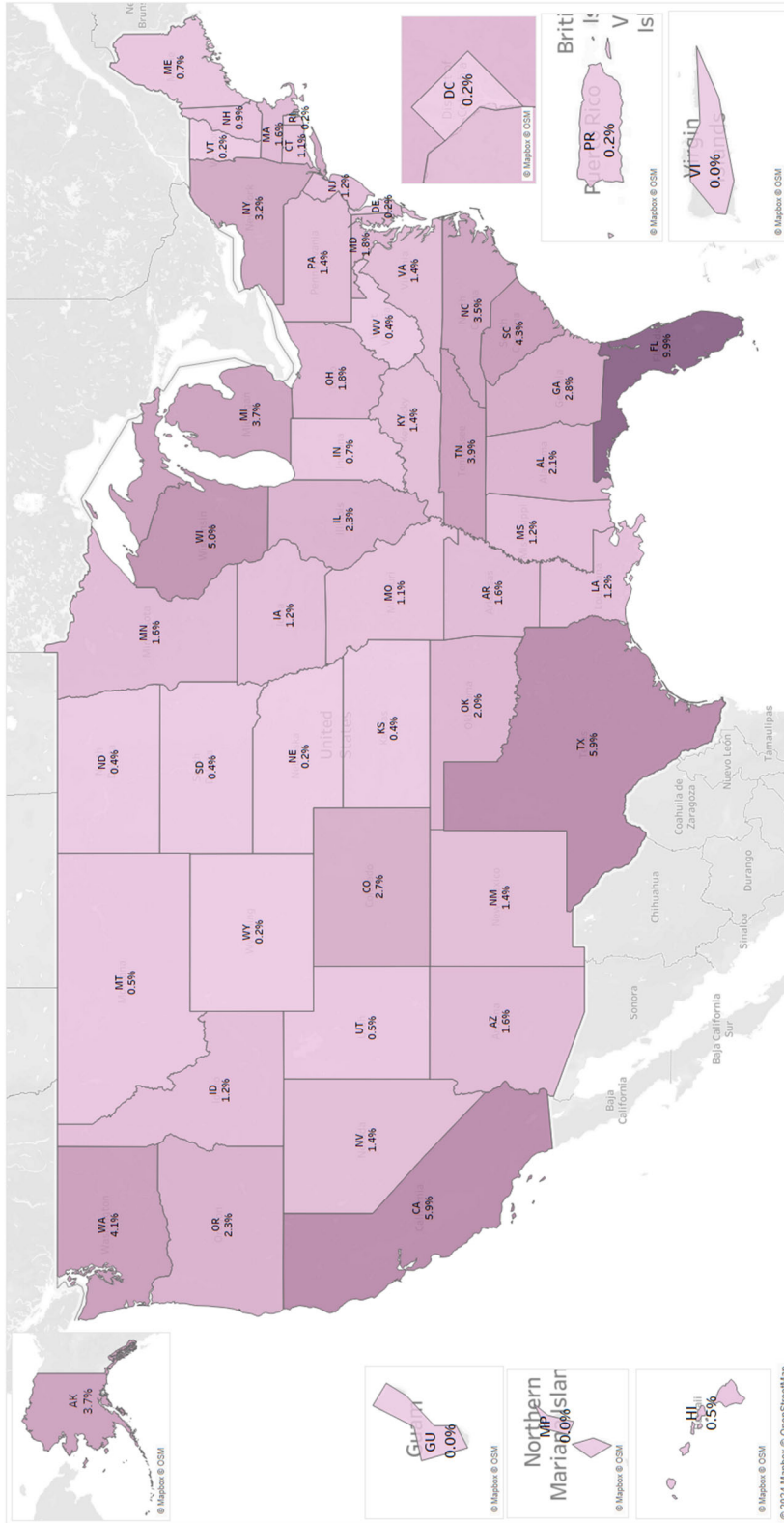
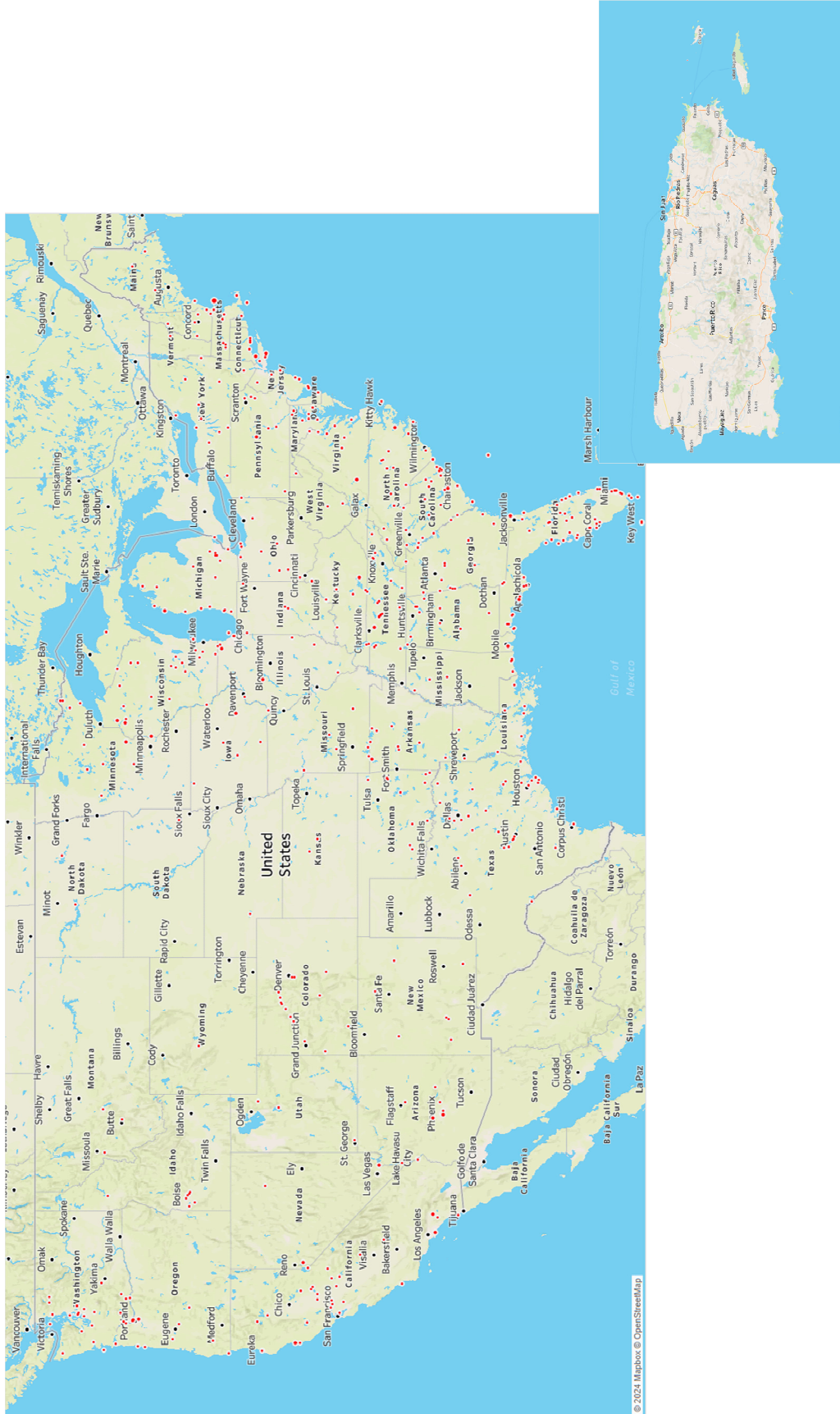


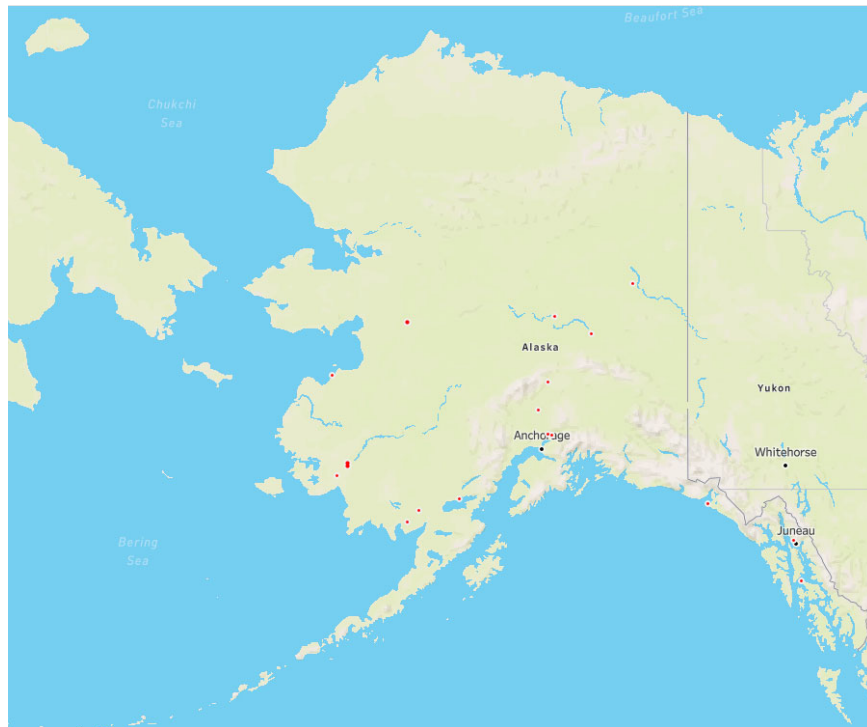
Figure 12a - FATAL ACCIDENTS BY LOCATION- CONTINENTAL U.S. AND PUERTO RICO



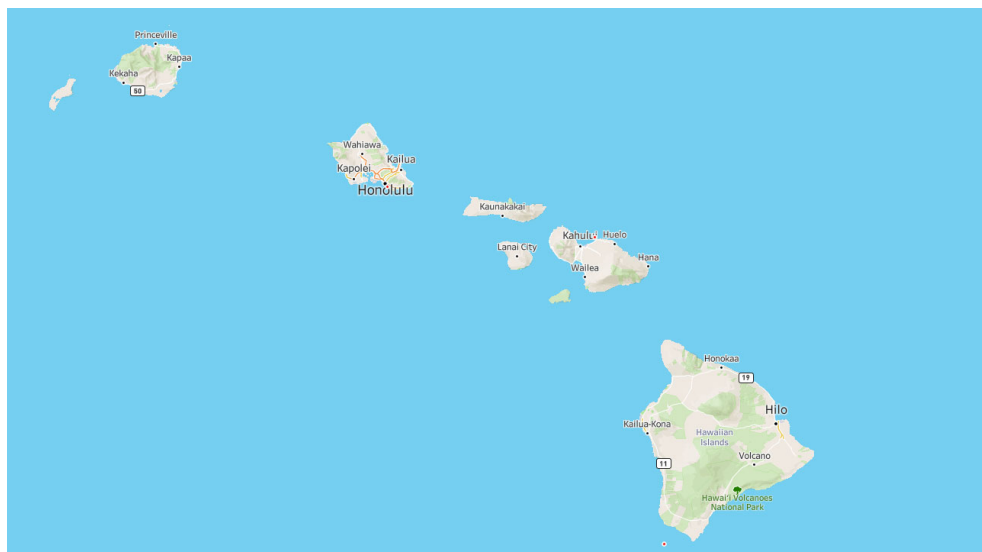
Plots represent fatal accidents; the size of the plot correlates to the number of deaths in a fatal accident. The largest plot represents four deaths.



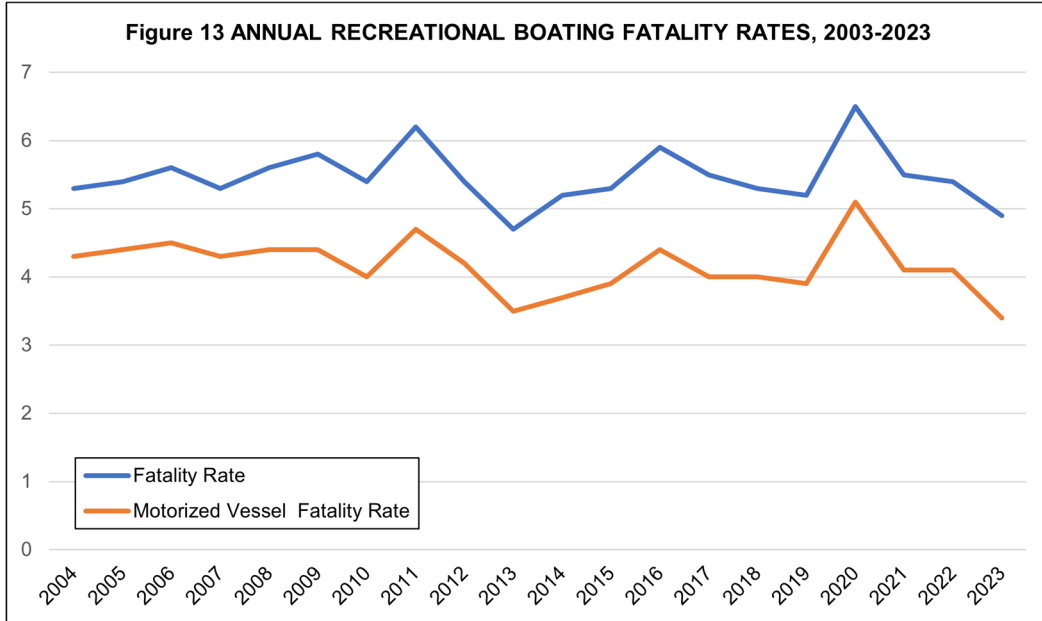
**Figure 12b • FATAL ACCIDENTS BY LOCATION– ALASKA**



**Figure 12c • FATAL ACCIDENTS BY LOCATION– HAWAII**



Plots represent fatal accidents; the size of the plot correlates to the number of deaths in a fatal accident. The largest plot represents two deaths.



**Table 31 - ANNUAL RECREATIONAL BOATING FATALITY RATES 2004-2023**

	All Deaths	All Registered Vessels	Fatality Rate	Motorized Vessel Deaths	Registered Motorized Vessels	Motorized Vessel Fatality Rate
<b>2004</b>	676	12,781,476	5.3	515	11,878,783	4.3
<b>2005</b>	697	12,942,414	5.4	528	11,998,728	4.4
<b>2006</b>	710	12,746,126	5.6	535	11,802,419	4.5
<b>2007</b>	685	12,875,568	5.3	515	11,966,627	4.3
<b>2008</b>	709	12,692,892	5.6	518	11,841,281	4.4
<b>2009</b>	736	12,721,541	5.8	522	11,834,872	4.4
<b>2010</b>	672	12,438,926	5.4	469	11,597,326	4.0
<b>2011</b>	758	12,173,935	6.2	527	11,326,848	4.7
<b>2012</b>	651	12,101,936	5.4	476	11,226,268	4.2
<b>2013</b>	560	12,013,496	4.7	391	11,128,052	3.5
<b>2014</b>	610	11,804,002	5.2	411	10,960,861	3.7
<b>2015</b>	626	11,867,049	5.3	434	11,034,479	3.9
<b>2016</b>	701	11,861,811	5.9	481	11,005,841	4.4
<b>2017</b>	658	11,961,568	5.5	440	11,090,600	4.0
<b>2018</b>	633	11,852,969	5.3	441	10,994,900	4.0
<b>2019</b>	613	11,878,542	5.2	426	11,052,684	3.9
<b>2020</b>	767	11,838,188	6.5	556	10,987,619	5.1
<b>2021</b>	658	11,957,886	5.5	458	11,064,813	4.1
<b>2022</b>	636	11,770,383	5.4	442	10,889,031	4.1
<b>2023</b>	564	11,546,512	4.9	370	10,728,774	3.4



Table 32 - FIVE YEAR SUMMARY OF SELECTED ACCIDENT DATA BY STATE 2019-2023															
	Total Number of Accidents					Fatal Accidents					Deaths				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Totals	4168	5265	4439	4040	3844	556	692	602	589	529	613	767	658	636	564
Alabama	101	96	69	72	58	25	12	10	11	11	28	19	10	11	12
Alaska	14	22	14	16	26	8	15	12	7	18	11	24	14	10	21
Arizona	96	162	118	124	95	7	7	12	12	7	7	10	13	13	9
Arkansas	37	75	54	60	61	10	13	9	13	8	10	13	11	15	9
California	324	493	454	387	339	37	37	37	42	30	39	39	39	43	33
Colorado	44	46	30	31	35	12	16	8	13	15	12	17	8	14	15
Connecticut	40	54	43	34	28	2	3	7	7	5	2	3	7	9	6
Delaware	13	19	17	23	19	1	5	2	2	1	1	6	2	2	1
DC	2	3	1	1	4	0	1	0	0	1	0	3	0	0	1
Florida	679	804	723	712	619	55	70	60	65	54	62	72	61	66	56
Georgia	109	107	91	97	101	22	10	15	18	16	23	11	17	23	16
Hawaii	15	10	15	11	14	3	1	5	4	3	4	1	5	4	3
Idaho	50	77	57	42	48	7	5	10	12	7	8	5	10	15	7
Illinois	75	85	88	53	70	13	16	14	5	11	18	19	15	5	13
Indiana	40	52	40	46	37	11	8	6	10	4	16	8	7	11	4
Iowa	21	38	33	28	37	5	7	2	4	6	5	8	3	4	7
Kansas	13	32	25	16	27	2	8	2	1	2	2	8	4	1	2
Kentucky	39	44	48	33	45	9	7	14	4	7	9	9	17	4	8
Louisiana	105	124	111	103	94	18	23	23	24	7	20	24	27	29	7
Maine	35	41	23	31	25	4	11	3	8	4	4	11	4	9	4
Maryland	130	148	138	126	116	12	6	6	11	10	16	7	6	11	10
Massachusetts	79	75	65	68	41	4	7	6	5	9	5	8	6	5	9
Michigan	128	159	110	88	82	21	29	18	17	20	22	31	21	17	21
Minnesota	100	105	87	90	68	10	16	18	14	9	10	16	18	15	9
Mississippi	20	25	20	27	31	4	4	4	2	7	5	6	4	2	7
Missouri	145	152	159	114	122	18	13	28	16	6	18	14	28	17	6
Montana	13	25	16	21	10	4	7	4	8	3	5	7	5	8	3
Nebraska	19	13	14	14	8	2	2	1	2	1	2	2	1	2	1
Nevada	44	66	32	21	34	4	3	3	5	6	5	3	3	5	8
New Hampshire	37	59	34	38	40	3	2	3	4	5	4	2	3	4	5
New Jersey	110	135	100	110	131	4	9	7	4	7	4	9	8	4	7
New Mexico	13	18	16	12	17	2	4	1	2	8	2	4	1	2	8
New York	165	175	162	154	105	17	25	15	24	17	17	28	17	24	18
North Carolina	128	183	171	143	155	15	23	20	20	19	16	27	20	20	20
North Dakota	16	18	13	10	16	2	1	2	1	2	2	1	2	1	2
Ohio	128	163	140	119	92	12	20	16	17	10	13	25	19	17	10
Oklahoma	24	59	49	38	58	8	17	11	11	11	8	17	12	14	11
Oregon	62	91	42	52	60	16	24	15	16	11	18	26	18	16	13
Pennsylvania	58	58	56	41	48	8	9	9	9	7	8	11	9	9	8
Rhode Island	42	57	33	33	31	1	2	1	3	1	1	2	2	3	1
South Carolina	141	153	184	152	156	15	21	16	22	23	15	25	18	22	24
South Dakota	23	25	16	11	23	4	3	2	0	2	5	3	2	0	2
Tennessee	107	155	123	116	117	9	27	20	24	21	9	30	21	27	22
Texas	184	281	238	201	189	38	55	52	30	33	43	59	58	34	33
Utah	86	90	43	43	51	6	10	9	4	3	7	10	11	4	3
Vermont	4	6	6	2	5	3	3	5	1	1	4	4	7	2	1
Virginia	84	102	89	85	58	18	18	16	13	7	20	21	18	16	8
Washington	106	114	81	53	52	26	26	13	15	23	27	28	14	18	23
West Virginia	9	16	4	11	8	2	5	1	3	2	2	5	1	3	2
Wisconsin	82	133	111	108	116	9	22	21	20	24	9	22	23	20	28
Wyoming	11	4	5	5	7	3	1	1	1	1	3	1	1	1	1
AS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CNMI	0	1	1	0	4	0	0	1	0	0	0	0	1	0	0
Guam	2	0	2	2	2	0	0	1	1	0	0	0	1	1	0
Puerto Rico	4	0	0	2	4	1	0	0	2	1	2	0	0	4	1
Virgin Islands	0	1	3	0	0	0	1	1	0	0	0	1	1	0	0
*AT	5	7	13	7	4	2	0	2	0	2	2	0	2	0	5
*GM	3	5	3	3	0	0	1	0	0	0	0	1	0	0	0
*PC	4	4	6	0	1	2	1	2	0	0	3	1	2	0	0

\*1997 was the first year statistics were compiled for accidents that occurred three or more miles offshore in the Atlantic Ocean and Pacific Ocean and nine or more miles in the Gulf of Mexico.





**Table 34 - NUMBER OF INJURED VICTIMS BY PRIMARY INJURY & VESSEL TYPE**

Primary Injury	Number of Injuries	Airboat	Auxiliary sailboat	Cabin motorboat	Canoe	Houseboat	Inflatable	Kayak	Open motorboat	Personal watercraft	Pontoon	Rowboat	Sailboat (only)	Sailboat	Standup	Other	Unknown
Amputation	27	0	2	3	0	0	0	0	15	5	1	0	0	0	0	0	1
Broken bone	383	1	0	24	2	1	1	2	167	163	21	0	0	0	0	1	0
Burns	91	0	4	23	0	4	0	0	57	2	1	0	0	0	0	0	0
Carbon monoxide	18	0	0	0	0	9	0	0	9	0	0	0	0	0	0	0	0
Concussion	223	2	0	17	0	1	0	4	127	61	10	0	1	0	0	0	0
Dislocation	41	1	0	1	0	0	0	1	22	10	4	0	0	1	0	1	0
Electric shock	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
Hypothermia	128	1	5	5	11	0	0	27	57	7	0	2	8	0	0	0	5
Internal organ injury	92	0	1	5	2	0	0	4	47	24	9	0	0	0	0	0	0
Laceration	486	1	7	42	0	3	4	1	273	98	50	0	4	0	2	1	0
Scrape/bruise	295	6	8	20	1	1	1	2	154	74	22	0	3	0	2	0	1
Shock	12	0	3	1	0	0	0	0	5	2	1	0	0	0	0	0	0
Spinal cord injury	54	1	0	4	1	0	0	0	28	15	4	0	1	0	0	0	0
Sprain/strain	93	1	1	6	0	0	1	0	45	30	6	2	0	0	1	0	0
Other	3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
Unknown	178	2	3	5	3	1	0	3	107	35	11	1	1	0	0	0	6
<b>All Injuries</b>	<b>2126</b>	<b>16</b>	<b>34</b>	<b>156</b>	<b>20</b>	<b>20</b>	<b>7</b>	<b>44</b>	<b>1117</b>	<b>527</b>	<b>140</b>	<b>5</b>	<b>18</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>13</b>

**Table 35 - NUMBER OF FATAL VICTIMS BY LIFE JACKET WEAR, CAUSE OF DEATH & VESSEL TYPE 2023**

Cause of Death	Life jacket worn?	Number of deaths	Airboat	Auxiliary sailboat	Cabin motorboat	Canoe	Houseboat	Inflatable	Kayak	Open motorboat	Personal watercraft	Pontoon	Rowboat	Sailboat (only)	Sailboat (unknown)	Standup paddleboard	Other	Unknown
Carbon monoxide	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	No	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cardiac arrest	Yes	6	0	0	0	2	0	0	3	0	1	0	0	0	0	0	0	0
	No	12	0	0	2	2	0	0	3	3	0	1	1	0	0	0	0	0
	Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drowning	Yes	48	1	1	0	5	0	11	10	10	7	1	0	0	0	1	1	0
	No	319	2	5	12	30	1	10	60	137	8	34	8	1	0	7	2	2
	Unknown	10	0	0	0	1	0	0	2	2	0	0	0	0	0	2	0	3
Hypothermia	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	No	3	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0
	Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	No	3	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0
	Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trauma	Yes	39	0	0	0	1	0	0	1	13	24	0	0	0	0	0	0	0
	No	50	0	0	4	0	0	0	0	40	1	3	1	0	0	1	0	0
	Unknown	4	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0
Unknown	Yes	9	0	0	0	0	0	1	3	2	3	0	0	0	0	0	0	0
	No	41	0	2	0	1	0	1	9	23	2	1	0	2	0	0	0	0
	Unknown	18	0	1	0	0	0	0	2	12	0	1	0	0	0	0	0	2
<b>All Causes</b>		<b>564</b>	<b>3</b>	<b>9</b>	<b>20</b>	<b>43</b>	<b>1</b>	<b>23</b>	<b>95</b>	<b>247</b>	<b>47</b>	<b>41</b>	<b>11</b>	<b>3</b>	<b>0</b>	<b>11</b>	<b>3</b>	<b>7</b>

# **REGISTRATION DATA**



### Explanation of Registration Data Section

The following section contains five tables and figures that examine boat registration information. Registered vessels are those vessels that are required to be recorded by a state, which includes numbered vessels and other forms of registration. Not all states have the same registration requirements. While some states may only register vessels with a motor, others may register sailboats, canoes, kayaks, and rowboats in addition to those vessels with a motor.

#### **Recreational Vessel Registration by Year, 1988-2023 (Table 36 & Figure 15, Page 69)**

This table provides information about recreational vessel registration for each year from 1988-2023. The accompanying figure displays a trend line from 1988-2023.

#### **Recreational Vessel Registration by Length & Means of Propulsion (Table 37, Page 70)**

The top section of the table provides tallies for the number of mechanically-propelled vessels, the number of manually-propelled vessels, and a summation of these two categories. The middle section of the table documents mechanically-propelled vessel registration by length category. The bottom section of the table focuses on manually-propelled vessels.

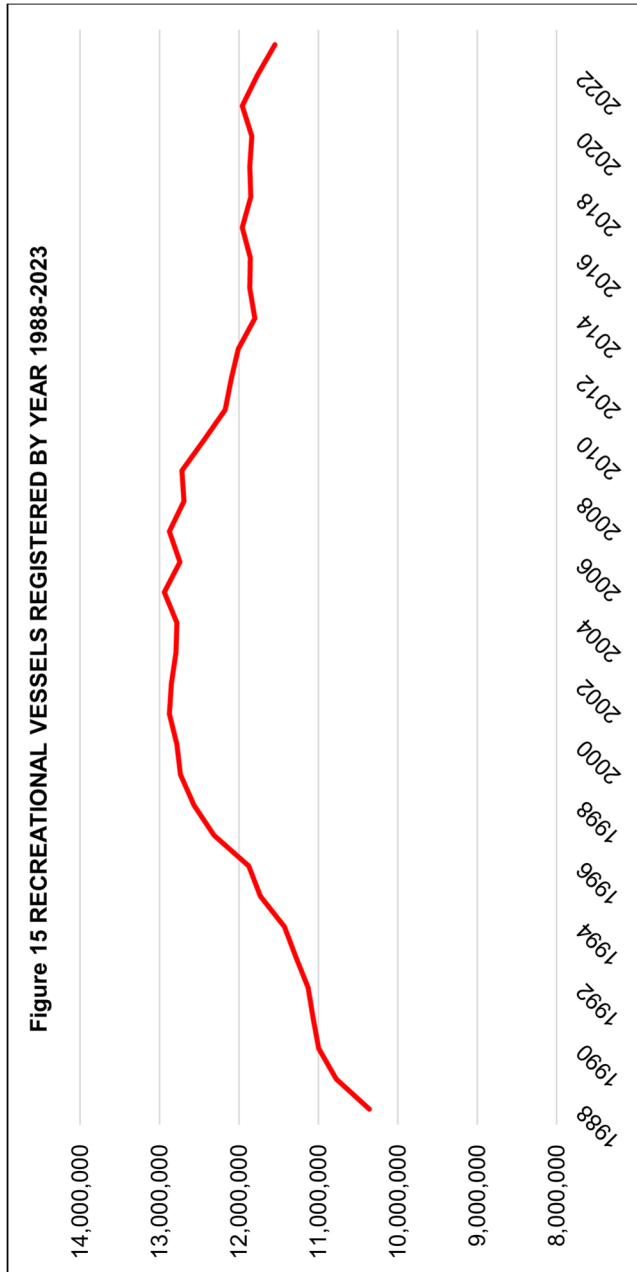
#### **Registration Data by State (Table 38, Page 71)**

This table examines recreational vessel registration, deaths, and fatality rates by state for years 2022 and 2023. The fatality rate is calculated by dividing the number of fatalities by the total vessel registration. The Coast Guard then multiplied by a factor of 100,000 to arrive at the number of deaths per 100,000 registered vessels. When examining a state fatality rate, it is important to note that the state fatality rate may include deaths from vessels that were registered in another state. This table also specifies the scope of the state's registration program.

#### **Distribution of 2023 Recreational Vessel Registration by State (Figure 16, Page 72)**

This figure provides the percentage that each state contributed to national registration figures. So, for instance, California registered 672,103 vessels. Out of the total national registration of 11,546,512 California contributed 5.8%  $((672,103/11,546,512) \times 100)$  of registered vessels. Please note that percentages have been rounded.

Table 36 - RECREATIONAL VESSELS REGISTERED BY YEAR, 1988-2023	
Year	Registered Vessels
1988	10,362,613
1989	10,777,370
1990	10,996,253
1991	11,068,440
1992	11,132,386
1993	11,282,736
1994	11,429,585
1995	11,734,710
1996	11,877,938
1997	12,312,982
1998	12,565,930
1999	12,738,271
2000	12,782,143
2001	12,876,346
2002	12,854,054
2003	12,794,616
2004	12,781,476
2005	12,942,414
2006	12,746,126
2007	12,875,568
2008	12,692,892
2009	12,721,541
2010	12,438,926
2011	12,173,935
2012	12,101,936
2013	12,013,496
2014	11,804,002
2015	11,867,049
2016	11,861,811
2017	11,961,568
2018	11,852,969
2019	11,878,542
2020	11,838,188
2021	11,957,886
2022	11,770,383
2023	11,546,512



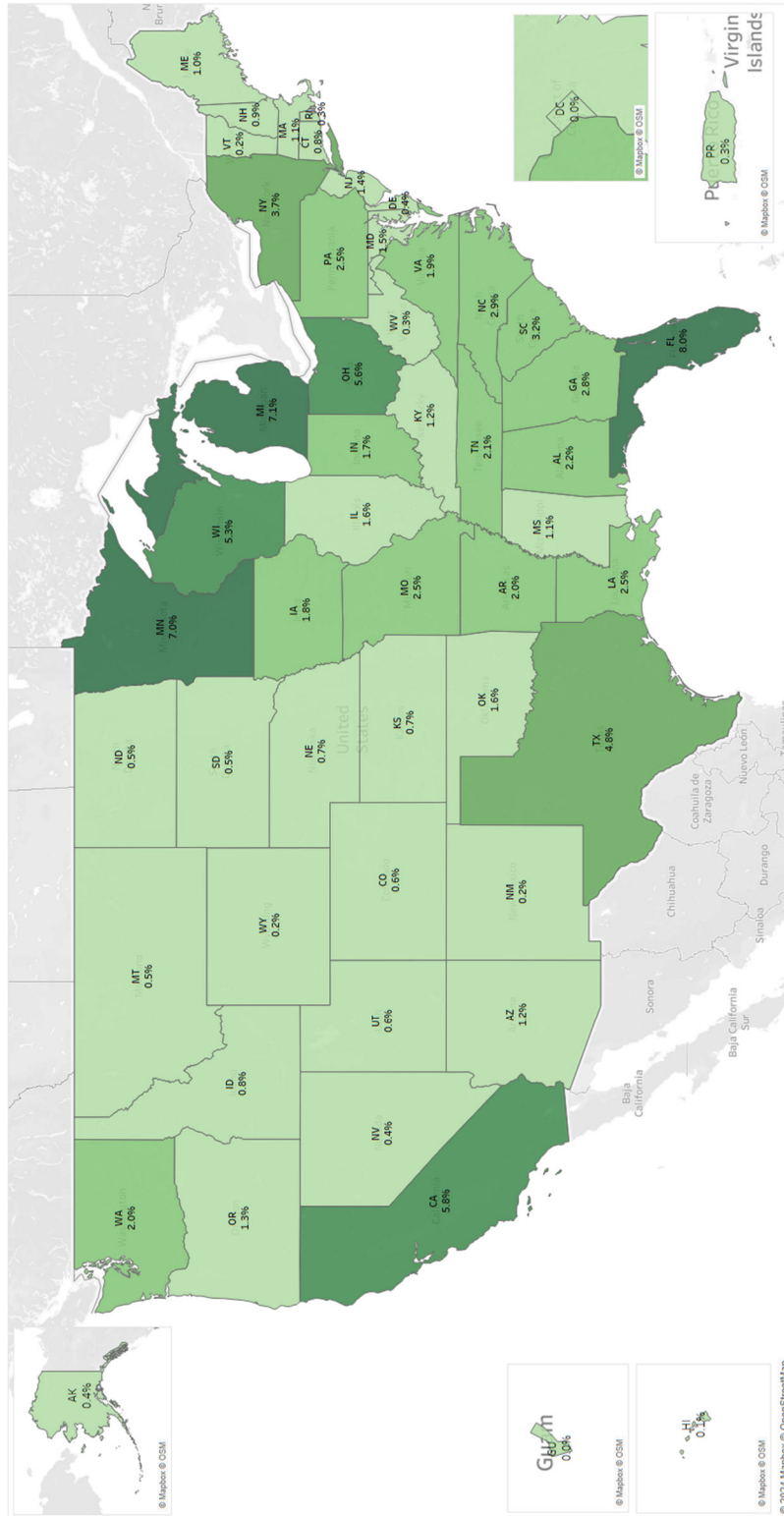
<b>Table 37 • RECREATIONAL VESSEL REGISTRATION BY LENGTH AND MEANS OF PROPULSION 2023</b>	
<b>MECHANICALLY PROPELLED</b>	
	<b>10,728,774</b>
Under 16 feet	3,715,813
16 to less than 26 feet	6,398,097
26 to less than 40 feet	531,328
40 to 65 feet	72,772
Over 65 feet	10,764
<b>NOT MECHANICALLY PROPELLED</b>	
	<b>817,738</b>
Rowboats	35,376
Sailboats	82,516
Paddlecraft	606,221
Other	93,625
<b>TOTAL</b>	<b>11,546,512</b>

**Table 38 - RECREATIONAL VESSEL REGISTRATION DATA BY STATE 2022-2023**

	2023			2022			Scope of Current Boat Registration System
	Registration	Deaths	Fatality Rate	Registration	Deaths	Fatality Rate	
Nation	11,546,512	564	4.9	11,770,383	636	5.4	
AK	44,969	21	46.7	46,228	10	21.6	All motorized vessels; non-motorized is voluntary
AL	249,684	12	4.8	248,710	11	4.4	All motorized vessels, sailboats, and boats for hire
AR	229,497	9	3.9	234,776	15	6.4	All watercraft
AZ	136,602	9	6.6	125,436	13	10.4	All motorized vessels
CA	672,103	33	4.9	626,642	43	6.9	All motorized vessels. All sailboats over 8 feet in length.
CO	72,676	15	20.6	71,957	14	19.5	All watercraft powered by motor or sail; sailboards exempt
CT	89,172	6	6.7	90,641	9	9.9	All motorized vessels; sailboats 19.5 feet or more in length
DC	1,869	1	53.5	1,875	0	0.0	All watercraft
DE	48,703	1	2.1	51,721	2	3.9	All motorized vessels; non-motorized is voluntary
FL	922,915	56	6.1	1,004,240	66	6.6	All motorboats; all non-motorized vessels over 16 feet in length
GA	323,965	16	4.9	329,189	23	7.0	All motorized vessels and sailboats >12' in length
HI	12,236	3	24.5	12,915	4	31.0	All watercraft
IA	211,177	7	3.3	195,782	4	2.0	All watercraft with exceptions (a)
ID	89,332	7	7.8	87,840	15	17.1	All motorized vessels and sailboats
IL	183,689	13	7.1	187,429	5	2.7	All motorized vessels; non-motorized is voluntary
IN	200,616	4	2.0	202,750	11	5.4	All motorized vessels on public waterways
KS	79,812	2	2.5	81,631	1	1.2	All motorized vessels and sailboats
KY	141,525	8	5.7	167,679	4	2.4	All motorized vessels, except electric motors 1 hp or less
LA	290,341	7	2.4	300,582	29	9.6	All motorized vessels; sailboats more than 12 feet in length
MA	127,685	9	7.0	129,699	5	3.9	All motorized vessels
MD	169,900	10	5.9	172,091	11	6.4	All motorized vessels; vessels that may become motorized
ME	113,698	4	3.5	116,827	9	7.7	All motorized vessels
MI	815,317	21	2.6	809,750	17	2.1	All watercraft with exceptions (b)
MN	811,085	9	1.1	822,450	15	1.8	All watercraft with exceptions (c)
MO	288,280	6	2.1	289,724	17	5.9	All motorized vessels; sailboats over 12 feet in length
MS	125,315	7	5.6	129,237	2	1.5	All motorized vessels and sailboats
MT	53,525	3	5.6	74,600	8	10.7	All motorized vessels
NC	339,851	20	5.9	384,858	20	5.2	All motorized vessels; sailboats more than 14 feet in length
ND	54,978	2	3.6	69,577	1	1.4	All motorized vessels; non-motorized is voluntary
NE	78,894	1	1.3	80,436	2	2.5	All motorized vessels
NH	102,187	5	4.9	105,100	4	3.8	All motorized vessels; sailboats 12 feet or more in length
NJ	157,391	7	4.4	164,911	4	2.4	All watercraft with exceptions (d)
NM	28,680	8	27.9	28,512	2	7.0	All motorized vessels and sailboats
NV	42,045	8	19.0	43,071	5	11.6	All motorized vessels; non-motorized is voluntary
NY	430,569	18	4.2	436,565	24	5.5	All motorized vessels
OH	649,051	10	1.5	652,808	17	2.6	All watercraft
OK	189,871	11	5.8	194,373	14	7.2	All watercraft with exceptions (e)
OR	152,440	13	8.5	155,229	16	10.3	All motorized vessels; sailboats 12 feet or more in length
PA	287,740	8	2.8	298,048	9	3.0	All motorized vessels and certain non-powered craft (f)
RI	38,025	1	2.6	37,862	3	7.9	All motorized vessels and rowboats over 12 feet
SC	366,322	24	6.6	360,233	22	6.1	All watercraft
SD	60,365	2	3.3	60,026	0	0.0	All motorized vessels ; all other boats over 12 feet in length
TN	244,601	22	9.0	248,665	27	10.9	All motorized vessels and sailboats
TX	559,355	33	5.9	567,470	34	6.0	All motorized vessels and sailboats 14 feet or more in length
UT	65,306	3	4.6	62,422	4	6.4	All motorized vessels and sailboats
VA	221,641	8	3.6	223,140	16	7.2	All motorized vessels
VT	27,223	1	3.7	28,092	2	7.1	All motorized vessels
WA	233,372	23	9.9	238,235	18	7.6	All motorboats with exceptions (g); sailboats >16 ft in length
WI	611,024	28	4.6	607,994	20	3.3	All motorized vessels & sailboats over 12 feet in length
WV	40,166	2	5.0	53,857	3	5.6	All motorized vessels
WY	24,631	1	4.1	25,471	1	3.9	All motorized vessels ; non-motorized is voluntary
AS	90		0.0	132	0	0	All watercraft
CNMI	391	0	0.0	405	0	0	All motorized vessels
GU	726	0	0.0	1,001	1	99.9	All motorized vessels and sailboats over 12 feet
PR	31,093	1	3.2	27,340	4	14.6	All motorboats; vessels adapted to hold a motor
VI	2,796	0	0.0	2,149	0	0	All watercraft
Offshore		5			0		

(a) IA excludes inflatables under 7 feet in length and canoes/kayaks under 13 feet in length. (b) MI excludes manually propelled boats 16 feet or less in length (c) MN excludes non-motorized boats 10 feet or less in length, waterfowl during waterfowl season, riceboats during harvest season, and seaplanes. (d) NJ excludes non-motorized boats less than 12 feet in length and canoes and kayaks. (e) OK excludes canoes, kayaks, and pedal boats. (f) PA registers non-powered craft using lakes or access areas owned by the State Fish & Boat Commission. (g) WA excludes motorboats < 16 feet with motors 10 horsepower or less used solely on exclusive state waters.

Figure 16 - DISTRIBUTION OF 2023 RECREATIONAL VESSEL REGISTRATION BY STATE



USCG Boating Accident Report Form

DEPARTMENT OF HOMELAND SECURITY U.S. Coast Guard <b>RECREATIONAL BOATING ACCIDENT REPORT</b>		OMB Control Number: 1625-0003 Expires: 07/31/2022
<b>INSTRUCTIONS:</b> Use "Report required because" section below to determine if a report is required for your accident. If required, please have each vessel owner or operator involved in the accident submit a report to their state reporting authority. Each boat operator/owner involved in an accident should submit a separate report. For each question below, please provide answers if applicable and if known; otherwise leave blank.		
<b>Privacy Act Notice</b>		
<b>Authority:</b> 46 U.S.C. 6102 and 33 CFR 173 & 174 authorize the collection of information on boating accidents. <b>Purpose:</b> The Coast Guard uses this information for statistical purposes, chiefly to inform the public, to measure the Program's efforts, and to regulate issues relating to boating safety. <b>Routine Uses:</b> The Coast Guard shares this information within the agency, and if state and federal law permit it, to the public.		
<b>REPORT SUBMISSION</b>		
<b>Report required because (select all that apply):</b> <input type="checkbox"/> At least one person in this accident <i>died</i> : If so, how many? _____ <input type="checkbox"/> At least one injured person in this accident <i>required or was in need of treatment beyond first aid</i> : If so, how many? _____ <input type="checkbox"/> At least one person in this accident <i>disappeared</i> and has not yet been recovered: If so, how many? _____ <input type="checkbox"/> All boat and other property damage (e.g., fishing/hunting gear) caused by this accident <i>totaled (or likely totaled) \$2,000 or more</i> : Approximate value of damage to your boat: \$ _____ Approximate value of damage to your other property: \$ _____ <input type="checkbox"/> Your or another boat in this accident was (or likely was) a <i>total loss</i>		<b>To be submitted within:</b> 48 hours (if injury, disappearance or death) 10 days (if boat/property damage only)  <b>To be submitted to:</b> (Local State Reporting Authority)  <b>Phone:</b> You may submit any comments concerning the accuracy of the burden estimate or any suggestions for reducing the burden to: Commandant (CG-BSX-21), U.S. Coast Guard, Washington, DC 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (1625-0003), Washington, DC 20503. Questions relating to the collection of this data should be sent to the Coast Guard.
<b>Report submitted by (select all that apply):</b> <input type="checkbox"/> Boat Operator (required if possible) <input type="checkbox"/> Boat Owner (if operator unable, or same as operator) <input type="checkbox"/> Other (describe): _____		<b>For State Agency Use Only</b>
First Name _____ Last Name _____ Phone _____		First Name _____ Last Name _____  Phone: _____  Primary Cause of Accident _____
<b>ACCIDENT SUMMARY</b>		
<b>WHEN</b> Date: _____ Time: _____ am <input type="checkbox"/> pm <input type="checkbox"/> (mm/dd/yyyy) (select one)		<b>ACCIDENT DESCRIPTION:</b> Briefly describe this accident (attach extra pages if necessary)
<b>WHERE</b> Body of Water Name _____		
Location (on water) description _____  Nearest city/town _____  County: _____ State: _____		
<b>YOUR BOAT – PEOPLE</b> # people on board (including operator): _____ # people being towed (e.g., on tubes, skis): _____ # people wearing lifejackets (on board or towed): _____		<b>DAMAGE TO YOUR BOAT:</b> Briefly summarize any damage to your boat   <b>DAMAGE TO YOUR OTHER PROPERTY: (NOT BOAT)</b> Briefly summarize any damage to your other property (not boat)
<b>OTHER BOATS INVOLVED IN ACCIDENT</b> # of other boats involved: _____		

USCG Boating Accident Report Form

For each question below, please provide answers IF APPLICABLE AND IF KNOWN, otherwise leave blank.													
<b>YOUR BOAT</b>													
<b>BOAT IDENTIFICATION</b>													
Your Boat Name:						Manufacturer:							
Model Name:						Model Year:							
Registration #:						Documentation #:							
Hull Identification # (HIN):						Rented: <input type="checkbox"/> Yes <input type="checkbox"/> No							
<b>SIZE ESTIMATES</b>													
Length: ft.			Depth from transom (stern) to keel (bottommost point): ft.				in.		Beam width at widest point: ft.				
<b>HULL MATERIAL</b>													
Type of Hull Material (select one)													
Fiberglass			Wood			Rubber/vinyl/canvas			Other (describe):				
Aluminum			Steel			Plastic							
<b>BOAT TYPE</b>													
Boat Type (select one)						Available Propulsion (select all that apply)							
Cabin motorboat		Inflatable boat		Personal watercraft (PWC) (e.g., Wave Runner™, Jet Ski™, Sea-Doo™)		Paddlecraft:		Propeller		Air thrust			
Open motorboat		Houseboat				Canoe		Sail		Other (describe):			
Auxiliary sail		Sail (only)		Air boat		Standup Paddleboard		Manual					
Pontoon boat		Rowboat		Other (describe):				Water jet					
<b>ENGINE</b>													
# Engines:			Engine type and horsepower (select one)						Fuel type (select all that apply)				
Manufacturer			Outboard		Sterndrive		Inboard		Pod drive		Gas		Electric
Total horsepower: hp			No engine		Other:				Diesel		Other:		
<b>SAFETY MEASURES</b>													
Organizations that have conducted a vessel safety check (VSC) on board your boat within the past year (including carriage of safety equipment, e.g., lifejackets, anchor and line, fire extinguishers):													
US Coast Guard Auxiliary: VSC Decal? <input type="checkbox"/> Yes <input type="checkbox"/> No				Federal Agency (Name):									
US Power Squadrons: VSC Decal? <input type="checkbox"/> Yes <input type="checkbox"/> No				State Agency (Name):									
				Other Agency (Name):									
# Life jackets on board:			# Fire extinguishers on board:			Type of fire extinguishers (e.g., ABC):							
			# Fire extinguishers used:										
<b>ACCIDENT DETAILS – EXTERNAL CONDITIONS</b>													
<b>WEATHER</b>													
Overall weather was (select one)				It was (select one)		Visibility was (select one)			Wind was (select one)				
Clear		Raining		Day		Good			0 mph (none)				
Cloudy		Snowing		Night		Fair			Over 0, up to 12 mph (light)				
Foggy		Hazy				Poor			Over 12, up to 25 mph (moderate)				
Other (describe):				Approximate air temperature:		°F		Over 25, up to 55 mph (strong)					
								Over 55 mph (stormy)					
<b>WATER</b>													
Overall water conditions (select one):						Other water conditions:							
Up to 6 in. waves (calm)						Approximate water temperature:			°F				
Over 6 in., up to 2 ft. waves (choppy)						Strong current?			Yes		No		
Over 2 ft., up to 6 ft. waves (rough)						Hazardous waters? (e.g., rapid tidal flow, currents)			Yes		No		
Over 6 ft. waves (very rough)						Congested waters?			Yes		No		



USCG Boating Accident Report Form

For each question below, please provide answers IF APPLICABLE AND IF KNOWN, otherwise leave blank.

**ACCIDENT DETAILS – ACTIVITIES AND OPERATIONS ON YOUR BOAT**

**OPERATOR/PASSENGER ACTIVITIES**

Operator/passenger activities on your boat at time of accident:

Activities were (select one)                      Operator/Passenger activities (select all that apply)

Recreational	Fishing	Tubing	Starting engine
Commercial	Hunting	Water Skiing	Making repairs
	White water activity (e.g., rafting)	Relaxing	Other (list):

**BOAT OPERATIONS**

Your boat operations at time of accident (select all that apply)

Cruising (underway under power)	Drifting	Racing	Towing another vessel
Changing direction	At anchor	Rowing/paddling	Launching
Changing speed	Being towed	Docking/undocking	Tied to dock/mooring
Sailing	Other (list):		

**ACCIDENT DETAILS – CONTRIBUTING FACTORS ON YOUR BOAT**

**CONTRIBUTING FACTORS**

Indicate factors on your boat which may have contributed to this accident (select all that apply)

Alcohol use	Improper lookout	Dam/lock	Starting in gear
Drug use	Operator inattention	Force of wake/wave	Sharp turn
Excessive speed	Operator inexperience	Hazardous waters	Restricted vision (e.g., fog)
Improper anchoring	Language barrier	Heavy weather	Mission/inadequate aids to navigation (e.g., buoy, daymarker)
Improper loading	Navigation rules violation	Ignition of fuel or vapor	Inadequate on-board navigation lights
Overloading	Failure to vent	Hull failure	People on gunwale, bow or transom
Other (describe):			

**ACCIDENT DETAILS –YOUR BOAT**

**MACHINERY/EQUIPMENT FAILURE**

Failure of the following machinery/equipment on your boat contributed to this accident (select all that apply)

Engine	Onboard lights	Shift	Sound equipment (e.g., horn, whistle)
Electrical system	Seats	Radio	Auxiliary equipment
Fuel system	Steering	Fire extinguisher	Other (list):
Sail/mast	Throttle	Ventilation	
Onboard navigation aids (e.g., GPS)			

**ACCIDENT DETAILS – EVENTS ON YOUR BOAT**

**ACCIDENT EVENTS**

Types of events occurring to/on your boat during accident (select all that apply)

Collision with recreational boat	Flooding/swamping	Person fell overboard
Collision with commercial boat (e.g., tug, barge)	Fire/explosion – fuel	Person fell on/within boat
Collision with fixed object (e.g., dock, bridge)	Fire/explosion – non-fuel	Sudden medical condition
Collision with submerged object (e.g., stump, cable)	Carbon monoxide exposure	Person struck by boat
Collision with floating object (e.g., log, buoy)	Mishap of skier, tuber, wake boarder, etc.	Person struck by propeller or propulsion unit
Capsizing	Person left boat voluntarily	Person electrocuted
Grounding	Person ejected from boat (caused by collision or maneuver)	
Sinking	Other (describe):	



USCG Boating Accident Report Form

For each question below, please provide answers IF APPLICABLE AND IF KNOWN, otherwise leave blank.

**ACCIDENT DETAILS –YOUR BOAT-  
INJURED PEOPLE RECEIVING OR IN NEED OF TREATMENT BEYOND FIRST AID**

*Report only injured people on, struck by, or being towed by your boat, receiving or in need of treatment beyond first aid. Do not report injured people on, struck by, or being towed by another boat or no boat (e.g., swimmers, people on a dock). If more than one injured person to report, attach additional copies of this page. If none, SKIP INJURED PEOPLE section.*

**INJURED PERSON**

First Name	MI	Last Name
Street		
City	State	Zip
Phone	Date of Birth (mm/dd/yyyy)	Age

**INJURY DETAILS**

Injury caused when person (select all that apply)	Nature of most serious injury (select one)
Struck the (e.g., boat, water):	Scrape/bruise
Was struck by a (e.g., boat, propeller):	Cut
Was exposed to carbon monoxide poisoning	Sprain/strain
Received an electric shock	Concussion/brain injury
Other (describe):	Spinal cord injury
Person was wearing lifejacket?	Broken/fractured bone
Person received treatment beyond first aid?	Body part of most serious injury (e.g., head, trunk, leg):
Person was admitted to a hospital?	

**ACCIDENT DETAILS – YOUR BOAT – DEATHS/DISAPPEARANCES**

*Only report deaths/disappearances of people on, struck by, or being towed by your boat. If more than one death/disappearance to report, attach additional copies of this page. If none, SKIP DEATHS/DISAPPEARANCES section.*

**PERSON WHO DIED/DISAPPEARED**

First Name	MI	Last Name
Street		
City	State	Zip
Phone	Date of Birth (mm/dd/yyyy)	Age

**DETAILS OF DEATH/DISAPPEARANCE**

Injury caused when person (select all that apply)	Nature of death/disappearance (select one)
Struck the (e.g., boat, water):	Death – by drowning
Was struck by a (e.g., boat, propeller):	Death – other likely cause (describe)
Was exposed to carbon monoxide poisoning	
Received an electric shock	Disappeared and not yet recovered
Other (describe):	Person was wearing lifejacket?
	Yes
	No

USCG Boating Accident Report Form

For each question below, please provide answers IF APPLICABLE AND IF KNOWN, otherwise leave blank.					
ACCIDENT DETAILS – YOUR BOAT OPERATOR					
OPERATOR INSTRUCTION			OPERATOR SAFETY MEASURES		
Boating safety instruction completed <i>(select all that apply)</i>			On board, prior to accident, was operator wearing:		
None			A lifejacket?	Yes	No
State course			An engine cut-off switch <i>(Lanyard or wireless device) if equipped?</i>	Yes	No
USCG Auxiliary course			On board, prior to accident, was operator using:		
US Power Squadrons course			Alcohol?	Yes	No
Internet <i>(name of sponsoring organization)</i>			Drugs?	Yes	No
Other <i>(describe)</i>			Operator arrested for Boating Under the Influence?	Yes	No
			Weather reports consulted prior to accident?	Yes	No
OPERATOR EXPERIENCE					
Experience operating this type of boat <i>(select one)</i>					
0 to 10 hours		Over 10, up to 100 hours		Over 100, up to 500 hours	
				Over 500 hours	
ACCIDENT DETAILS – OTHER KEY PEOPLE					
<i>Only report other key people not already documented as injured, died, disappeared or operator/owner of your boat. If more than two other key people to report, attach additional copies of this page.</i>					
NAME/ADDRESS					
This other key person was a(n) <i>(select all that apply)</i>					
<input type="checkbox"/> Other boat operator <input type="checkbox"/> Other boat owner <input type="checkbox"/> Owner of other damaged property <input type="checkbox"/> Passenger on your boat <input type="checkbox"/> Witness					
First Name		MI	Last Name		
Street					
City		State	Zip	Phone	
Other boat name <i>(if any)</i>			Other boat registration # <i>(if any)</i>		
NAME/ADDRESS					
This other key person was a(n) <i>(select all that apply)</i>					
<input type="checkbox"/> Other boat operator <input type="checkbox"/> Other boat owner <input type="checkbox"/> Owner of other damaged property <input type="checkbox"/> Passenger on your boat <input type="checkbox"/> Witness					
First Name		MI	Last Name		
Street					
City		State	Zip	Phone	
Other boat name <i>(if any)</i>			Other boat registration # <i>(if any)</i>		

USCG Boating Accident Report Form

For each question below, please provide answers IF APPLICABLE AND IF KNOWN, otherwise leave blank.						
<b>YOUR BOAT OPERATOR</b>						
<b>NAME/ADDRESS</b>						
First Name	MI	Last Name				
Street						
City	State	Zip				
<b>AGE/GENDER/PHONE</b>						
Date of Birth <i>(mm/dd/yyyy)</i>	Age	Gender	Male	Female	Phone	
<b>YOUR BOAT OWNER</b>						
If same as <i>your boat operator</i> SKIP rest of YOUR BOAT OWNER section.						
<b>NAME/ADDRESS/PHONE</b>						
First Name	MI	Last Name				
Street						
City	State	Zip	Phone			
<b>PERSON SUBMITTING THIS REPORT</b>						
If same as <i>your boat operator</i> OR <i>owner</i> , SKIP rest of PERSON SUBMITTING THIS REPORT section.						
<b>NAME/ADDRESS/PHONE/ROLE</b>						
First Name	MI	Last Name				
Street						
City	State	Zip	Phone			
I was a(n) <i>(select one)</i>						
<input type="checkbox"/>	Other person on board <i>this</i> boat					
<input type="checkbox"/>	Accident witness <i>not</i> on board <i>this</i> boat					
<input type="checkbox"/>	Other <i>(describe)</i> :					
<b>SIGNATURE OF PERSON SUBMITTING THIS REPORT</b>						
Your signature					Date <i>(mm/dd/yyyy)</i>	
<p>An Agency may not conduct or sponsor and a person is not required to respond to an information collection, unless it displays a currently valid OMB Control Number.</p> <p>The Coast Guard estimates that the average burden for this report form is 30 minutes. You may submit any comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to: Commandant (CG-BSX-21), U.S. Coast Guard, Washington, DC 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (1625-0003), Washington, DC 20503.</p>						

## Glossary

**Airboat** - A vessel that is typically flat-bottomed and propelled by an aircraft-type propeller powered by an engine.

**At Anchor** - Held in place in the water by an anchor; includes “moored” to a buoy or anchored vessel and “dragging anchor”.

**Auxiliary Sail** - A vessel with sail as its primary method of propulsion and mechanical propulsion as its secondary method.

**Cabin Motorboat** - A vessel propelled by propulsion machinery and providing enclosed spaces inside its structure.

**Canoe** - A small narrow boat, propelled by paddles. Canoes usually are pointed at both bow and stern and are normally open on top, but can be covered.

**Capsizing** - Overturning of a vessel.

**Carbon Monoxide Poisoning** - Death or injury resulting from an odorless, colorless gas generated from auxiliary boat equipment (stoves, heaters, refrigerators, generators, hot water heaters, etc.), another boat’s exhaust, or the exhaust of the vessel on which persons were either aboard or in close proximity.

**Collision with Fixed Object** - The striking of any fixed object, above or below the surface of the water.

**Collision with Floating Object** - Collision with any waterborne object above or below the surface that is free to move with the tide, current, or wind, except another vessel.

**Collision with Commercial/Governmental/Recreational Vessel** - Any striking together of two or more vessels, regardless of operation at the time of the accident, is a collision.

**Collision with Submerged Object** - A boat’s collision with any waterborne or fixed object that is below the surface of the water.

**Congested Waters** - Where the body of water is either too small or narrow to safely accommodate the number of boats on it.

**Cruising** - Proceeding normally, unrestricted, with an absence of drastic rudder or engine changes.

**Departed Vessel** - An accident where a person voluntarily disembarks a vessel by his/her own will (i.e. by diving off, jumping in), as opposed to a case where the person is forcefully ejected by a change in the vessel speed and/or direction.

**Documented Vessel** - A vessel of five or more net tons owned by a citizen of the United States and used exclusively for pleasure with a valid marine document issued by the Coast Guard. Documented vessels are not numbered.

**Drifting** - Underway, but proceeding over the bottom without use of engines, oars or sails; being carried along only by the tide, current, or wind.

**Electrocution** - Death or injury resulting from an electrical current that comes in contact with water causing electrocution of the victim.

**Excessive Speed** - Speed above that which a reasonable and prudent person would have operated under the conditions that existed. It is not necessarily a speed in excess of a posted limit.

**Failure to Vent** - Prior to starting the engine, failure to turn on the powered ventilation system that

brings in “fresh air” and expels gasoline vapors from the engine compartment.

**Fall in Vessel** - Any operator or passenger who slips, trips, or falls on board or within the vessel.

**Falls Overboard** - Any operator or passenger who falls off of the vessel.

**Fiberglass hull** - Hulls of fiber-reinforced plastic. The laminate consists of two basic components, the reinforcing material (glass filaments) and the plastic or resin in which it is embedded.

**Fire/Explosion (fuel)** - Accidental combustion of vessel fuel, liquids, including their vapors, or other substances such as wood.

**Fire/Explosion (other)** - Accidental burning or explosion of any material onboard except vessel fuels or their vapors.

**Flooding/Swamping** - Filling with water, regardless of method of ingress, but retaining sufficient buoyancy to remain on the surface.

**Force of Wave/Wake** - The track in the water of a moving boat; commonly used for the disturbance of the water (waves) resulting from the passage of the boat’s hull.

**Fueling** - Any stage of the fueling operation; primarily concerned with introduction of explosive or combustible vapors or liquids on board.

**Grounding** - Running aground of a vessel, striking or pounding on rocks, reefs, or shoals; stranding.

**Hazardous Waters** - Rapid tidal flows (the vertical movement of water) and/or currents (the horizontal flow of water) resulting in hazardous conditions in which to operate a boat.

**Houseboat** - A motorized vessel that is usually non-planing and designed primarily for multi-purpose accommodation spaces with low freeboard and little or no foredeck or cockpit.

**Hull Failure** - Defect or failure of the structural body of a vessel (i.e., hull material, design, or construction) not including superstructure, masts, or rigging.

**Ignition of Spilled Fuel or Vapor** - Accidental combustion of vessel fuel, liquids, and/or their vapors.

**Improper Anchoring** - Where a boat is either in the process of being anchored incorrectly or incorrectly held in place in the water by an anchor.

**Improper Loading** - Loading, including weight shifting, of the vessel causing instability, limited maneuverability, or dangerously reduced freeboard.

**Improper Lookout** - No proper watch; the failure of the operator to perceive danger because no one was serving as lookout, or the person so serving failed in that regard. Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.

**Inboard**— An engine mounted inside the confines of a vessel which powers a drive shaft that turns a water jet impeller or that runs through the bottom of the hull and is attached to a propeller at the other end.

**Inflatable** - A vessel that uses air-filled flexible fabric for buoyancy.

**Kayak** - A small boat with a cockpit that is propelled by a double-bladed paddle by a sitting paddler.

**Inadequate On-board Navigation Lights** - Insufficient and/or improper lights shown by a boat that indicate course, position, and occupation, such as fishing or towing.

**Machinery Failure** - Defect and/or failure in the machinery or material, design or construction, or components installed by the manufacturer involved in the mechanical propulsion of the boat (e.g., engine, transmission, fuel system, electric system, and steering system).

**Missing or Inadequate Navigation Aids** - The absence of or ineffective presence of navigation aids.

**Motorboat** - Any vessel equipped with propulsion machinery.

**Navigation Rules Violation** - Violation of the statutory and regulatory rules governing the navigation of vessels.

**Numbered vessel** - An undocumented vessel numbered by a state with an approved numbering system under Chapter 123 of title 46, U.S.C.

**Open Motorboat** - A vessel equipped with propulsion machinery and having an open load carrying area that does not have a continuous deck to protect it from the entry of water.

**Operator Inattention** - Failure on the part of the operator to pay attention to the vessel, its occupants, or the environment in which the vessel is operating.

**Operator Inexperience** - Lack of practical experience or knowledge in operating a vessel or, more particularly, the vessel involved in the accident.

**Outboard** - An engine with propeller or water jet integrally attached, which is usually mounted at the stern of a vessel.

**Overloading** - Excessive loading of the vessel causing instability, limited maneuverability, dangerously reduced freeboard, etc.

**Paddlecraft** - A vessel powered only by its occupants, using a single or double-bladed paddle as a lever without the aid of a fulcrum provided by oarlocks, thole pins, crutches, or similar arrangements.

**People on Gunwale, Bow or Transom** - Standing/Sitting on the upper edge of the side of a boat, usually on a small projection above the deck; and/or standing/sitting on the most forward part of the boat; and/or standing/sitting on the back of the boat.

**Person Struck by Vessel** - A person is struck by a boat.

**Person Struck by Propeller** - A person is struck by the propeller, propulsion unit, or steering machinery.

**Personal Watercraft** - A vessel propelled by a water-jet pump or other machinery as its primary source of motive power and designed to be operated by a person sitting, standing, or kneeling on the vessel, rather than sitting or standing within the vessel's hull.

**Pod drive**- An engine mounted in front of the transom of a vessel and attached through the bottom of the hull to a steerable propulsion unit.

**Pontoon Boat** - A vessel with a broad, flat deck that is affixed on top of closed cylinders which are used for buoyancy, the basic design of which is usually implemented with two rows of floats as a catamaran or with three rows of floats as a trimaran.

**Restricted Vision** - A vessel operator's vision is said to be restricted when it is limited by a vessel's bow high trim, or by glare, sunlight, bright lights, a dirty windshield, spray, a canopy top, etc.

**Rowboat** - An open vessel manually propelled by oars.

**Sail (only)** - A vessel propelled only by sails.

**Sharp Turn** - An immediate or abrupt change in the boat's course of direction.

**Sinking** - Losing enough buoyancy to settle below the surface of the water.

**Skier Mishap** - Skier mishap is defined by persons (1) falling off their water-skis, (2) striking a fixed or submerged object, or by (3) becoming entangled or struck by the tow line. Also includes mishaps involving inner-tubes and other devices on which a person can be towed behind a boat.

**Standup Paddleboard** - A vessel, typically 7' – 15' in length with enough width and flotation to stay afloat without momentum while boarded, that is propelled by a standing operator with the use of a single or double-bladed paddle.

**Starting in Gear** - The boat's engine is started with the transmission in forward or reverse.

**Steel hull** - Hulls of sheet steel or steel alloy, not those with steel ribs and wood, canvas, or plastic hull coverings.

**Sterndrive** - An engine, powering a propeller through a series of shafts and gears, mounted in front of the transom of a vessel and attached through the transom to a drive unit that is similar to the lower unit of an outboard; and may also be known as an inboard-outdrive or an inboard-outboard.

**Sudden Medical Condition** - An incident where a person on a vessel experiences an unexpected medical condition.

**Towing** - Engaged in towing any vessel or object, other than a person.

**Weather** - As a contributing factor of an accident, "Weather" is supposed to signify a stormy or windy condition, usually connoting rough or high seas and dangerous operating conditions.

**Wood Hull** - Hulls of plywood, molded plywood, wood planking, or any other wood fiber in its natural consistency, including those of wooden construction that have been "sheathed" with fiberglass or sheet metal.

Glossary of State Codes			
AL	Alabama	NJ	New Jersey
AK	Alaska	NM	New Mexico
AZ	Arizona	NY	New York
AR	Arkansas	NC	North Carolina
CA	California	ND	North Dakota
CO	Colorado	OH	Ohio
CT	Connecticut	OK	Oklahoma
DE	Delaware	OR	Oregon
DC	District of Columbia	PA	Pennsylvania
FL	Florida	RI	Rhode Island
GA	Georgia	SC	South Carolina
HI	Hawaii	SD	South Dakota
ID	Idaho	TN	Tennessee
IL	Illinois	TX	Texas
IN	Indiana	UT	Utah
IA	Iowa	VT	Vermont
KS	Kansas	VA	Virginia
KY	Kentucky	WA	Washington
LA	Louisiana	WV	West Virginia
ME	Maine	WI	Wisconsin
MD	Maryland	WY	Wyoming
MA	Massachusetts	GU	Guam
MI	Michigan	PR	Puerto Rico
MN	Minnesota	VI	Virgin Islands
MS	Mississippi	AS	American Samoa
MO	Missouri	CNMI	Northern Mariana Islands
MT	Montana	AT	Atlantic Ocean
NE	Nebraska	GM	Gulf of Mexico
NV	Nevada	PC	Pacific Ocean
NH	New Hampshire		