2021 Recreational Boating Statistics

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U.S. Department of Homeland Security
U.S. Coast Guard
Office of Auxiliary and Boating Safety

U.S. Department of Homeland Security
United States Coast Guard

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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 2021, the 63rd 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 2021 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.

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G																										
H																										

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Table of Contents

List of Tables

List of Figures

2021 EXECUTIVE SUMMARY

- In calendar year 2021, the Coast Guard counted 4,439 accidents that involved 658 deaths, 2,641 injuries and approximately $67.5 million dollars of damage to property as a result of recreational boating accidents.
    - The fatality rate was 5.5 deaths per 100,000 registered recreational vessels. This rate represents a 15.4% decrease from the 2020 fatality rate of 6.5 deaths per 100,000 registered recreational vessels.
    - Compared to 2020, the number of accidents decreased 15.7%, the number of deaths decreased 14.2%, and the number of injuries decreased 17.2%.
- Where cause of death was known, 81% of fatal boating accident victims drowned. Of those drowning victims with reported life jacket usage, 83% were not wearing a life jacket.
- Where length was known, 3 of every 4 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 16% of deaths.
- Where instruction was known, 75% of deaths occurred on boats where the operator did not receive boating safety instruction. Only 16% percent of deaths occurred on vessels where the operator had received a nationally-approved boating safety education certificate.
- There were 188 accidents in which at least one person was struck by a propeller. Collectively, these accidents resulted in 24 deaths and 191 injuries.
- Operator inattention, operator inexperience, improper lookout, machinery failure, and excessive speed ranked as the top five primary contributing factors in accidents.
- Where data was known, the most common vessel types involved in reported accidents were open motorboats (47%), 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 (15%), and pontoons (10%).
- The 11,957,886 recreational vessels registered by the states in 2021 represent a 1.01% increase from last year when 11,838,188 recreational vessels were registered.

Table 1 ▪ 2021 EXECUTIVE SUMMARY

TOP FIVE PRIMARY ACCIDENT TYPES

Accident Rank	Accident Type	Number of Accidents	Number of Deaths	Number of Injuries
1	Collision with recreational vessel	1226	31	740
2	Collision with fixed object	508	43	408
3	Flooding/swamping	461	55	100
4	Grounding	308	12	179
5	Falls overboard	273	170	98

VESSEL TYPES WITH THE TOP CASUALTY NUMBERS

Casualty Rank	Type of Boat	Drownings	Other Deaths	Total Deaths	Total Injuries	Total Casualties
1	Open motorboat	203	84	287	1378	1665
2	Personal watercraft	29	26	55	670	725
3	Pontoon	55	9	64	181	245
4	Canoe/kayak	122	20	142	80	222
5	Cabin motorboat	17	18	35	182	217

LIFE JACKET WEAR BY TOP FIVE KNOWN CAUSES OF DEATH

Known Cause of Death Rank	Cause of Death	Number of Deaths	Life Jacket		
			Worn	Not Worn	Unknown if worn
1	Drowning	489	84	399	6
2	Trauma	87	35	49	3
3	Cardiac arrest	12	7	5	0
4	Hypothermia	7	7	0	0
5	Carbon monoxide poisoning	6	1	5	0

TOP TEN KNOWN PRIMARY CONTRIBUTING FACTORS OF ACCIDENTS

Accident Rank	Contributing Factor	Number of Accidents	Number of Deaths	Number of Injuries
1	Operator inattention	677	41	398
2	Operator inexperience	506	65	270
3	Improper lookout	454	18	339
4	Machinery failure	305	12	108
5	Excessive speed	298	23	281
6	Alcohol use	247	86	186
7	Force of wave/wake	241	16	186
8	Navigation rules violation	204	18	156
9	Hazardous waters	200	68	85
10	Weather	178	30	64

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 2017-2021 to address the following initiatives: 1) Improve and expand recreational boating education, training, and outreach; 2) Update, leverage, and enforce policies, regulations, and standards; and 3) Improve upon and expand recreational boating data collection and research. To view the Strategic Plan of the Program, please visit the Division's website at http://www.uscgboating.org/content/strategic-plan.php.

The Coast Guard will release a new Strategic Plan of the National Recreational Boating Safety Program for 2022-2026, which will be posted 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 2021. 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
AT	13	2	11	8	$2,973,995.00	13 accidents offshore in the Atlantic Ocean
AZ	2	2	0	0	$0.00	
FL	12	4	4	3	$88,200.00	
GA	4	5	0	1	$0.00	3 accidents on private waters
GM	3	0	7	1	$158,200.00	3 accidents offshore in the Gulf of Mexico
KY	1	3	4	0	$5,000.00	1 accident the Coast Guard investigated
LA	1	1	0	0	$0.00	1 accident on private waters
MP	1	1	0	0	$0.00	
NC	2	1	0	1	$20,000.00	1 accident on private waters
OK	1	0	3	0	$0.00	
PC	6	2	5	4	$2,683,652.00	6 accidents offshore in the Pacific Ocean
SC	1	2	4	1	$46,995.00	
TN	2	2	0	0	$0.00	
TX	2	3	0	0	$0.00	2 accidents on private waters
UT	2	2	1	0	$0.00	1 accident on private waters
VA	1	0	0	0	$2,000.00	
VI	3	1	3	1	$305,000.00	
WA	1	0	3	0	$0.00	
Nation	**58**	**31**	**45**	**20**	**$6,283,042.00**	

Major Changes to the Publication
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.

Table 10 has been 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.

Table 4a has been added to provide detail related to Figure 2. Figures 9a and 9b have been added to provide a graphical depiction of information in Tables 26 and 27. Figures 12 and 16 have been color-coded.

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

Table 37 has been 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.

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).

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.
- Electrocution 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 and their associated casualty counts can be found in Table 3.

Table 3 ▪ NON-REPORTABLE SCENARIOS WITH THEIR CASUALTY COUNT					
Does not meet Coast Guard policy	Accidents	Deaths	Injuries	Vessels Losses	Damages
A person dies or is injured from natural causes while aboard a vessel where the vessel did not contribute to the casualty.	6	6	0	0	$5,000.00
A person dies, is injured, or is missing as a result of assault by another person or persons while aboard a vessel.	2	1	0	1	$10,500.00
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.	11	7	4	0	$0.00
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.	2	2	0	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.	5	5	0	0	$0.00
Casualties or damage that occur during accidents that only involve watercraft that have not been deemed a vessel.	7	10	0	1	$138,500.00
Casualties or damage that occur when the only vessel(s) involved are being used solely for governmental, commercial or criminal activity.	58	9	29	3	$6,877,402.00
Casualties or damage that occur when the only vessel(s) involved are foreign vessels and thus not subject to U.S. federal reporting requirements.	0	0	0	0	$0
Casualties or damage that occur when the only vessel(s) involved are not required to be numbered and are being used exclusively for racing.	4	1	2	1	$306,800.00
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).	0	0	0	0	$0
Casualties that result from falls from or on docked vessels or vessels that are moored to a permanent structure.	3	2	1	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.	4	1	0	3	$536,000.00
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.	13	2	3	3	$60,300.00
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.	10	0	0	6	$157,500.00
Property damage occurs to a docked or moored vessel due to theft or vandalism.	0	0	0	0	$0
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.	14	0	0	2	$186,750.00
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.	1	0	0	0	$20,000.00
Does not meet federal reporting requirements	368	0	53	0	$287,616.34
Total	509	46	92	20	$8,588,868.34

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: boat days, boat hours, person boat days and person boat hours. Risk ratios were calculated in the NRBSS 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

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.

There has been discussion about adjusting numbers to account for non-reporting, but results have not been published yet. The Coast Guard is studying alternate data sources including insurance claims to better gauge the gap between reported and unreported accidents.

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 2021 accident data submitted by states as of 31 March 2022 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 Texas, the Coast Guard attributes the accident to Texas.

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 eighteen 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. The category in which accidents are more frequently fatal span the hours between 8:31 am and 10:30 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 2017-2021 (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 2:31 pm to 4:30 pm in July on the weekends. However, you could deduce that 2:31 pm to 4:30 pm was the time frame during which the highest number of accidents occurred in calendar year 2021. 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.

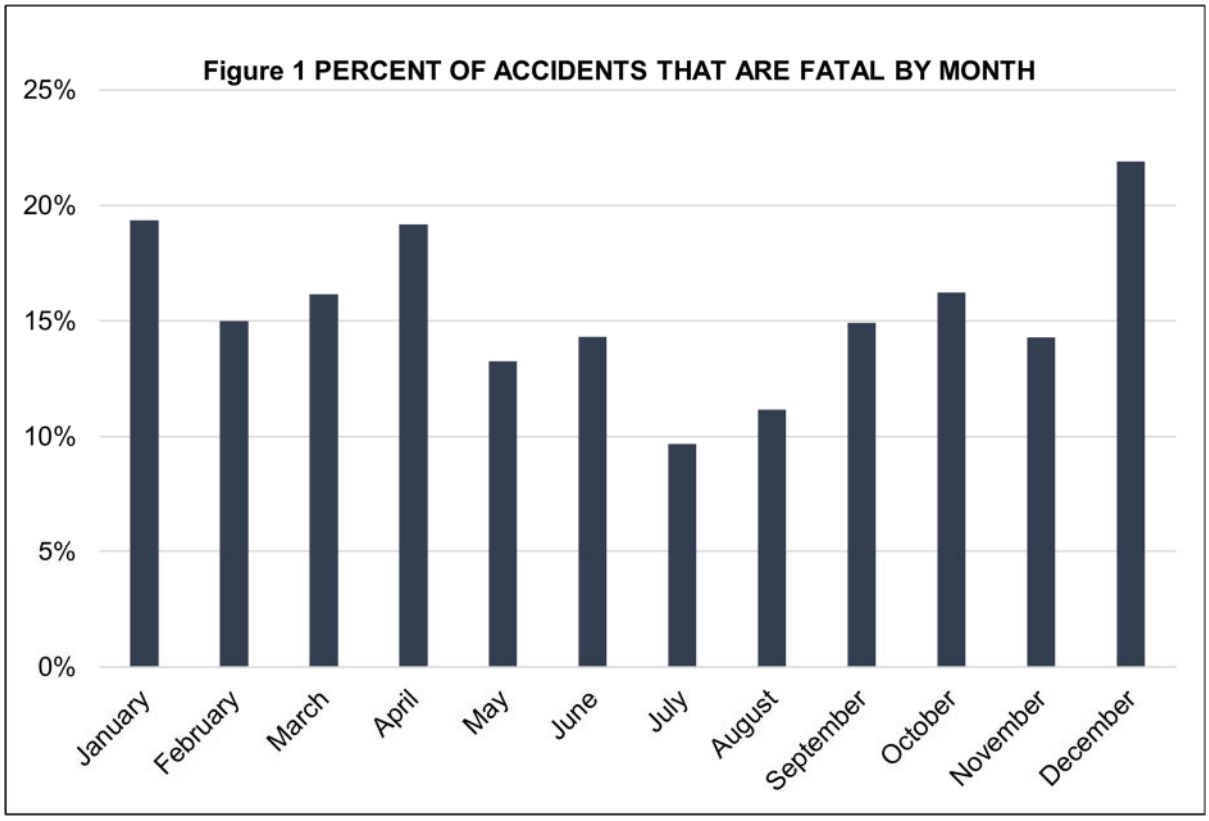


Table 4 ▪ PERCENT OF ACCIDENTS THAT ARE FATAL BY MONTH					
Month	Fatal Accidents	Non-Fatal Accidents	Total Accidents	Accidents Resulting in Deaths	Total Deaths
January	24	100	124	19%	25
February	15	85	100	15%	16
March	32	166	198	16%	36
April	51	215	266	19%	55
May	79	517	596	13%	89
June	107	641	748	14%	119
July	92	858	950	10%	100
August	73	581	654	11%	76
September	60	342	402	15%	66
October	31	160	191	16%	33
November	15	90	105	14%	18
December	23	82	105	22%	25
Total	**602**	**3837**	**4439**	**14%**	**658**

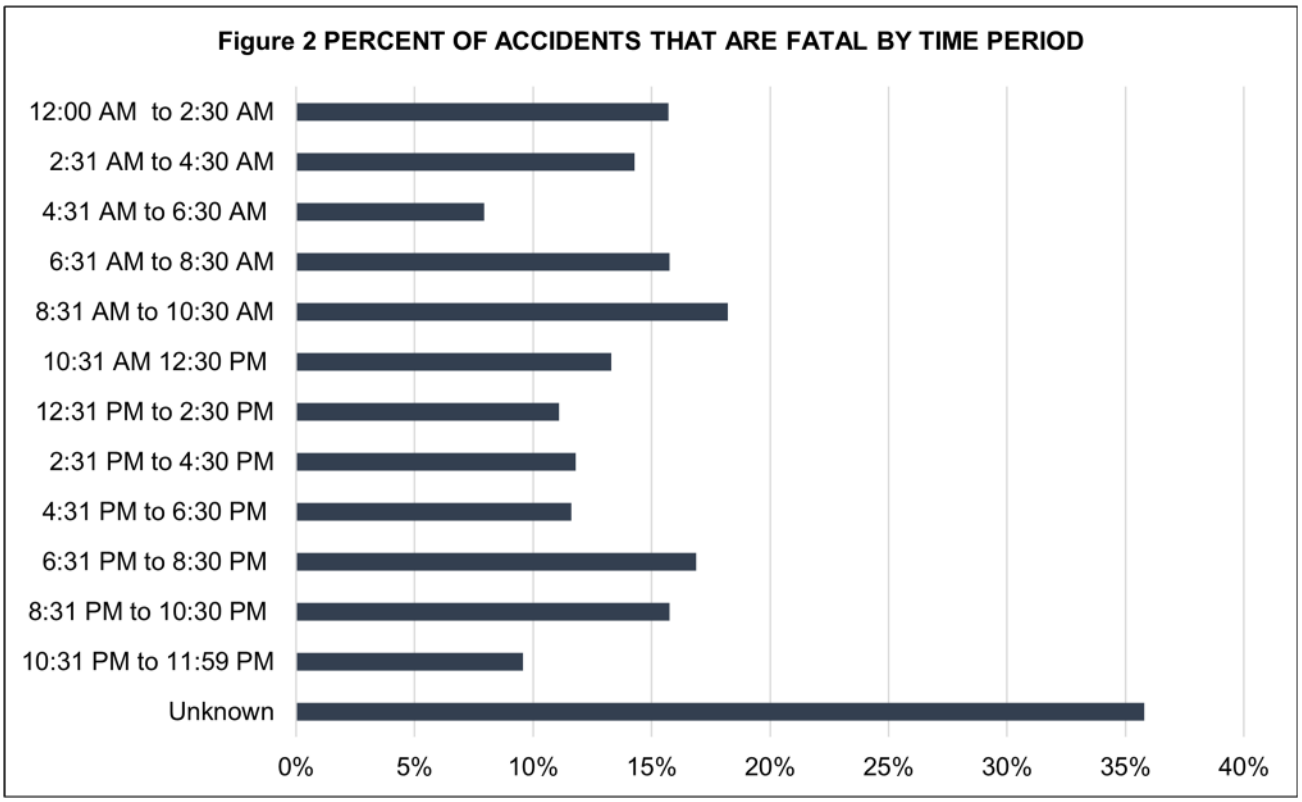


Table 4a ▪ PERCENT OF ACCIDENTS THAT ARE FATAL BY TIME PERIOD

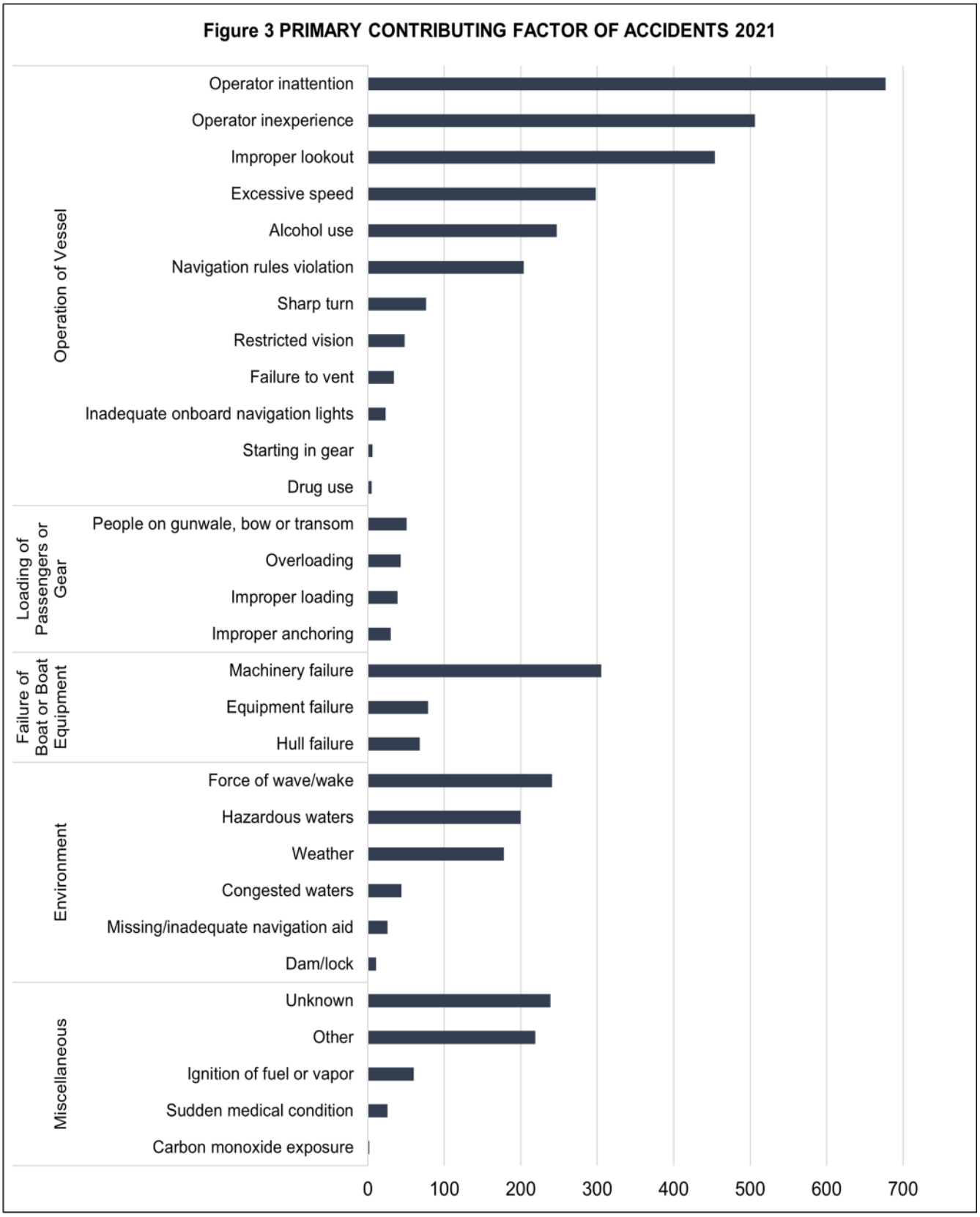
Time period	Fatal Accidents	Non-Fatal Accidents	Total Accidents	Accidents Resulting in Deaths	Total Deaths
12:00 AM to 2:30 AM	19	102	121	16%	25
2:31 AM to 4:30 AM	6	36	42	14%	6
4:31 AM to 6:30 AM	5	58	63	8%	7
6:31 AM to 8:30 AM	20	107	127	16%	22
8:31 AM to 10:30 AM	41	184	225	18%	44
10:31 AM 12:30 PM	63	411	474	13%	67
12:31 PM to 2:30 PM	80	641	721	11%	85
2:31 PM to 4:30 PM	107	799	906	12%	112
4:31 PM to 6:30 PM	98	746	844	12%	106
6:31 PM to 8:30 PM	82	404	486	17%	90
8:31 PM to 10:30 PM	38	203	241	16%	42
10:31 PM to 11:59 PM	9	85	94	10%	10
Unknown	34	61	95	36%	42
All time periods	**602**	**3837**	**4439**	**14%**	**658**

Table 5 ▪ PRIMARY CONTRIBUTING FACTOR OF ACCIDENTS & CASUALTIES 2021				
		Accidents	Deaths	Injuries
Operation of Vessel **2578 Accidents** **266 Deaths** **1802 Injuries**	Alcohol use	247	86	186
	Drug use	5	4	0
	Excessive speed	298	23	281
	Failure to vent	34	1	44
	Improper lookout	454	18	339
	Inadequate onboard navigation lights	23	2	21
	Navigation rules violation	204	18	156
	Operator inattention	677	41	398
	Operator inexperience	506	65	270
	Restricted vision	48	2	29
	Sharp turn	76	5	73
	Starting in gear	6	1	5
Loading of Passengers or Gear **163 Accidents** **55 Deaths** **78 Injuries**	Improper anchoring	30	1	10
	Improper loading	39	21	22
	Overloading	43	12	13
	People on gunwale, bow or transom	51	21	33
Failure of Boat or Boat Equipment **452 Accidents** **21 Deaths** **134 Injuries**	Equipment failure	79	5	20
	Hull failure	68	4	6
	Machinery failure	305	12	108
Environment **700 Accidents** **124 Deaths** **368 Injuries**	Congested waters	44	0	17
	Dam/lock	11	7	3
	Force of wave/wake	241	16	186
	Hazardous waters	200	68	85
	Missing/inadequate navigation aid	26	3	13
	Weather	178	30	64
Miscellaneous **546 Accidents** **192 Deaths** **259 Injuries**	Carbon monoxide exposure	2	1	5
	Ignition of fuel or vapor	60	0	43
	Sudden medical condition	26	14	13
	Other	219	49	149
	Unknown	239	128	49
All categories combined		**4439**	**658**	**2641**

Table 6 ▪ MACHINERY & EQUIPMENT PRIMARY CONTRIBUTING FACTOR OF ACCIDENTS & CASUALTIES 2021

		Accidents	Deaths	Injuries
Machinery Failure	Electrical system failure	48	0	1
	Engine failure	145	5	53
	Exhaust system failure	1	0	0
	Fuel system failure	18	0	22
	Shift failure	20	0	6
	Steering system failure	36	5	13
	Throttle failure	21	1	10
	Ventilation system failure	4	0	1
	Not specified	12	1	2
Equipment Failure	Auxiliary equipment failure	57	1	16
	Onboard navigation aid	0	0	0
	Sail dismasting	4	1	0
	Seat broke loose	4	3	1
	Other	7	0	3
	Not specified	7	0	0

Figure 3 PRIMARY CONTRIBUTING FACTOR OF ACCIDENTS 2021



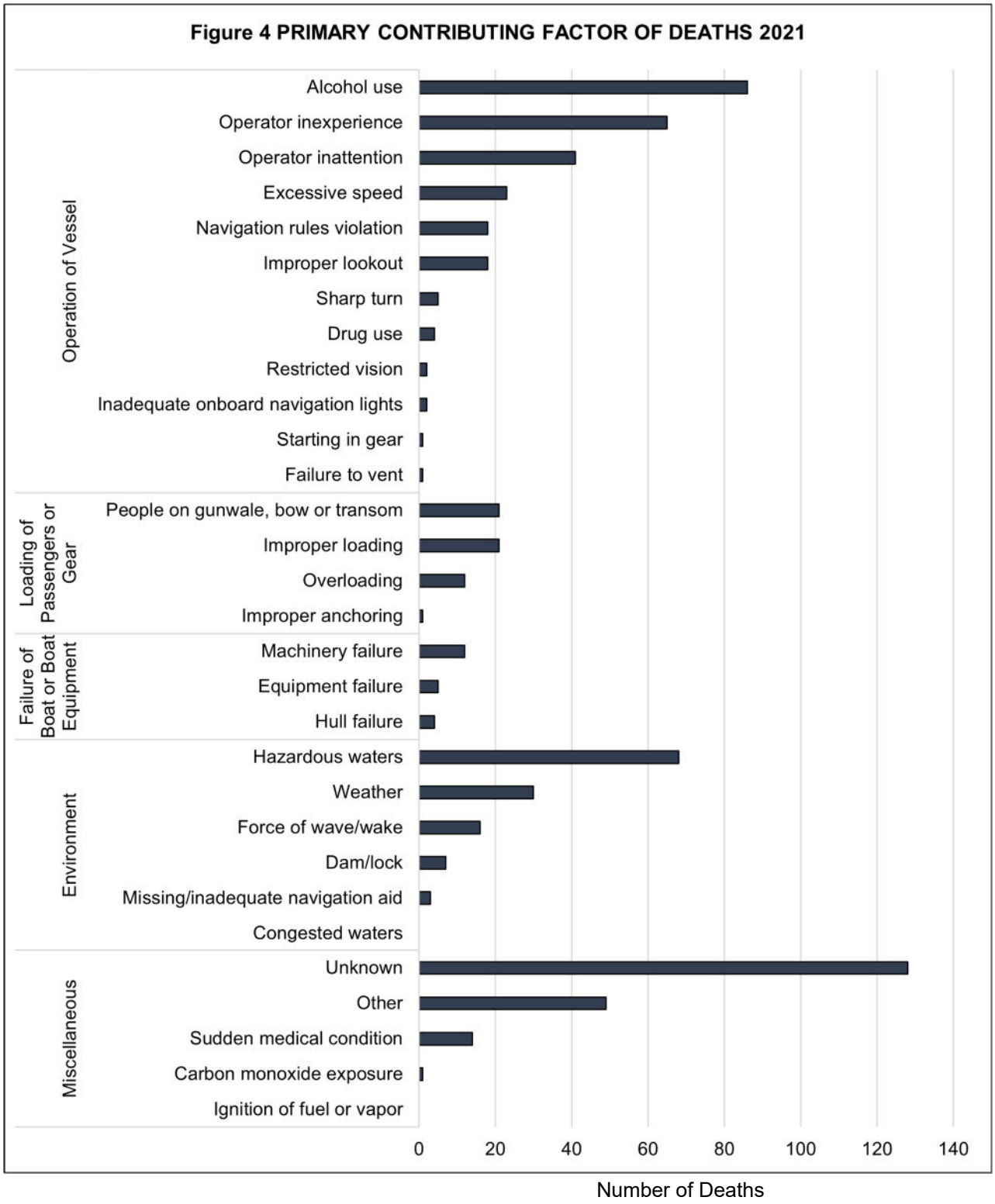


Figure 4 PRIMARY CONTRIBUTING FACTOR OF DEATHS 2021
Operation of Vessel
Alcohol use
Operator inexperience
Operator inattention
Excessive speed
Navigation rules violation
Improper lookout
Sharp turn
Drug use
Restricted vision
Inadequate onboard navigation lights
Starting in gear
Failure to vent
Loading of Passengers or Gear
People on gunwale, bow or transom
Improper loading
Overloading
Improper anchoring
Failure of Boat or Boat Equipment
Machinery failure
Equipment failure
Hull failure
Environment
Hazardous waters
Weather
Force of wave/wake
Dam/lock
Missing/inadequate navigation aid
Congested waters
Miscellaneous
Unknown
Other
Sudden medical condition
Carbon monoxide exposure
Ignition of fuel or vapor
0
20
40
60
80
100
120
140
Number of Deaths

Figure 5 PRIMARY CONTRIBUTING FACTOR OF INJURIES 2021

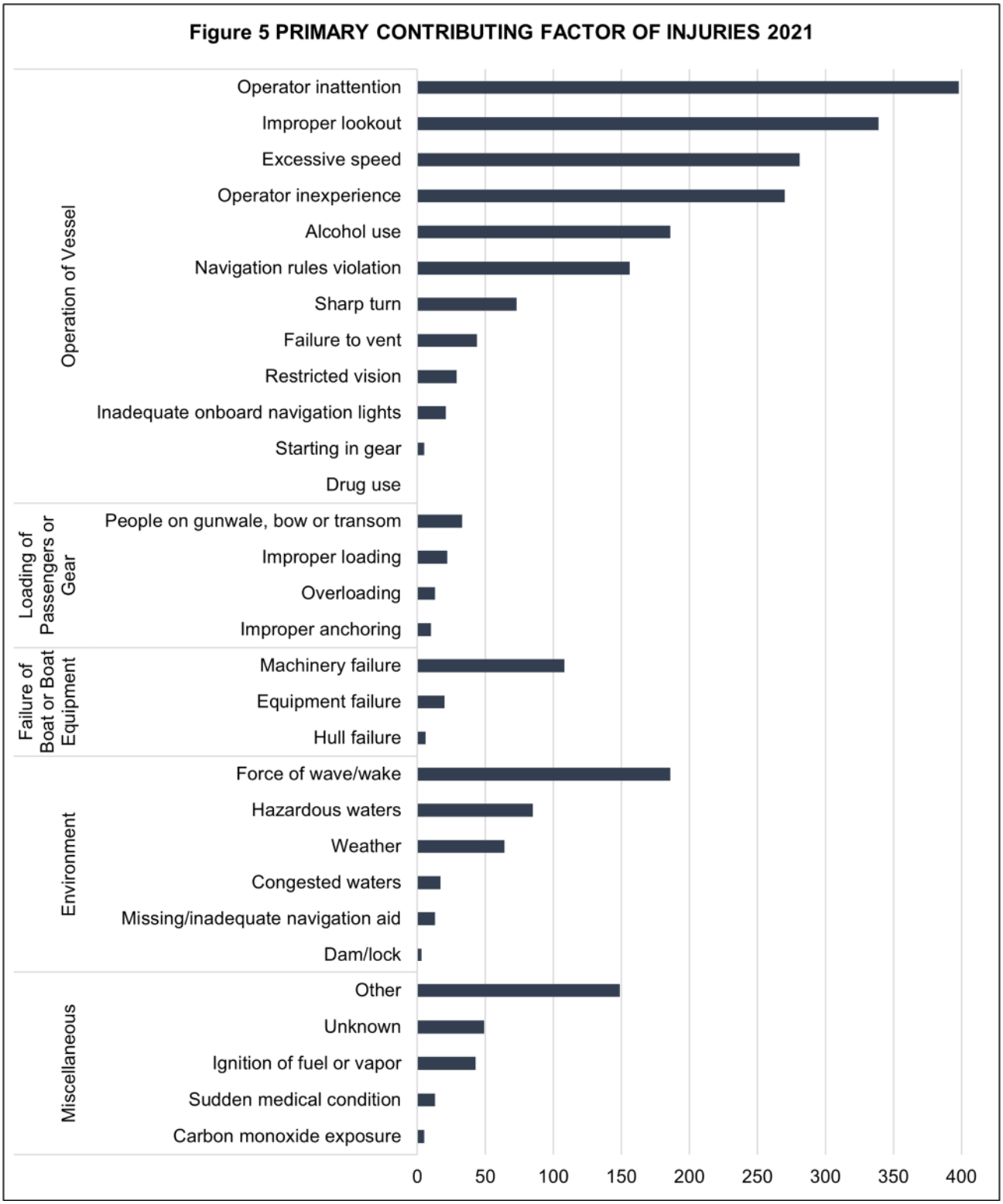


Table 7 - NUMBER OF VESSELS IN ACCIDENTS BY VESSEL TYPE & PRIMARY CONTRIBUTING FACTOR 2021

	All contributing factors	Alcohol use	Carbon monoxide exposure	Congested waters	Dam/lock	Drug use	Equipment failure	Excessive speed	Failure to vent	Force of wave/wake	Hazardous waters	Hull failure	Ignition of fuel or vapor	Improper anchoring	Improper loading	Improper lookout	Inadequate onboard navigation lights	Machinery failure	Missing/inadequate navigation aid	Navigation rules violation	Operator inattention	Operator inexperience	Overloading	People on gunwale, bow or transom	Restricted vision	Sharp turn	Starting in gear	Sudden medical condition	Weather	Other	Unknown
All vessels	6104	319	2	74	11	5	87	453	35	280	217	69	74	45	41	715	45	389	27	368	999	764	45	52	83	97	7	27	239	222	313
Airboat	38	1	0	1	0	0	0	4	0	0	2	0	0	0	0	4	0	0	0	5	11	1	0	0	4	3	0	0	1	1	0
Auxiliary sailboat	276	6	0	3	0	0	6	8	2	7	5	2	4	13	1	34	0	25	0	17	45	36	0	1	5	1	0	0	26	4	25
Cabin motorboat	761	30	1	13	0	1	17	41	14	23	17	9	23	5	1	77	2	105	3	26	135	91	2	4	10	1	0	0	50	14	45
Canoe	62	3	0	0	1	0	0	0	0	2	9	0	0	2	3	1	0	0	0	2	5	6	4	1	0	0	0	0	7	4	12
Houseboat	85	5	0	6	0	0	5	4	1	2	0	1	1	1	0	6	0	10	0	6	1	3	0	0	1	0	0	0	2	2	28
Inflatable	20	0	0	0	0	0	0	0	0	1	7	1	2	0	0	2	0	0	0	0	3	3	0	0	0	0	0	0	0	0	1
Kayak	176	13	0	1	2	1	0	1	0	4	42	0	0	2	2	3	0	0	0	1	12	38	2	0	0	2	0	3	12	3	32
Open motorboat	2806	168	1	34	7	2	47	202	15	159	92	43	36	15	26	367	35	202	20	130	469	221	32	34	45	43	2	17	111	139	92
Personal watercraft	1148	34	0	8	0	1	5	153	3	55	17	6	4	0	4	145	2	18	1	125	199	276	1	0	7	41	5	3	3	9	23
Pontoon	528	48	0	7	0	0	2	33	0	15	12	6	2	4	0	63	6	25	3	34	97	73	2	12	7	5	0	1	12	42	17
Rowboat	29	4	0	0	0	0	2	0	0	0	4	0	0	1	3	2	0	1	0	0	0	1	2	0	1	0	0	2	1	1	4
Sail (only)	46	1	0	0	1	0	3	2	0	1	4	1	0	1	0	5	0	1	0	4	6	4	0	0	0	0	0	0	9	0	3
Sail (unknown)	1	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	1
Standup paddleboard	25	4	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	2	7	0	0	0	0	0	0	2	1	5
Other	26	1	0	1	0	0	0	2	0	0	1	0	0	0	0	1	0	2	0	2	11	1	0	0	0	0	0	0	3	0	1
Unknown	77	1	0	0	0	0	0	3	0	11	2	0	2	1	1	4	0	0	0	16	3	3	0	0	3	1	0	0	0	2	24

Table 8 ▪ ALCOHOL USE AS A CONTRIBUTING FACTOR IN ACCIDENTS & CASUALTIES BY STATE 2017-2021

	Accidents					Deaths					Injuries				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
USA	323	309	330	353	330	118	119	128	130	110	255	275	279	315	280
AK	1	7	1	5	2	1	10	1	6	2	0	5	0	0	0
AL	8	9	12	11	7	2	7	8	2	1	10	7	12	4	6
AR	4	1	3	4	8	1	0	1	2	6	7	1	0	2	0
AZ	2	9	8	7	7	2	4	0	0	0	0	17	6	5	7
CA	14	11	16	21	18	4	5	6	10	3	17	13	18	24	15
CO	5	2	1	4	5	1	1	0	3	4	3	1	1	2	1
CT	4	2	6	0	1	5	0	1	0	1	1	2	1	0	0
DE	3	1	0	1	0	1	0	0	0	0	2	0	0	1	0
DC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FL	39	29	40	36	39	14	6	18	13	13	35	20	26	27	17
GA	11	8	7	11	9	2	2	3	0	4	9	8	2	27	16
HI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IA	4	6	4	8	5	1	2	1	2	0	3	6	6	4	2
ID	5	3	4	6	8	1	1	1	0	3	4	3	3	9	6
IL	7	7	9	6	6	3	4	8	4	4	1	2	6	2	1
IN	6	7	5	4	5	2	2	4	2	3	7	10	2	1	4
KS	4	1	2	0	1	0	0	1	0	0	5	4	3	0	1
KY	7	5	8	9	6	5	4	1	1	2	2	1	6	7	5
LA	11	12	8	10	16	3	3	3	2	8	11	11	8	21	20
MA	3	6	6	6	4	3	1	0	2	2	1	6	8	3	7
MD	16	10	14	17	13	3	5	9	3	1	17	5	10	21	14
ME	6	4	3	3	1	4	1	2	1	1	2	1	0	1	0
MI	9	8	17	14	10	4	3	5	4	3	3	4	13	12	4
MN	14	8	10	12	14	4	2	2	5	6	12	10	4	5	9
MO	13	19	14	13	10	1	3	4	2	2	8	33	18	20	9
MS	1	5	0	4	4	1	1	0	1	0	0	7	0	4	7
MT	1	4	1	1	2	0	4	1	0	2	0	4	0	1	0
NC	13	18	11	22	11	1	4	4	10	1	13	18	9	18	7
ND	4	1	0	2	2	3	1	0	0	0	1	1	0	3	3
NE	3	2	3	1	3	1	0	0	0	0	2	0	3	2	3
NH	3	3	1	1	2	0	1	0	0	2	1	0	1	1	0
NJ	1	4	2	1	5	0	0	2	0	1	1	2	0	0	15
NM	0	2	0	2	3	0	1	0	1	1	0	1	0	1	0
NV	2	3	1	1	1	1	1	0	1	0	1	4	0	0	1
NY	12	15	11	9	13	1	3	2	3	4	16	13	17	7	17
OH	10	6	11	12	12	4	2	2	9	4	8	3	11	9	9
OK	5	7	4	4	2	3	3	2	2	1	6	7	2	3	1
OR	1	4	5	4	3	1	2	4	2	1	0	7	3	1	2
PA	5	1	3	3	3	3	1	1	2	2	4	0	4	0	0
RI	2	0	0	2	2	2	0	0	0	0	1	0	0	3	4
SC	12	4	9	6	14	2	1	2	3	3	8	3	9	4	15
SD	0	4	1	1	0	0	1	0	1	0	0	3	4	0	0
TN	9	8	9	7	12	2	3	1	6	6	3	6	7	8	10
TX	10	12	27	29	18	7	6	11	8	7	5	6	33	35	21
UT	1	4	5	6	0	0	3	2	5	0	1	3	6	1	0
VA	3	6	6	7	1	2	2	4	4	0	0	1	1	4	1
VT	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
WA	9	8	17	6	8	5	5	9	3	2	3	4	14	6	5
WI	16	10	4	12	14	9	6	1	4	4	20	10	2	6	15
WV	2	2	1	2	0	1	2	1	1	0	1	1	0	0	0
WY	1	1	0	0	0	1	0	0	0	0	0	1	0	0	0
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

Table 9 ▪ VESSEL OPERATION AT THE TIME OF ACCIDENT 2021			
	Vessels Involved	**Deaths**	**Injuries**
Totals	**6104**	**658**	**2641**
At anchor	203	11	50
Being towed	43	0	8
Changing direction	624	49	388
Changing speed	452	25	225
Cruising	2401	161	1335
Docking/undocking	348	11	70
Drifting	634	196	273
Idling	57	6	27
Launching/loading	58	3	20
Rowing/paddling	218	131	77
Sailing	73	4	22
Tied to dock/moored	759	5	70
Towing	34	0	8
Trolling	42	12	20
Other	20	1	3
Unknown	138	43	45

Table 10 ▪ VESSEL ACTIVITY AT THE TIME OF ACCIDENT 2021									
		Deaths				**Injuries**			
	Vessels Involved	**Total**	**Operator**	**Occupant**	**Other/ unknown role**	**Total**	**Operator**	**Occupant**	**Other/ unknown role**
Totals	**6104**	**658**	**389**	**205**	**64**	**2641**	**1006**	**1275**	**360**
Boating/relaxation	3813	353	219	115	19	1829	799	979	51
Commercial	45	1	0	1	0	5	0	5	0
Fishing	662	173	105	63	5	269	121	148	0
Fueling	31	0	0	0	0	19	4	15	0
Government	15	0	0	0	0	2	0	2	0
Hunting	31	7	5	2	0	14	10	4	0
Racing	30	1	1	0	0	8	4	4	0
Repairs	52	7	7	0	0	21	8	13	0
Starting engine	66	1	1	0	0	58	20	29	9
Swimming/snorkeling	115	59	19	16	24	45	3	19	23
Towed watersports	342	18	3	0	15	301	9	20	272
Towing	35	1	0	1	0	3	2	1	0
Whitewater	41	19	17	2	0	20	11	9	0
Other	30	8	5	3	0	13	4	8	1
None; not in operation	646	0	0	0	0	2	0	1	1
Unknown	150	10	7	2	1	32	11	18	3

Table 11 ▪ WEATHER AND WATER CONDITIONS 2021				
		Accidents	**Deaths**	**Injuries**
		4439	**658**	**2641**
TYPE OF BODY OF WATER	Lakes, Ponds, Reservoirs, Dams, Gravel Pits	2042	357	1299
	Rivers, Streams, Creeks, Swamps, Bayous	958	165	530
	Bays, Inlets, Marinas, Sounds, Harbors, Channels, Canals, Sloughs, Coves	1045	83	590
	Ocean/Gulf	285	37	165
	Great Lakes (not tributaries)	109	16	57
WATER CONDITIONS	Calm (waves less than 6")	2659	328	1638
	Choppy (waves >6" to 2')	1180	167	716
	Rough (waves >2' to 6')	342	55	166
	Very Rough (waves larger than 6')	58	21	34
	Unknown	200	87	87
WIND	None	372	46	258
	Light (0 - 6 mph)	2628	361	1714
	Moderate (7 - 14 mph)	992	145	482
	Strong (15 - 25 mph)	264	41	111
	Storm (over 25 mph)	41	9	20
	Unknown	142	56	56
VISIBILITY	Poor - Day	45	9	25
	Poor - Night	132	26	116
	Poor - Unknown if day or night	1	1	0
	Fair - Day	193	34	87
	Fair - Night	125	12	73
	Fair– Unknown if day or night	3	3	0
	Good - Day	3215	419	1894
	Good - Night	471	82	290
	Good- Unknown if day or night	10	0	5
	Unknown - Day	165	37	99
	Unknown - Night	48	18	27
	Unknown - Unknown if day or night	31	17	25
WATER TEMPERATURE	39 degrees F and below	31	14	15
	40 - 49 degrees F	122	55	64
	50 - 59 degrees F	361	76	187
	60 - 69 degrees F	772	118	451
	70 - 79 degrees F	1457	167	895
	80 - 89 degrees F	988	123	640
	90 degrees F and above	20	2	16
	Unknown	688	103	373

Table 12 ▪ TIME RELATED DATA 2021				
		Accidents	**Deaths**	**Injuries**
		4439	**658**	**2641**
Time of Day	12:00 AM to 2:30 AM	121	25	61
	2:31 AM to 4:30 AM	42	6	25
	4:31 AM to 6:30 AM	63	7	44
	6:31 AM to 8:30 AM	127	22	56
	8:31 AM to 10:30 AM	225	44	112
	10:31 AM 12:30 PM	474	67	252
	12:31 PM to 2:30 PM	721	85	411
	2:31 PM to 4:30 PM	906	112	551
	4:31 PM to 6:30 PM	844	106	499
	6:31 PM to 8:30 PM	486	90	289
	8:31 PM to 10:30 PM	241	42	190
	10:31 PM to 11:59 PM	94	10	91
	Unknown	95	42	60
Month of Year	January	124	25	81
	February	100	16	39
	March	198	36	94
	April	266	55	144
	May	596	89	338
	June	748	119	442
	July	950	100	644
	August	654	76	425
	September	402	66	214
	October	191	33	105
	November	105	18	51
	December	105	25	64
Day of Week	Sunday	1063	137	609
	Monday	462	74	250
	Tuesday	318	52	152
	Wednesday	354	51	187
	Thursday	377	72	198
	Friday	526	89	340
	Saturday	1339	183	905

Table 13 ▪ VESSEL INFORMATION 2021				
		Vessels Involved	**Deaths**	**Injuries**
		6104	**658**	**2641**
Hull Material	Aluminum	1139	203	448
	Fiberglass	4414	283	1993
	Plastic	238	104	103
	Rubber/Vinyl/Canvas	58	24	32
	Steel	47	2	9
	Wood	59	6	16
	Other	3	3	3
	Unknown	146	33	37
Horsepower	No Engine	364	195	126
	10 hp or less	113	19	52
	11 - 25 hp	137	32	46
	26 - 75 hp	444	53	193
	76 - 150 hp	1227	109	570
	151 - 250 hp	896	72	444
	Over 250 hp	1189	55	510
	Unknown	1734	123	700
Year Built	2021	559	38	254
	2020	347	21	174
	2018 - 2019	526	38	244
	2016 - 2017	329	35	127
	2014 - 2015	265	23	123
	2008 - 2013	547	52	276
	Prior to 2008	2927	276	1272
	Unknown	604	175	171
Length	Less than 16 feet	1646	265	889
	16 feet to <26 feet	2799	273	1321
	26 feet to <40 feet	884	38	286
	40 feet to 65 feet	410	20	67
	More than 65 feet	89	1	2
	Unknown	276	61	76

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
All Vessels	**6104**	**816**	**4292**	**996**	**658**	**93**	**434**	**131**	**2641**	**388**	**1916**	**337**
Airboat	38	0	35	3	0	0	0	0	38	0	32	6
Auxiliary sailboat	276	5	222	49	12	0	11	1	38	1	24	13
Cabin motorboat	761	9	665	87	35	0	32	3	182	5	160	17
Canoe	62	11	34	17	46	6	25	15	20	5	10	5
Houseboat	85	14	29	42	4	3	1	0	8	5	1	2
Inflatable	20	4	11	5	7	1	4	2	12	4	6	2
Kayak	176	16	121	39	96	10	62	24	60	5	43	12
Open motorboat	2806	160	2207	439	287	17	212	58	1378	51	1153	174
Personal watercraft	1148	425	582	141	55	19	30	6	670	242	361	67
Pontoon	528	159	289	80	64	32	25	7	181	65	92	24
Rowboat	29	3	22	4	23	2	18	3	11	2	9	0
Sailboat (only)	46	5	34	7	4	0	3	1	16	1	13	2
Sailboat (unknown)	1	0	0	1	0	0	0	0	0	0	0	0
Standup paddleboard	25	5	15	5	18	3	10	5	5	2	3	0
Other	26	0	14	12	2	0	1	1	3	0	1	2
Unknown	77	0	12	65	5	0	0	5	19	0	8	11

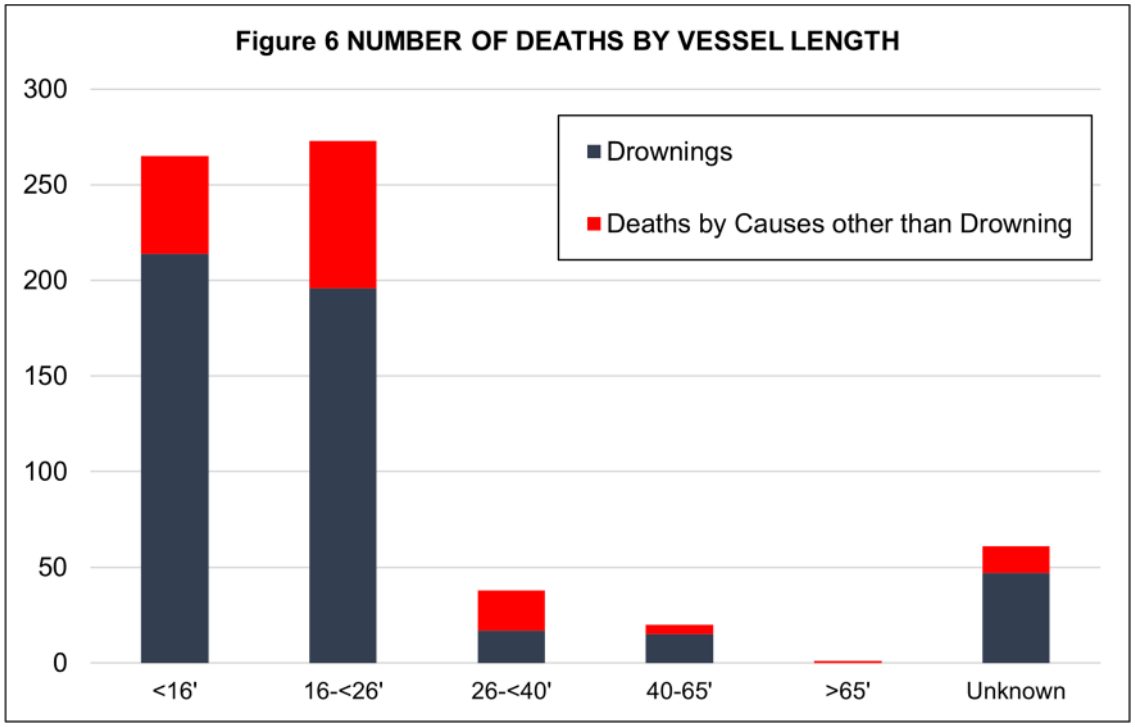


Table 15 ▪ NUMBER & PERCENT OF DEATHS BY VESSEL LENGTH				
Length	Drownings	Deaths by Causes other than Drowning	Total Deaths	Percent of Deaths from Drowning
<16'	214	51	265	81%
16-<26'	196	77	273	72%
26-<40'	17	21	38	45%
40-65'	15	5	20	75%
>65'	0	1	1	0%
Unknown	47	14	61	77%
Total	489	169	658	74%

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 461 accidents where flooding/swamping was the first event in the boating accident. There were 55 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 222 accidents and 10 deaths associated with flooding/swamping as a second event and 84 accidents and 16 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 767 accidents and 81 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 2021

	Accidents	Vessels Involved	Drowning Deaths	Other Deaths	Total Deaths	Total Injuries	Damages
All Accident Types	**4439**	**6104**	**489**	**169**	**658**	**2641**	**$67,506,110.39**
Capsizing	264	285	133	13	146	110	$1,274,433.00
Carbon monoxide poisoning	8	8	0	6	6	13	$15,000.00
Collision with fixed object	508	588	19	24	43	408	$7,491,686.40
Collision with floating object	49	54	4	3	7	23	$803,300.00
Collision with commercial vessel	18	37	3	6	9	21	$160,545.00
Collision with governmental vessel	10	25	0	0	0	3	$157,001.00
Collision with recreational vessel	1226	2549	5	26	31	740	$12,671,287.20
Collision with submerged object	209	210	10	1	11	79	$3,761,930.49
Departed vessel	158	171	86	11	97	72	$160,300.00
Ejected from vessel	189	219	29	15	44	157	$1,172,790.00
Electrocution	0	0	0	0	0	0	$0.00
Fall in vessel	149	163	4	2	6	148	$455,857.00
Falls overboard	273	287	137	33	170	98	$164,331.00
Fire/explosion (fuel)	138	157	0	1	1	116	$6,335,889.38
Fire/explosion (non-fuel)	93	118	0	4	4	18	$5,900,373.00
Fire/explosion (unknown origin)	38	76	0	2	2	4	$5,416,050.00
Flooding/swamping	461	484	47	8	55	100	$9,412,733.00
Grounding	308	312	5	7	12	179	$10,690,468.92
Person struck by propeller	45	46	0	1	1	44	$1,000.00
Person struck by vessel	30	39	2	0	2	32	$6,200.00
Sinking	0	0	0	0	0	0	$0.00
Skier mishap	213	219	5	5	10	235	$23,000.00
Sudden medical condition	3	3	0	0	0	3	$0.00
Other	49	54	0	1	1	38	$1,431,935.00

Table 17 ▪ FREQUENCY OF EVENTS IN ACCIDENTS & CASUALTIES NATIONWIDE							
2021	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	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
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
2020							
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

Table 17 Continued ▪ FREQUENCY OF EVENTS IN ACCIDENTS & CASUALTIES NATIONWIDE							
2020 continued	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
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
2019							
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

Table 17 Continued ▪ FREQUENCY OF EVENTS IN ACCIDENTS & CASUALTIES NATIONWIDE							
2019 continued	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	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
2018							
Capsizing	266	223	62	551	214	269	$4,245,361.27
Carbon monoxide poisoning	8	2	0	10	8	8	$0.00
Collision with fixed object	470	84	17	571	71	348	$8,793,679.73
Collision with floating object	59	5	0	64	11	26	$499,957.49
Collision with commercial vessel	25	0	1	26	1	18	$753,995.00
Collision with governmental vessel	6	3	0	9	1	4	$71,501.00
Collision with recreational vessel	1028	65	10	1103	45	689	$11,044,445.18
Collision with submerged object	151	1	0	152	10	45	$1,274,500.69
Departed vessel	119	69	20	208	86	100	$857,197.37
Ejected from vessel	197	585	276	1058	305	983	$7,858,064.03
Electrocution	0	0	0	0	0	0	$0.00
Fall in vessel	128	191	57	376	39	535	$4,205,491.69
Falls overboard	274	49	6	329	171	158	$455,847.70
Fire/explosion (fuel)	145	2	1	148	4	99	$3,906,954.54
Fire/explosion (non-fuel)	70	3	0	73	0	11	$6,235,940.37
Fire/explosion (unknown origin)	41	0	0	41	0	7	$3,291,006.75
Flooding/swamping	443	244	78	765	105	227	$13,031,049.80
Grounding	367	64	33	464	26	298	$6,901,793.84
Person struck by propeller	45	107	25	177	25	177	$80,388.70
Person struck by vessel	31	204	34	269	23	348	$837,487.82
Sinking	0	144	87	231	20	45	$6,343,604.00
Skier mishap	230	8	1	239	10	264	$2,600.00
Sudden medical condition	0	0	0	0	0	0	$0.00
Other	42	17	1	60	2	53	$498,108.00
Unknown	0	0	0	0	0	0	$0.00

Table 17 Continued ▪ FREQUENCY OF EVENTS IN ACCIDENTS & CASUALTIES NATIONWIDE							
2017	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	286	244	72	602	222	324	$5,472,159.63
Carbon monoxide poisoning	9	1	1	11	4	14	$100.00
Collision with fixed object	470	103	11	584	68	384	$7,133,312.41
Collision with floating object	55	5	0	60	5	29	$665,200.00
Collision with commercial vessel	19	2	2	23	2	15	$543,700.00
Collision with governmental vessel	6	0	0	6	0	5	$56,200.00
Collision with recreational vessel	1145	65	2	1212	52	753	$10,007,231.45
Collision with submerged object	141	1	0	142	3	47	$1,236,846.31
Departed vessel	93	56	14	163	66	82	$1,146,500.00
Ejected from vessel	173	610	348	1131	330	968	$7,569,723.77
Electrocution	1	2	0	3	5	0	$7,000.00
Fall in vessel	154	272	58	484	23	743	$5,109,056.87
Falls overboard	306	39	4	349	190	158	$135,458.00
Fire/explosion (fuel)	157	5	2	164	2	103	$5,532,049.00
Fire/explosion (non-fuel)	81	2	1	84	0	12	$6,793,581.68
Fire/explosion (unknown origin)	33	0	1	34	1	5	$2,758,227.00
Flooding/swamping	435	269	74	778	98	251	$17,383,750.97
Grounding	368	50	15	433	24	262	$5,773,401.27
Person struck by propeller	30	118	24	172	31	162	$170,980.00
Person struck by vessel	23	253	31	307	38	403	$1,087,437.00
Sinking	0	113	100	213	19	50	$10,377,829.59
Skier mishap	259	18	1	278	16	290	$14,134.00
Sudden medical condition	2	1	0	3	3	0	$0.00
Other	45	9	3	57	1	54	$392,437.00
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	Fall in vessel	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
All lengths	6104	285	8	588	54	37	25	2549	210	171	219	0	163	287	157	118	76	484	312	46	39	0	219	3	54	0	489	169	658	2641
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	2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5 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
6 feet	17	5	0	0	0	0	0	3	0	0	0	0	0	4	0	0	0	2	1	0	0	0	0	0	2	0	6	0	6	6
7 feet	15	4	0	1	0	0	0	5	0	1	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	3	0	3	6
8 feet	59	12	0	5	0	0	0	18	2	4	3	0	3	5	1	0	0	4	2	0	0	0	0	0	0	0	13	0	13	30
9 feet	107	10	0	7	1	0	0	52	4	1	12	0	1	6	3	2	1	5	0	0	1	0	0	1	0	0	14	4	18	59
10 feet	503	49	0	33	1	3	1	264	4	6	42	0	10	39	10	3	2	11	10	1	8	0	5	0	1	0	55	12	67	285
11 feet	505	11	0	35	3	1	1	298	5	2	48	0	24	30	1	0	0	17	13	1	4	0	9	0	2	0	18	17	35	285
12 feet	168	30	0	18	1	0	0	53	7	2	10	0	4	17	0	0	0	22	1	0	0	0	3	0	0	0	44	5	49	74
13 feet	38	7	0	7	0	1	0	11	1	0	2	0	1	2	0	0	0	4	1	0	0	0	0	0	1	0	6	0	6	24
14 feet	129	20	0	9	1	1	0	21	8	2	10	0	6	17	2	2	0	25	2	0	1	0	1	0	1	0	37	9	46	59
15 feet	103	12	0	16	2	0	0	22	10	1	2	0	2	9	0	1	0	23	2	0	1	0	0	0	0	0	17	4	21	60
Under 16 ft	1646	161	0	131	9	6	2	747	41	19	129	0	52	132	17	9	3	113	32	2	15	0	18	1	7	0	214	51	265	889
16 feet	186	19	0	18	2	0	1	49	10	10	6	0	4	8	0	1	2	39	7	3	1	0	4	1	1	0	30	10	40	97
17 feet	285	17	0	33	4	1	0	79	16	11	9	0	5	11	5	5	1	44	17	4	4	0	16	0	3	0	29	6	35	147
18 feet	309	6	0	27	4	4	3	106	17	8	4	0	7	14	13	4	2	45	23	1	0	0	19	0	2	0	25	15	40	152
19 feet	225	4	0	26	0	0	1	74	9	8	5	0	3	12	10	3	0	29	13	3	0	0	24	1	0	0	15	6	21	125
20 feet	400	4	1	35	3	3	1	158	20	15	4	0	10	15	7	5	6	44	22	2	2	0	39	0	4	0	23	11	34	181
21 feet	320	1	1	28	4	0	0	112	17	16	4	0	13	11	16	4	1	34	27	4	0	0	25	0	2	0	14	9	23	151
22 feet	340	3	0	48	4	2	0	133	11	19	4	0	5	13	8	6	0	23	20	8	2	0	29	0	2	0	26	4	30	149
23 feet	255	1	0	22	2	1	2	107	14	12	9	0	7	10	6	5	4	11	16	3	2	0	19	0	2	0	9	5	14	123
24 feet	306	2	0	25	4	2	0	128	12	18	8	0	10	15	14	4	2	17	22	1	2	0	16	0	4	0	18	7	25	135
25 feet	173	3	0	24	4	2	4	78	5	10	4	0	7	3	3	4	3	8	6	2	1	0	1	0	1	0	7	4	11	61
16 ft to less than 26 ft	2799	60	2	286	31	15	12	1024	131	127	57	0	71	112	82	41	21	294	173	31	14	0	192	2	21	0	196	77	273	1321
26 feet	127	2	0	14	0	0	0	58	5	4	1	0	1	2	3	5	1	6	14	4	1	0	2	0	4	0	2	6	8	56
27 feet	83	0	0	6	1	0	1	39	4	0	1	0	2	2	5	2	0	6	8	2	1	0	1	0	2	0	2	0	2	29
28 feet	100	1	0	14	2	0	1	32	1	1	5	0	7	1	5	5	3	12	6	1	0	0	3	0	0	0	1	2	3	33
29 feet	49	0	0	4	0	1	0	27	1	1	0	0	2	2	3	0	1	1	4	0	0	0	1	0	1	0	2	1	3	18
30 feet	73	2	0	4	0	0	1	30	3	3	1	0	2	2	8	4	1	4	5	0	2	0	1	0	0	0	2	1	3	31
31 feet	48	0	0	5	2	0	1	21	1	0	0	0	2	0	4	3	2	4	2	0	0	0	0	0	1	0	0	0	0	10
32 feet	72	1	1	8	1	1	1	34	2	1	1	0	4	2	3	2	3	1	6	0	0	0	0	0	0	0	2	0	2	24
33 feet	44	1	2	9	0	0	1	13	1	2	0	0	2	1	2	3	0	0	5	1	0	0	0	0	1	0	1	4	5	20
34 feet	57	0	0	2	0	1	2	35	1	1	1	0	1	1	2	2	0	1	7	0	0	0	0	0	0	0	1	1	2	13
35 feet	55	0	0	9	1	0	0	31	2	0	0	0	1	1	1	2	2	2	1	1	0	0	0	0	1	0	1	0	1	7
36 feet	60	0	0	8	1	0	1	31	0	2	0	0	1	2	1	2	0	5	3	0	0	0	0	0	3	0	0	3	3	7
37 feet	46	1	0	6	0	1	0	21	3	0	0	0	1	1	1	4	0	1	6	0	0	0	0	0	0	0	1	0	1	12
38 feet	45	0	0	10	0	1	0	20	1	0	1	0	0	0	3	2	1	4	2	0	0	0	0	0	0	0	2	3	5	18
39 feet	25	1	0	4	1	0	0	12	0	0	0	0	2	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	8
26 ft to less than 40 ft	884	9	3	103	9	5	9	404	25	15	11	0	28	17	41	37	14	51	69	9	4	0	8	0	13	0	17	21	38	286
40 ft to 65 ft	410	3	3	37	4	6	0	214	11	6	5	0	8	6	12	26	21	9	29	1	1	0	0	0	8	0	15	5	20	67
Over 65 ft	89	0	0	12	0	4	1	51	1	0	0	0	0	1	0	4	11	1	3	0	0	0	0	0	0	0	0	1	1	2
Unknown	276	52	0	19	1	1	1	109	1	4	17	0	4	19	5	1	6	16	6	3	5	0	1	0	5	0	47	14	61	76

Table 19 ▪ NUMBER OF VESSELS IN ACCIDENTS BY VESSEL TYPE & PRIMARY ACCIDENT TYPE WITH NUMBER OF CASUALTIES BY CASUALTY TYPE & VESSEL TYPE 2021

	All accident types	Capsizing	Carbon monoxide exposure	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	Fall in vessel	Falls overboard	Fire/explosion (fuel)	Fire/explosion (non-fuel)	Fire/explosion (unknown origin)	Flooding/swamping	Grounding	Person struck by propeller	Person struck by vessel	Sinking	Skier mishap	Sudden medical condition	Other	Unknown	Unknown	Drownings	Deaths by causes other than drowning	Total deaths	Injuries
	6104	**285**	**8**	**588**	**54**	**37**	**25**	**2549**	**210**	**171**	**219**	**0**	**163**	**287**	**157**	**118**	**76**	**484**	**312**	**46**	**39**	**0**	**219**	**3**	**54**	**0**	**489**	**169**	**658**	**2641**
All vessels	38	2	0	6	0	0	0	19	3	0	0	0	0	0	0	0	0	2	5	0	0	0	0	0	1	0	0	0	0	38
Airboat	276	5	1	23	3	3	0	158	4	2	0	0	7	8	5	11	2	12	24	0	1	0	0	0	7	0	10	2	12	38
Auxiliary sailboat	761	1	5	98	6	5	6	347	26	14	6	0	14	14	45	45	20	39	56	1	2	0	2	0	9	0	17	18	35	182
Cabin motorboat	62	37	0	5	0	0	0	1	1	3	0	0	0	7	0	0	0	6	1	0	0	0	0	0	1	0	39	7	46	20
Canoe	85	1	0	1	3	0	0	33	0	2	0	0	1	0	3	6	26	6	2	0	1	0	0	0	0	0	3	1	4	8
Houseboat	20	5	0	4	0	0	0	0	1	2	0	0	1	2	2	0	0	1	1	0	0	0	1	0	0	0	7	0	7	12
Inflatable	176	94	0	14	0	0	0	6	2	3	5	0	0	27	0	0	0	20	0	0	0	0	0	2	3	0	83	13	96	60
Kayak	2806	84	2	292	31	15	12	965	141	81	72	0	86	117	80	45	17	349	172	34	12	0	177	1	21	0	203	84	287	1378
Open motorboat	1148	24	0	80	6	4	2	696	16	5	122	0	44	47	13	5	3	18	25	2	16	0	16	0	4	0	29	26	55	670
Personal watercraft	528	3	0	52	3	2	1	257	15	52	10	0	9	33	5	5	4	15	23	7	5	0	22	0	5	0	55	9	64	181
Pontoon	29	8	0	0	1	0	0	4	0	1	1	0	0	8	0	0	0	6	0	0	0	0	0	0	0	0	21	2	23	11
Rowboat	46	9	0	2	0	0	3	21	1	2	0	0	0	3	0	0	0	2	2	0	1	0	0	0	0	0	2	2	4	16
Sailboat (only)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Sailboat (unknown)	25	3	0	2	0	0	0	0	0	1	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	15	3	18	5
Standup paddleboard	26	2	0	5	0	8	0	8	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1	2	3
Other	77	7	0	4	1	0	1	34	0	3	2	0	1	2	3	1	3	8	1	2	1	0	1	0	2	0	4	1	5	19
Unknown																														

Table 20 - NUMBER OF VESSELS IN ACCIDENTS BY PRIMARY ACCIDENT TYPE & PROPULSION TYPE

	All Types	Air Thrust	Manual	Propeller	Sail	Water Jet	Unknown
Injuries	**2641**	38	110	1714	16	741	22
Total deaths	**658**	1	191	391	4	65	6
Other deaths	**169**	1	25	113	2	27	1
Drownings	**489**	0	166	278	2	38	5
Unknown	**0**	0	0	0	0	0	0
Other	**54**	2	4	42	0	5	1
Sudden medical condition	**3**	0	2	1	0	0	0
Skier mishap	**219**	0	1	192	0	24	2
Sinking	**0**	0	0	0	0	0	0
Person struck by vessel	**39**	0	0	20	1	17	1
Person struck by propeller	**46**	0	0	43	0	3	0
Grounding	**312**	5	2	261	2	38	4
Flooding/swamping	**484**	2	33	407	2	29	11
Fire/explosion (unknown origin)	**76**	0	0	67	0	4	5
Fire/explosion (non-fuel)	**118**	0	0	111	0	5	2
Fire/explosion (fuel)	**157**	1	2	137	0	14	3
Falls overboard	**287**	0	63	171	3	48	2
Fall in vessel	**163**	0	1	113	0	46	3
Electrocution	**0**	0	0	0	0	0	0
Ejected from vessel	**219**	0	6	85	0	127	1
Departed vessel	**171**	0	10	147	2	10	2
Collision with submerged object	**210**	3	4	177	1	25	0
Collision with recreational vessel	**2549**	20	12	1718	21	739	39
Collision with governmental vessel	**25**	0	0	18	3	4	0
Collision with commercial vessel	**37**	0	2	30	0	4	1
Collision with floating object	**54**	0	1	44	0	8	1
Collision with fixed object	**588**	6	27	449	2	98	6
Carbon monoxide	**8**	0	0	7	0	1	0
Capsizing	**285**	3	148	89	9	27	9
Total vessels involved	**6104**	42	318	4329	46	1276	93

Table 21 - NUMBER OF VESSELS WITH PROPELLERS BY PRIMARY ACCIDENT TYPE & ENGINE TYPE

Engine Type	Inboard	Outboard	Pod drive	Sterndrive	Unknown
Injuries	400	1064	0	234	16
Total deaths	51	307	0	30	3
Other deaths	22	78	0	11	2
Drownings	29	229	0	19	1
Unknown	0	0	0	0	0
Other	18	19	0	3	2
Sudden medical condition	0	1	0	0	0
Skier mishap	78	66	0	47	1
Sinking	0	0	0	0	0
Person struck by vessel	1	15	0	4	0
Person struck by propeller	9	20	0	12	2
Grounding	90	120	0	42	9
Flooding/swamping	63	302	0	36	6
Fire/explosion (unknown origin)	23	14	0	27	3
Fire/explosion (non-fuel)	57	29	0	18	7
Fire/explosion (fuel)	57	32	0	43	5
Falls overboard	25	137	0	8	1
Fall in vessel	27	64	0	16	6
Electrocution	0	0	0	0	0
Ejected from vessel	12	60	0	11	2
Departed vessel	24	96	0	26	1
Collision with submerged object	50	100	0	27	0
Collision with recreational vessel	535	977	0	172	34
Collision with governmental vessel	2	13	0	3	0
Collision with commercial vessel	11	18	0	1	0
Collision with floating object	14	27	0	3	0
Collision with fixed object	126	283	0	39	1
Carbon monoxide	6	0	0	1	0
Capsizing	4	80	0	4	1
Total vessels involved	1232	2473	0	543	81

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, 2006-2021 (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 2021 (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, 2021 (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.

Table 22 ▪ OPERATOR INFORMATION 2021				
		Vessels Involved	Deaths	Injuries
		6104	**658**	**2641**
Age of Operator	12 years and under	18	1	12
	13 to 18 years	328	20	183
	19 to 25 years	597	65	342
	26 to 35 years	777	92	447
	36 to 55 years	1786	190	944
	Over 55 years	1416	236	590
	Unknown	343	48	85
	No operator	839	6	38
Operator's Experience	No Experience	66	8	35
	Under 10 hours	674	87	337
	10 to 100 hours	1079	107	563
	101 to 500 hours	1679	108	878
	Over 500 Hours	572	55	256
	Unknown	1195	287	534
	No Operator	839	6	38
Number of Persons on Board	None	595	0	3
	One	1852	252	566
	Two	1603	186	790
	Three	583	72	346
	Four	431	46	251
	Five	262	32	193
	Six	202	12	163
	Seven	126	21	118
	Eight	89	6	54
	Nine	45	4	31
	Ten	35	1	21
	More than 10	83	20	64
	Unknown	198	6	41
Education of Operator	American Red Cross	3	0	3
	Informal	254	18	120
	Internet Course	87	10	49
	State Course	970	44	525
	US Power Squadrons	33	2	9
	USCG Auxiliary	115	5	55
	Other	131	1	45
	No Education	2088	242	1097
	Unknown	1584	330	700
	No Operator	839	6	38

BOATING SAFETY INSTRUCTION

Table 23 ▪ NUMBER OF DEATHS BY TYPE OF OPERATOR BOATING INSTRUCTION 2021	
Type of Boating Instruction	Deaths
American Red Cross	0
Informal	18
Internet Course	10
State Course	44
US Power Squadrons	2
USCG Auxiliary	5
Other	1
No Education	242
Total Deaths - Known Operator Instruction	322
Total Deaths - Unknown Operator Instruction	330
Total Deaths - No Operator	6
Total Deaths - Known & Unknown Operator Instruction	658

Figure 7 PERCENT OF DEATHS BY KNOWN OPERATOR INSTRUCTION, 2021

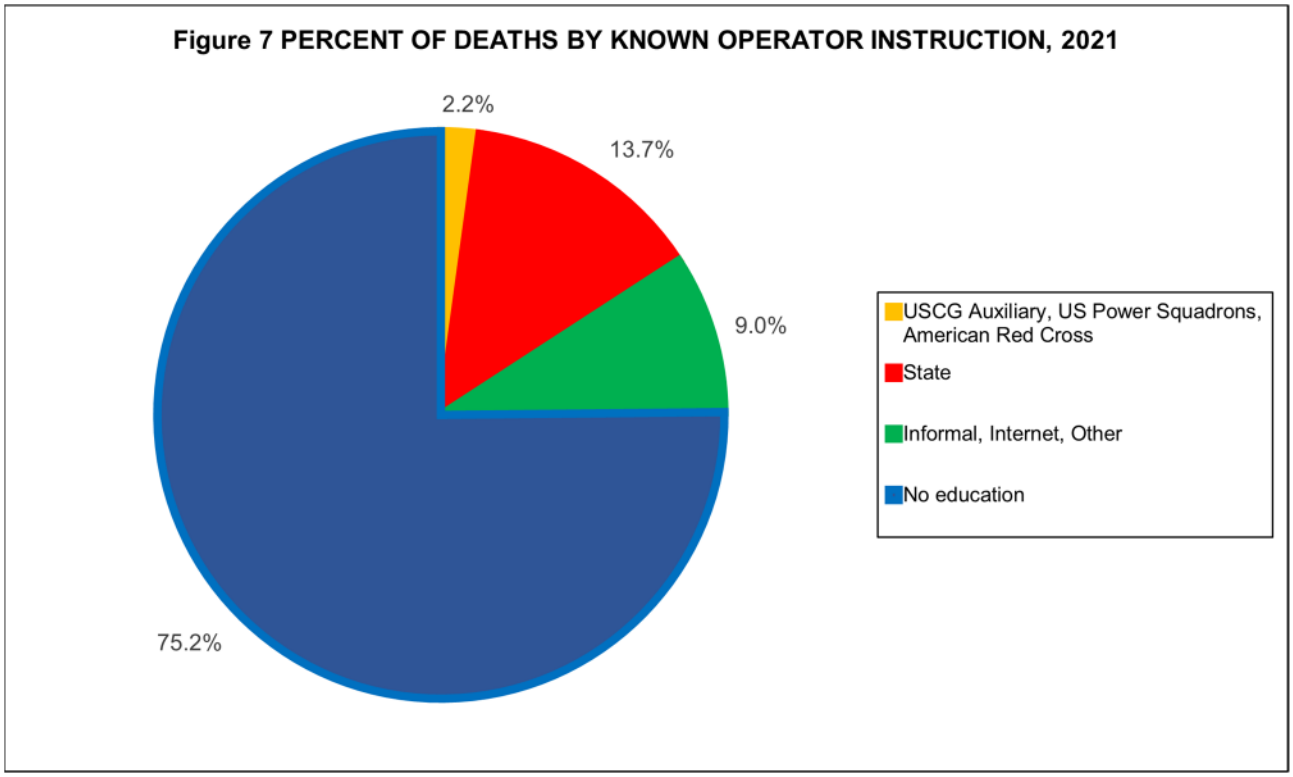
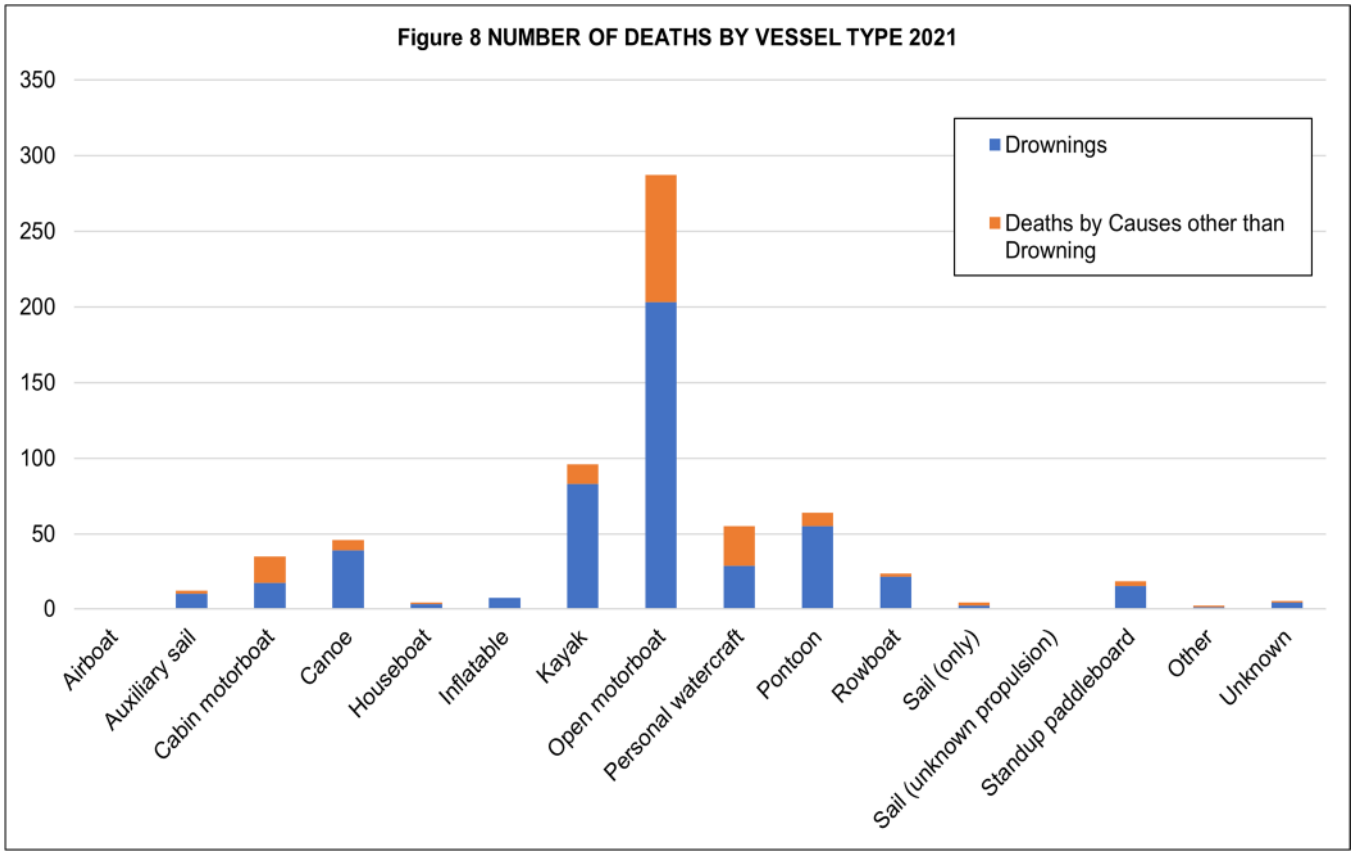


Table 24 ▪ NUMBER OF DEATHS BY VESSEL TYPE 2021				
Vessel type	Drownings	Deaths by Causes other than Drowning	Total Deaths	Percentage of Deaths from Drowning
Airboat	0	0	0	0%
Auxiliary Sailboat	10	2	12	83%
Cabin Motorboat	17	18	35	49%
Canoe	39	7	46	85%
Houseboat	3	1	4	75%
Inflatable	7	0	7	100%
Kayak	83	13	96	86%
Open Motorboat	203	84	287	71%
Personal Watercraft	29	26	55	53%
Pontoon	55	9	64	86%
Rowboat	21	2	23	91%
Sailboat (only)	2	2	4	50%
Sailboat (unknown)	0	0	0	0%
Standup paddleboard	15	3	18	83%
Other	1	1	2	50%
Unknown	4	1	5	80%
Total	**489**	**169**	**658**	**74%**



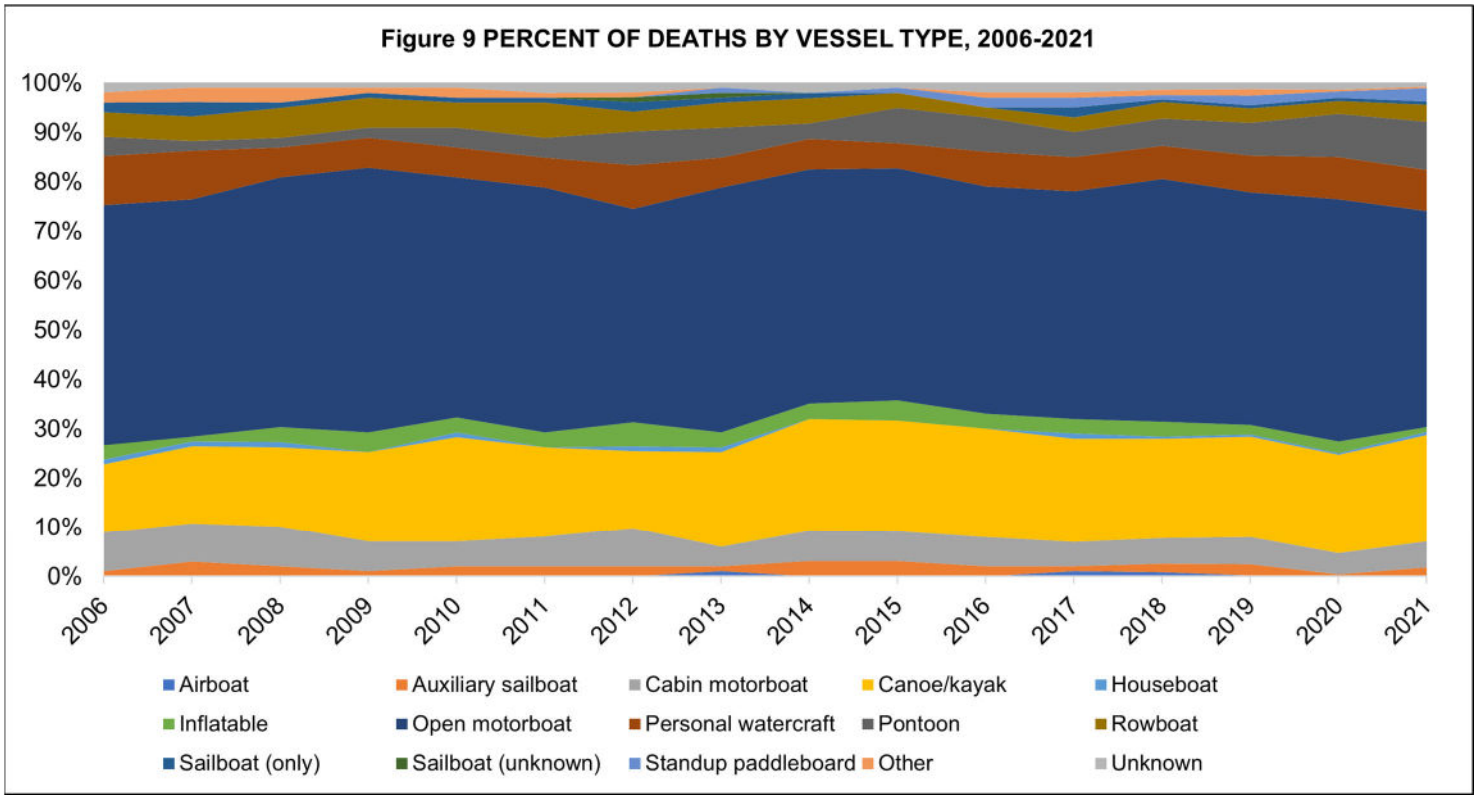


Table 25 ▪ PERCENT OF DEATHS BY VESSEL TYPE, 2006-2021

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Airboat	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	1%	0%	0%	0%
Auxiliary sailboat	1%	3%	2%	1%	2%	2%	2%	1%	3%	3%	2%	1%	2%	2%	0%	2%
Cabin motorboat	8%	8%	8%	6%	5%	6%	8%	4%	6%	6%	6%	5%	5%	6%	4%	5%
Canoe/kayak	14%	16%	16%	18%	21%	18%	16%	19%	22%	22%	22%	21%	20%	20%	20%	22%
Houseboat	1%	1%	1%	0%	1%	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%	1%
Inflatable	3%	1%	3%	4%	3%	3%	5%	3%	3%	4%	3%	3%	3%	2%	2%	1%
Open motorboat	49%	49%	50%	53%	48%	49%	44%	49%	46%	46%	46%	46%	49%	47%	49%	44%
Personal watercraft	10%	10%	6%	6%	6%	6%	9%	6%	6%	5%	7%	7%	7%	8%	9%	8%
Pontoon	4%	2%	2%	2%	4%	4%	7%	6%	3%	7%	7%	5%	6%	7%	9%	10%
Rowboat	5%	5%	6%	6%	5%	7%	4%	5%	5%	3%	2%	3%	3%	3%	3%	3%
Sailboat (only)	2%	3%	1%	1%	1%	1%	2%	1%	1%	0%	0%	2%	1%	1%	1%	1%
Sailboat (unknown)	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Standup paddleboard	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	2%	2%	1%	2%	1%	3%
Other	2%	3%	3%	1%	2%	1%	1%	0%	0%	0%	1%	1%	1%	1%	0%	0%
Unknown	2%	1%	1%	1%	1%	2%	2%	1%	2%	1%	2%	2%	1%	1%	1%	1%

Table 26 ▪ NUMBER OF DECEASED VICTIMS BY AGE AND VESSEL TYPE 2021

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 paddelboard	Other	Unknown			
Total	**0**	**12**	**35**	**46**	**4**	**7**	**96**	**287**	**55**	**64**	**23**	**4**	**0**	**18**	**2**	**5**	**489**	**169**	**658**
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	1	0	0	0	0	0	0	0	0	1	0	1
3	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	0	2
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	2
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	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	1	0	0	0	0	0	0	0	0	0	0	1	0	1
11	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
12	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
0-12	0	0	2	0	0	1	1	4	1	1	0	0	0	0	0	0	6	4	10
13 - 19	0	0	0	3	0	1	5	7	8	4	3	1	0	1	0	1	22	12	34
20 - 29	0	1	5	8	0	0	24	38	14	16	4	0	0	5	0	2	88	29	117
30 - 39	0	0	3	8	1	1	17	37	11	14	1	0	0	7	0	1	81	20	101
40 - 49	0	2	5	7	2	0	17	48	12	7	1	0	0	2	0	0	76	27	103
50 - 59	0	0	9	6	0	2	13	43	5	2	3	1	0	3	1	0	67	21	88
60 - 69	0	3	5	8	1	1	16	60	2	11	6	2	0	0	1	0	83	33	116
70 - 79	0	6	4	2	0	1	3	40	1	7	5	0	0	0	0	0	52	17	69
80 and Over	0	0	1	3	0	0	0	9	0	2	0	0	0	0	0	0	12	3	15
Unknown	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	1	2	3	5

Figure 9a PERCENT OF DECEASED VICTIMS BY AGE AND VESSEL TYPE 2021

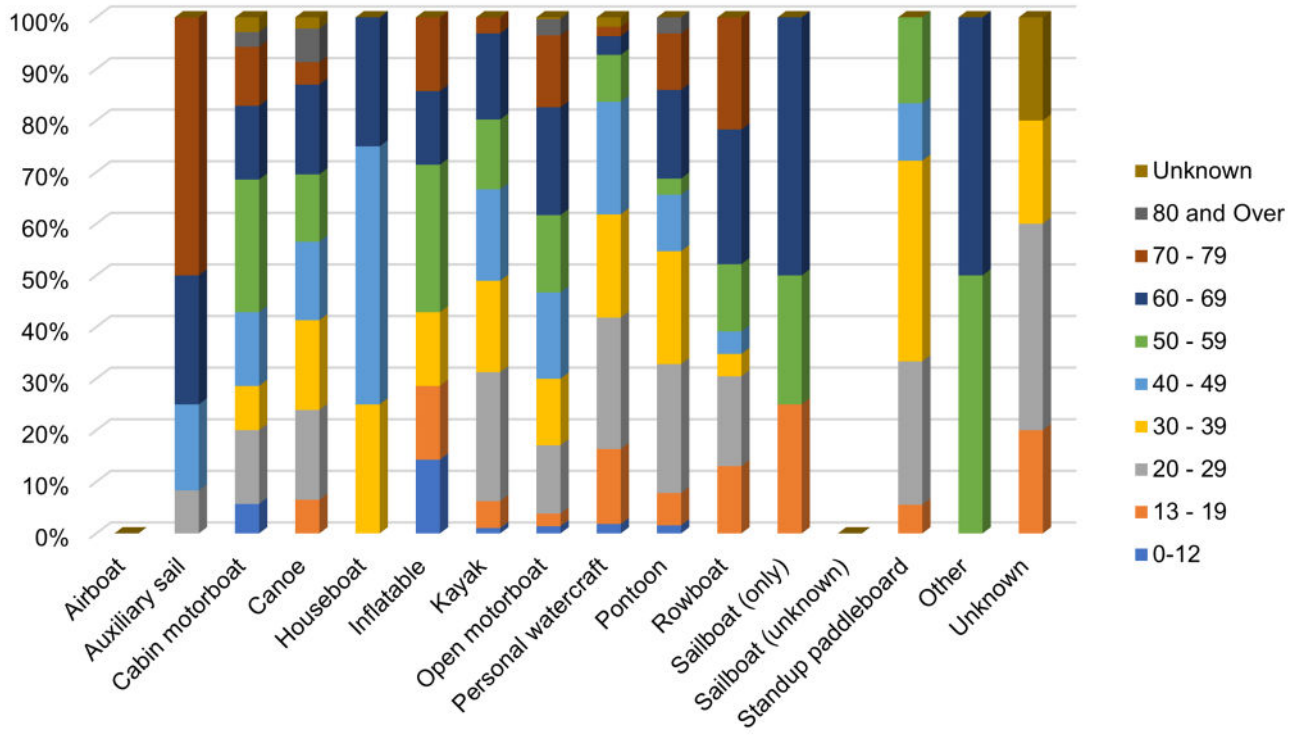


Figure 9b PERCENT OF INJURED VICTIMS BY AGE AND VESSEL TYPE 2021

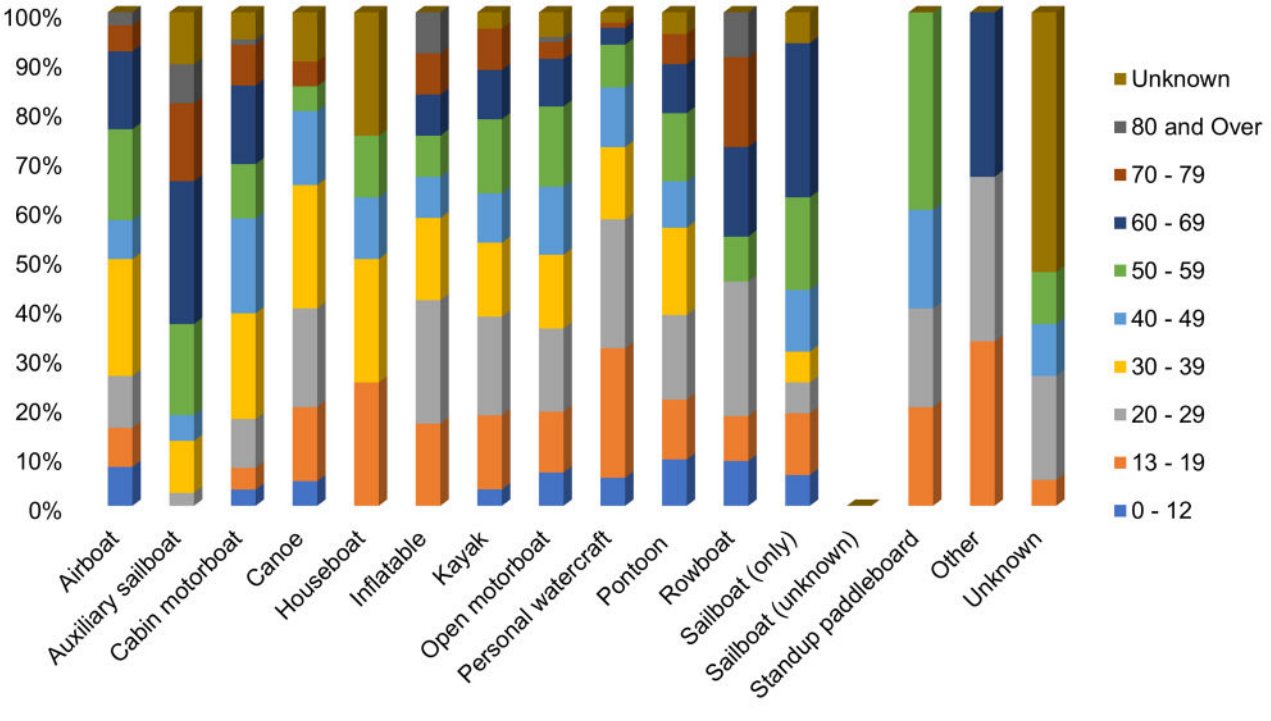
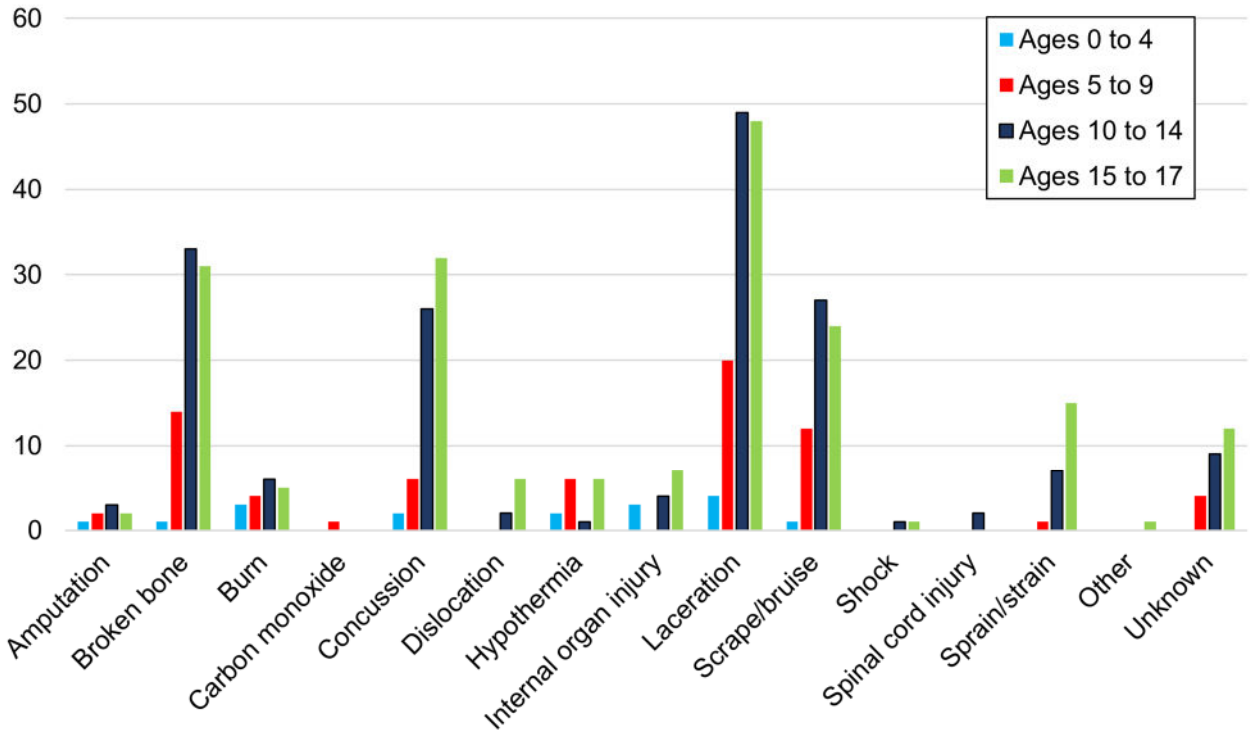


Table 27 ▪ NUMBER OF INJURED VICTIMS BY AGE AND VESSEL TYPE 2021

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
Total	**2641**	**38**	**38**	**182**	**20**	**8**	**12**	**60**	**1378**	**670**	**181**	**11**	**16**	**0**	**5**	**3**	**19**
0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	7	0	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0
3	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
4	6	0	0	1	0	0	0	0	1	3	0	1	0	0	0	0	0
5	8	0	0	0	1	0	0	0	7	0	0	0	0	0	0	0	0
6	15	0	0	0	0	0	0	0	7	3	5	0	0	0	0	0	0
7	9	0	0	0	0	0	0	0	7	2	0	0	0	0	0	0	0
8	20	1	0	1	0	0	0	1	10	4	3	0	0	0	0	0	0
9	18	1	0	0	0	0	0	0	9	6	2	0	0	0	0	0	0
10	20	1	0	0	0	0	0	0	11	7	1	0	0	0	0	0	0
11	26	0	0	2	0	0	0	0	18	1	4	0	1	0	0	0	0
12	29	0	0	1	0	0	0	0	14	12	2	0	0	0	0	0	0
0 - 12	162	3	0	6	1	0	0	2	93	38	17	1	1	0	0	0	0
13 - 19	401	3	0	8	3	2	2	9	170	176	22	1	2	0	1	1	1
20 - 29	490	4	1	18	4	0	3	12	232	175	31	3	1	0	1	1	4
30 - 39	407	9	4	39	5	2	2	9	206	98	32	0	1	0	0	0	0
40 - 49	344	3	2	35	3	1	1	6	190	81	17	0	2	0	1	0	2
50 - 59	361	7	7	20	1	1	1	9	224	58	25	1	3	0	2	0	2
60 - 69	235	6	11	29	0	0	1	6	133	23	18	2	5	0	0	1	0
70 - 79	97	2	6	15	1	0	1	5	47	7	11	2	0	0	0	0	0
80 and Over	22	1	3	2	0	0	1	0	14	0	0	1	0	0	0	0	0
Unknown	122	0	4	10	2	2	0	2	69	14	8	0	1	0	0	0	10

Table 28 ▪ NATURE OF PRIMARY INJURY TYPE BY AREA OF INJURY 2021										
	All Areas	Arm	Body	Foot	Hand	Head	Leg	Neck	Trunk	Unknown
All primary injury types	**2641**	**228**	**284**	**108**	**108**	**621**	**578**	**69**	**483**	**162**
Amputation	**39**	2	0	5	18	0	14	0	0	0
Broken bone	**555**	64	13	41	28	66	163	13	149	18
Burn	**115**	9	18	2	7	21	42	1	7	8
Carbon monoxide	**14**	0	14	0	0	0	0	0	0	0
Concussion	**258**	0	0	0	0	258	0	0	0	0
Dislocation	**67**	47	0	1	0	2	14	0	1	2
Electric shock	**0**	0	0	0	0	0	0	0	0	0
Hypothermia	**154**	0	154	0	0	0	0	0	0	0
Internal organ injury	**111**	0	17	0	0	9	0	0	72	13
Laceration	**606**	47	14	38	38	212	197	4	31	25
Scrape/bruise	**316**	38	28	4	9	39	102	4	59	33
Shock	**16**	0	16	0	0	0	0	0	0	0
Spinal cord Injury	**52**	0	0	0	0	0	0	9	43	0
Sprain/strain	**125**	11	5	15	6	5	29	24	24	6
Other	**24**	0	3	1	0	2	7	0	8	3
Unknown	**189**	10	2	1	2	7	10	14	89	54

Figure 10 NUMBER OF INJURED VICTIMS UNDER AGE 18 BY AGE AND INJURY TYPE ON PERSONAL WATERCRAFT, 2021



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, 2002-2021 (Figure 11 & Table 29, Page 56)
This figure and table document the number of accidents and casualties from 2002-2021.

Accident, Casualty & Damage Data by State (Table 30, Page 57)
This table provides accident, casualty, and damage information by state for the year 2021. 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 658, Michigan contributed 3.2% ((21/658) × 100) of deaths to the national count. Please note that percentages have been rounded.

Fatal Accidents by Location (Figures 12a-d, Pages 59-60)
These figures plot the location of fatal accidents in four different regions. 12a represents the continental United States and the U.S. Virgin Islands. 12b represents Alaska. 12c represents Hawaii. 12d represents Guam and the Northern Mariana Islands. 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, 2002-2021 (Figure 13 & Table 31, Page 61)
This table and accompanying figure provide two fatality rates for years 2002-2021. 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 2021 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 2020-2021 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, 2017-2021 (Table 32, Page 63)
This table examines the number of accidents, fatal accidents, and fatalities by state for years 2017-2021.

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.

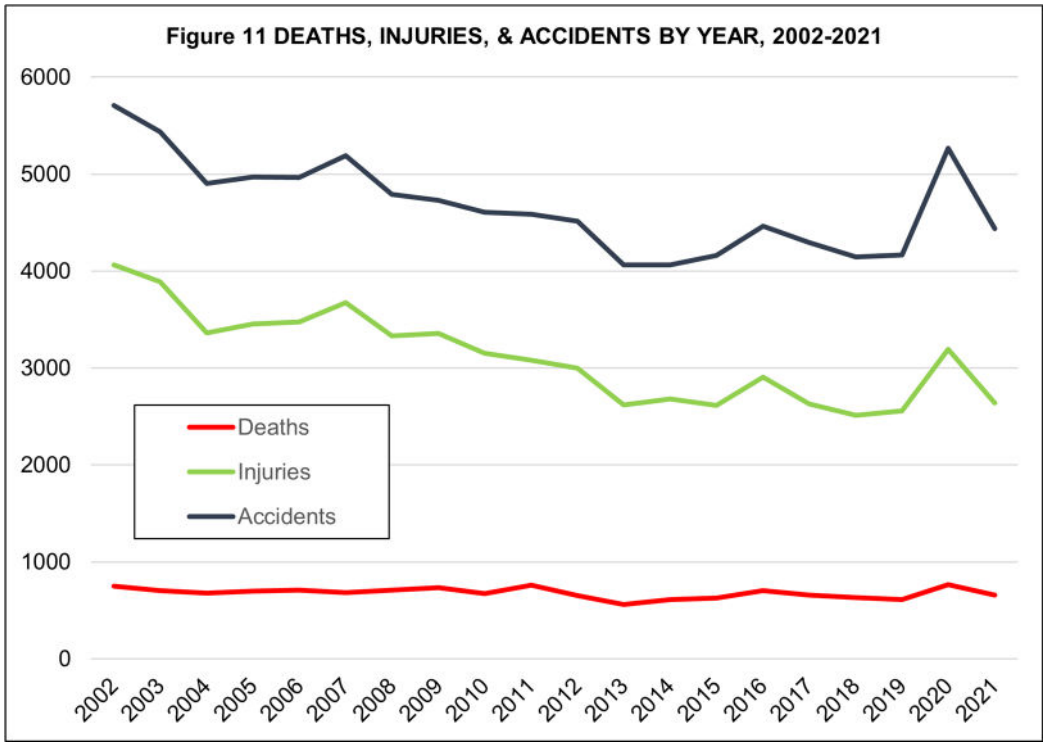


Table 29 ▪ DEATHS, INJURIES, & ACCIDENTS BY YEAR, 2002-2021

Year	Deaths	Injuries	Accidents
2002	750	4062	5705
2003	703	3888	5438
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

Table 30 ▪ ACCIDENT, CASUALTY & DAMAGE DATA BY STATE 2021

	Number of Accidents				Persons Involved		
	Total	Fatal	Non-Fatal Injury	Property Damage	Deaths	Injured	Damages
Totals	4439	602	1815	2022	658	2641	$67,506,110.39
AK	14	12	1	1	14	2	$33,500.00
AL	69	10	32	27	10	48	$773,565.00
AR	54	9	18	27	11	24	$424,294.00
AZ	118	12	48	58	13	64	$1,111,684.00
CA	454	37	190	227	39	235	$6,306,080.00
CO	30	8	17	5	8	21	$77,500.00
CT	43	7	14	22	7	19	$1,171,342.00
DC	1	0	1	0	0	1	$10,000.00
DE	17	2	4	11	2	5	$86,486.00
FL	723	60	306	357	61	451	$13,135,684.14
GA	91	15	35	41	17	62	$1,597,523.80
HI	15	5	6	4	5	7	$76,200.00
IA	33	2	21	10	3	36	$215,763.82
ID	57	10	24	23	10	31	$200,766.00
IL	88	14	17	57	15	29	$656,126.00
IN	40	6	13	21	7	20	$2,433,550.00
KS	25	2	9	14	4	16	$120,050.00
KY	48	14	17	17	17	38	$318,279.00
LA	111	23	46	42	27	77	$1,043,610.00
MA	65	6	28	31	6	40	$2,796,700.00
MD	138	6	57	75	6	70	$2,500,003.44
ME	23	3	8	12	4	10	$687,250.00
MI	110	18	33	59	21	42	$983,177.28
MN	87	18	42	27	18	55	$468,879.71
MO	159	28	70	61	28	116	$1,061,002.98
MS	20	4	11	5	4	21	$134,800.00
MT	16	4	6	6	5	7	$56,050.00
NC	171	20	67	84	20	91	$1,947,069.00
ND	13	2	7	4	2	8	$39,200.00
NE	14	1	8	5	1	10	$57,000.00
NH	34	3	16	15	3	17	$124,195.44
NJ	100	7	44	49	8	67	$1,036,200.00
NM	16	1	10	5	1	19	$44,051.00
NV	32	3	14	15	3	20	$125,535.00
NY	162	15	63	84	17	117	$2,139,036.06
OH	140	16	49	75	19	74	$3,461,992.89
OK	49	11	29	9	12	42	$284,650.00
OR	42	15	15	12	18	27	$407,320.00
PA	56	9	30	17	9	34	$424,711.96
RI	33	1	9	23	2	14	$687,480.00
SC	184	16	71	97	18	110	$1,739,234.35
SD	16	2	4	10	2	5	$64,400.00
TN	123	20	54	49	21	78	$1,079,681.00
TX	238	52	108	78	58	149	$1,951,119.82
UT	43	9	22	12	11	32	$1,201,800.00
VA	89	16	37	36	18	47	$635,487.17
VT	6	5	0	1	7	0	$8,000.00
WA	81	13	28	40	14	38	$4,849,736.00
WI	111	21	41	49	23	61	$565,796.15
WV	4	1	1	2	1	3	$6,300.38
WY	5	1	4	0	1	5	$10,400.00
AS	0	0	0	0	0	0	$0.00
CNMI	1	1	0	0	1	0	$0.00
GU	2	1	0	1	1	0	$15,000.00
PR	0	0	0	0	0	0	$0.00
VI	3	1	2	0	1	3	$305,000.00
Atlantic Ocean*	13	2	4	7	2	11	$2,973,995.00
Gulf of Mexico*	3	0	2	1	0	7	$158,200.00
Pacific Ocean*	6	2	2	2	2	5	$2,683,652.00

*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.

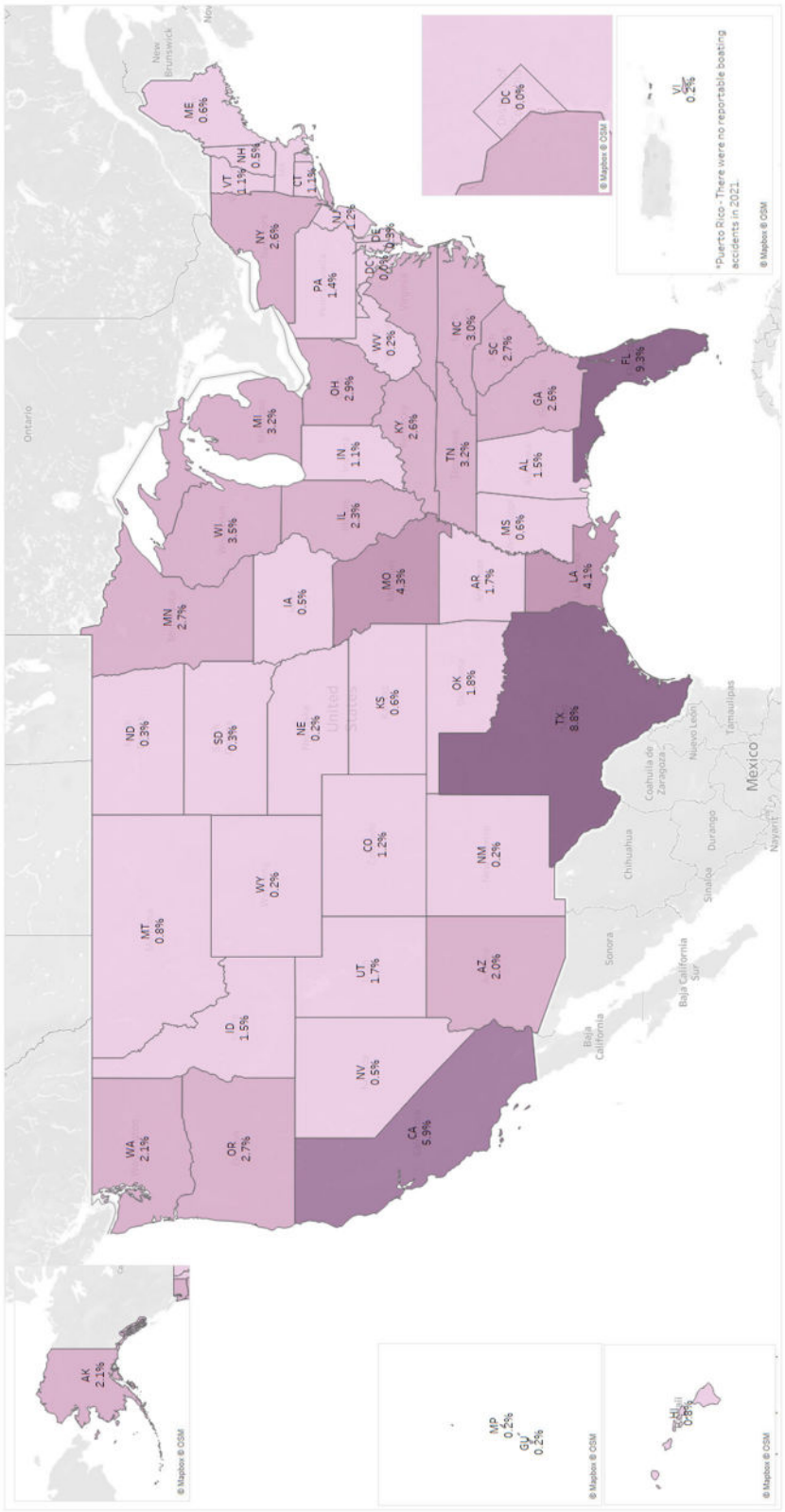
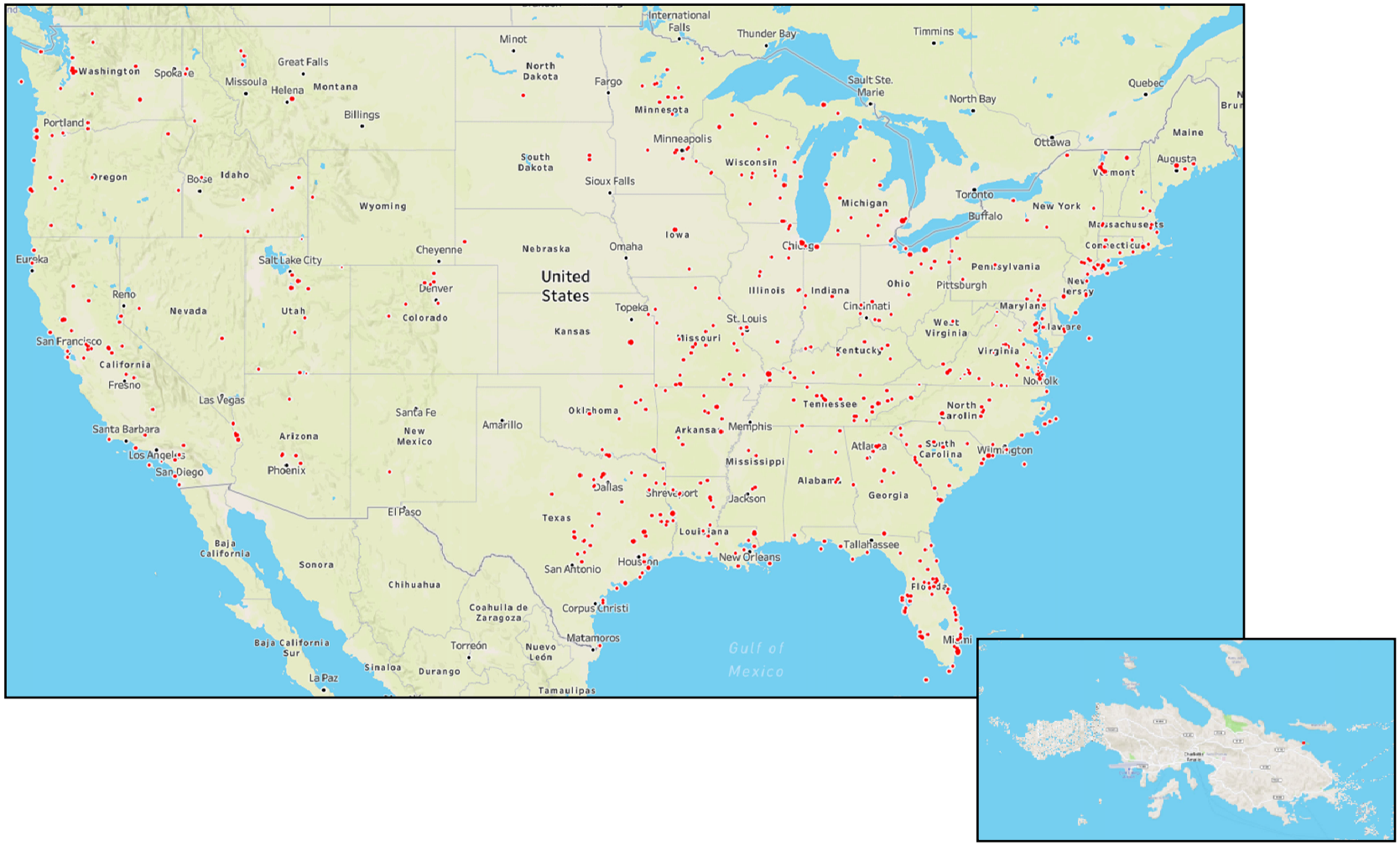


Figure 12 ▪ DISTRIBUTION OF 2021 DEATHS BY STATE

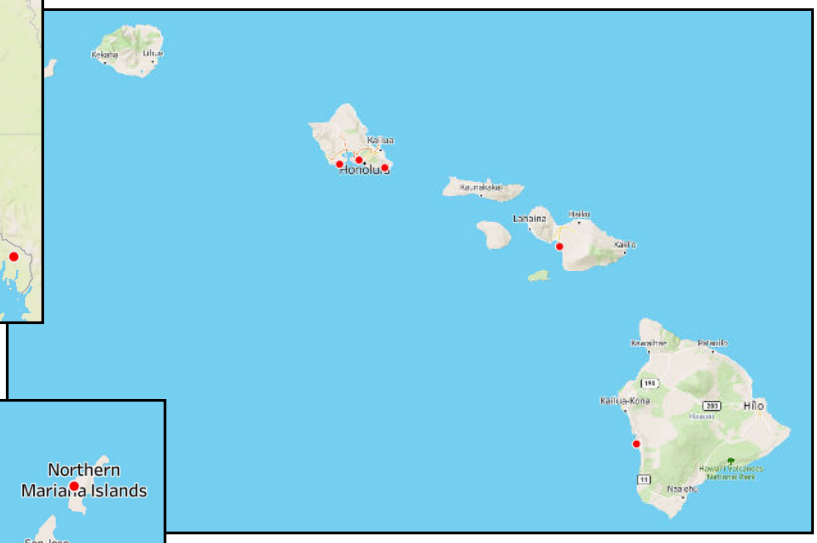
Figure 12a ▪ FATAL ACCIDENTS BY LOCATION– CONTINENTAL U.S. AND U.S. VIRGIN ISLANDS



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

Figure 12b ▪ FATAL ACCIDENTS BY LOCATION– ALASKA

Figure 12c ▪ FATAL ACCIDENTS BY LOCATION– HAWAII



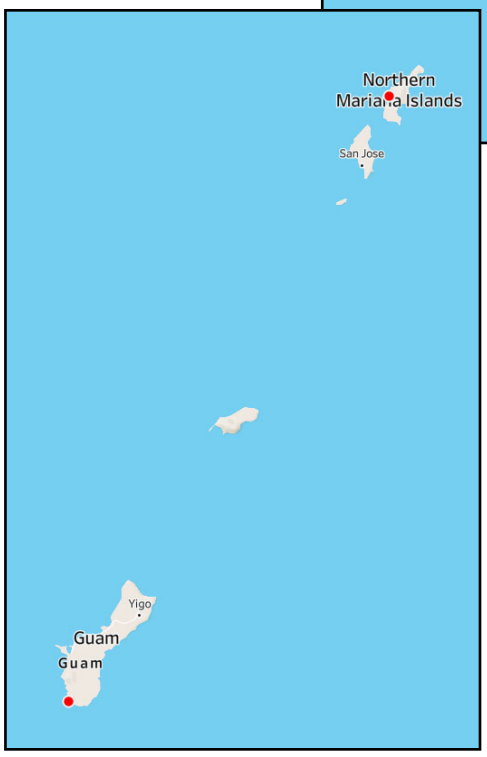


Figure 12d ▪ FATAL ACCIDENTS BY LOCATION– GUAM AND NORTHERN MARIANA ISLANDS

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.

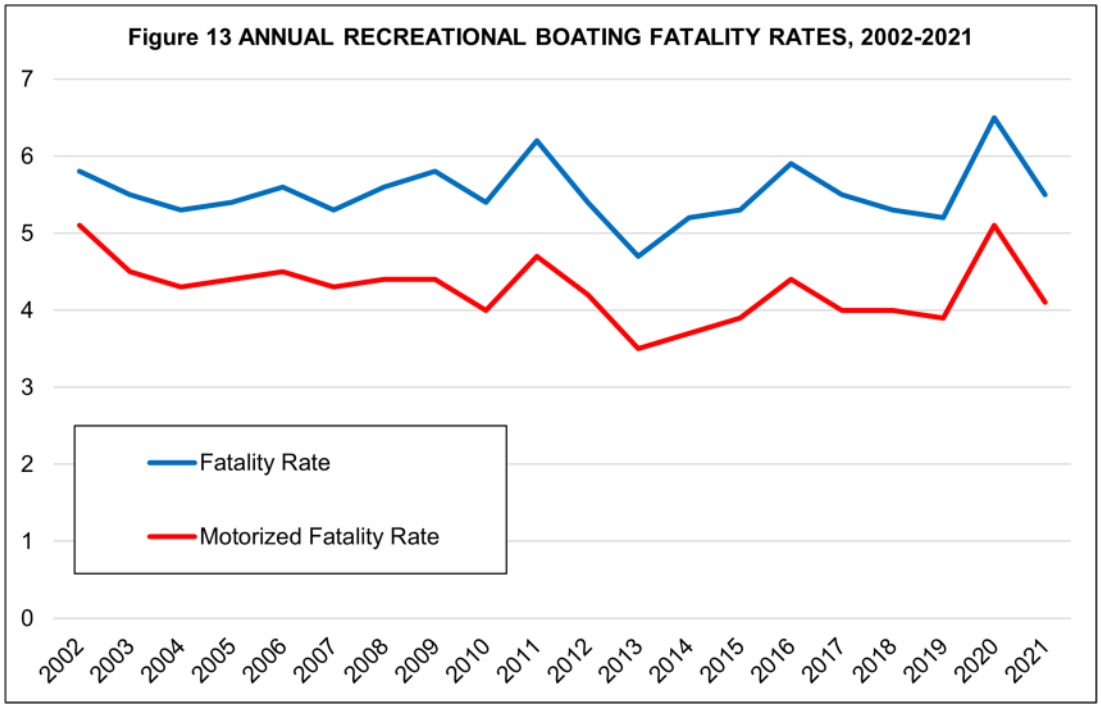
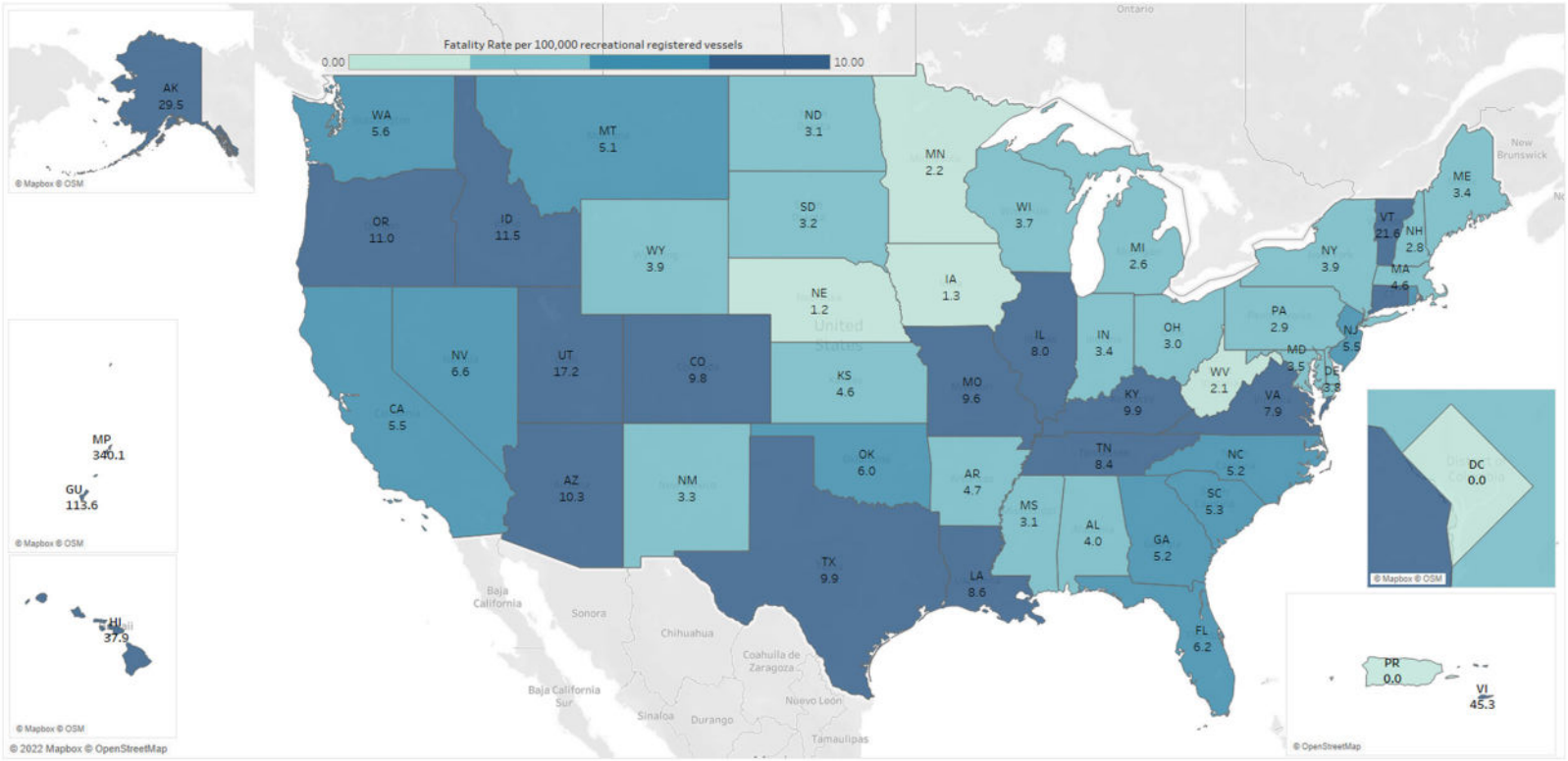


Table 31 ▪ ANNUAL RECREATIONAL BOATING FATALITY RATES 2002-2021

	All Deaths	All Registered Vessels	Fatality Rate	Motorized Vessel Deaths	Registered Motorized Vessels	Motorized Vessel Fatality Rate
2002	750	12,854,054	5.8	612	11,918,688	5.1
2003	703	12,794,616	5.5	536	11,946,576	4.5
2004	676	12,781,476	5.3	515	11,878,783	4.3
2005	697	12,942,414	5.4	528	11,998,728	4.4
2006	710	12,746,126	5.6	535	11,802,419	4.5
2007	685	12,875,568	5.3	515	11,966,627	4.3
2008	709	12,692,892	5.6	518	11,841,281	4.4
2009	736	12,721,541	5.8	522	11,834,872	4.4
2010	672	12,438,926	5.4	469	11,597,326	4.0
2011	758	12,173,935	6.2	527	11,326,848	4.7
2012	651	12,101,936	5.4	476	11,226,268	4.2
2013	560	12,013,496	4.7	391	11,128,052	3.5
2014	610	11,804,002	5.2	411	10,960,861	3.7
2015	626	11,867,049	5.3	434	11,034,479	3.9
2016	701	11,861,811	5.9	481	11,005,841	4.4
2017	658	11,961,568	5.5	440	11,090,600	4.0
2018	633	11,852,969	5.3	441	10,994,900	4.0
2019	613	11,878,542	5.2	426	11,052,684	3.9
2020	767	11,838,188	6.5	556	10,987,619	5.1
2021	658	11,957,886	5.5	458	11,064,813	4.1

Figure 14 ▪ STATES CODED BY THEIR 2021 FATALITY RATE



Note: The fatality rate is calculated using the number of deaths in each state and the number of recreational registered vessels in each state. Please be aware that, for some states, the fatality rate includes deaths that occurred on vessels that were not registered. Further, it is important to note that the state fatality rate may include deaths from vessels that were registered in another state.

Table 32 ▪ FIVE YEAR SUMMARY OF SELECTED ACCIDENT DATA BY STATE 2017-2021															
	Total Number of Accidents					Fatal Accidents					Deaths				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Totals	4291	4145	4168	5265	4439	599	565	556	692	602	658	633	613	767	658
Alabama	70	66	101	96	69	18	13	25	12	10	21	17	28	19	10
Alaska	15	22	14	22	14	13	17	8	15	12	20	22	11	24	14
Arizona	123	129	96	162	118	11	6	7	7	12	13	11	7	10	13
Arkansas	64	60	37	75	54	11	7	10	13	9	11	7	10	13	11
California	350	322	324	493	454	49	33	37	37	37	50	34	39	39	39
Colorado	32	28	44	46	30	6	6	12	16	8	6	6	12	17	8
Connecticut	49	39	40	54	43	8	4	2	3	7	9	5	2	3	7
Delaware	23	23	13	19	17	3	2	1	5	2	3	2	1	6	2
DC	1	2	2	3	1	0	0	0	1	0	0	0	0	3	0
Florida	723	607	679	804	723	60	54	55	70	60	66	57	62	72	61
Georgia	102	104	109	107	91	12	9	22	10	15	14	11	23	11	17
Hawaii	15	8	15	10	15	3	1	3	1	5	3	1	4	1	5
Idaho	46	44	50	77	57	13	9	7	5	10	16	10	8	5	10
Illinois	84	67	75	85	88	15	16	13	16	14	15	17	18	19	15
Indiana	57	43	40	52	40	7	8	11	8	6	8	8	16	8	7
Iowa	40	31	21	38	33	4	8	5	7	2	4	8	5	8	3
Kansas	29	22	13	32	25	2	2	2	8	2	2	2	2	8	4
Kentucky	41	41	39	44	48	12	13	9	7	14	13	13	9	9	17
Louisiana	106	95	105	124	111	19	17	18	23	23	19	19	20	24	27
Maine	49	43	35	41	23	11	4	4	11	3	13	4	4	11	4
Maryland	147	122	130	148	138	6	13	12	6	6	6	16	16	7	6
Massachusetts	66	77	79	75	65	10	10	4	7	6	10	10	5	8	6
Michigan	116	119	128	159	110	19	20	21	29	18	20	22	22	31	21
Minnesota	105	77	100	105	87	13	13	10	16	18	14	14	10	16	18
Mississippi	34	31	20	25	20	6	9	4	4	4	6	11	5	6	4
Missouri	124	122	145	152	159	10	12	18	13	28	10	14	18	14	28
Montana	9	19	13	25	16	2	9	4	7	4	2	13	5	7	5
Nebraska	27	20	19	13	14	4	4	2	2	1	4	4	2	2	1
Nevada	35	53	44	66	32	4	5	4	3	3	4	5	5	3	3
New Hampshire	49	39	37	59	34	5	4	3	2	3	5	5	4	2	3
New Jersey	106	116	110	135	100	4	5	4	9	7	4	5	4	9	8
New Mexico	18	24	13	18	16	5	2	2	4	1	5	2	2	4	1
New York	167	143	165	175	162	19	17	17	25	15	22	20	17	28	17
North Carolina	117	182	128	183	171	15	27	15	23	20	15	30	16	27	20
North Dakota	15	13	16	18	13	4	2	2	1	2	4	2	2	1	2
Ohio	117	126	128	163	140	20	15	12	20	16	20	17	13	25	19
Oklahoma	38	36	24	59	49	7	5	8	17	11	10	7	8	17	12
Oregon	60	65	62	91	42	11	16	16	24	15	12	17	18	26	18
Pennsylvania	69	63	58	58	56	15	13	8	9	9	15	14	8	11	9
Rhode Island	31	26	42	57	33	3	1	1	2	1	4	1	1	2	2
South Carolina	151	130	141	153	184	12	15	15	21	16	13	16	15	25	18
South Dakota	17	12	23	25	16	0	1	4	3	2	0	1	5	3	2
Tennessee	93	109	107	155	123	14	22	9	27	20	16	22	9	30	21
Texas	170	204	184	281	238	51	35	38	55	52	63	38	43	59	58
Utah	58	81	86	90	43	3	8	6	10	9	3	9	7	10	11
Vermont	3	6	4	6	6	3	3	3	3	5	3	3	4	4	7
Virginia	72	80	84	102	89	10	9	18	18	16	10	11	20	21	18
Washington	109	94	106	114	81	15	19	26	26	13	15	21	27	28	14
West Virginia	12	16	9	16	4	3	3	2	5	1	3	4	2	5	1
Wisconsin	105	106	82	133	111	22	15	9	22	21	25	21	9	22	23
Wyoming	10	8	11	4	5	5	1	3	1	1	5	1	3	1	1
AS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CNMI	0	0	0	1	1	0	0	0	0	1	0	0	0	0	1
Guam	2	4	2	0	2	0	0	0	0	1	0	0	0	0	1
Puerto Rico	3	4	4	0	0	1	1	1	0	0	3	1	2	0	0
Virgin Islands	0	0	0	1	3	0	0	0	1	1	0	0	0	1	1
*AT	8	10	5	7	13	1	1	2	0	2	1	1	2	0	2
*GM	2	7	3	5	3	0	1	0	1	0	0	1	0	1	0
*PC	7	5	4	4	6	0	0	2	1	2	0	0	3	1	2

*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 33 - NUMBER OF ACCIDENTS BY PRIMARY ACCIDENT TYPE & STATE 2021

	Total accidents	Capsizing	Carbon monoxide	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	Fall in vessel	Falls overboard	Fire/explosion (fuel)	Fire/explosion (non-fuel)	Fire/explosion (unknown origin)	Flooding/swamping	Grounding	Person struck by propeller	Person struck by vessel	Sinking	Skier mishap	Sudden medical condition	Other	Drownings	Other deaths	Total deaths	Injuries
Totals	4439	264	8	508	49	18	10	1226	209	158	189	0	149	273	138	93	38	461	308	45	30	213	0	3	49	489	169	658	2641
AK	14	2	0	0	1	0	0	1	0	0	1	0	0	6	0	0	0	2	1	0	0	0	0	0	0	12	2	14	2
AL	69	3	0	12	0	1	0	22	4	2	1	0	2	5	3	0	0	9	1	0	0	4	0	0	0	5	5	10	48
AR	54	1	0	12	1	0	0	12	3	5	2	0	1	2	2	0	1	5	5	0	0	2	0	0	0	8	3	11	24
AZ	118	5	0	5	0	0	0	44	0	6	5	0	4	4	5	3	1	14	7	3	5	6	0	0	1	9	4	13	64
CA	454	36	0	23	5	0	1	110	33	14	26	0	13	19	12	15	8	50	38	6	3	38	0	0	4	32	7	39	235
CO	30	4	0	0	0	0	0	5	0	2	3	0	0	2	2	0	0	2	2	2	1	4	0	0	1	7	1	8	21
CT	43	3	0	6	0	0	0	13	4	3	1	0	1	3	0	2	0	5	1	0	0	0	0	0	1	6	1	7	19
DC	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
DE	17	0	0	2	1	0	0	6	0	0	1	0	1	1	0	0	1	1	3	0	0	0	0	0	0	2	0	2	5
FL	723	15	0	146	2	8	1	227	18	16	34	0	36	39	18	13	5	89	33	6	2	8	0	0	7	36	25	61	451
GA	91	5	0	11	1	0	0	27	6	6	3	0	4	3	3	1	1	5	7	1	1	5	0	0	1	14	3	17	62
HI	15	3	0	1	0	0	0	1	1	0	1	0	0	3	0	0	0	0	4	0	0	0	0	0	1	1	4	5	7
IA	33	4	0	4	1	0	0	12	0	0	0	0	1	3	3	0	0	2	1	0	0	2	0	0	0	3	0	3	36
ID	57	5	0	7	1	0	0	9	9	2	2	0	2	2	2	0	1	5	3	1	0	5	0	0	1	9	1	10	31
IL	88	5	0	8	0	0	1	34	1	2	2	0	1	4	4	2	0	13	8	0	0	1	0	0	2	13	2	15	29
IN	40	3	0	3	1	0	0	7	1	1	1	0	0	3	5	2	1	5	1	0	0	4	0	0	2	6	1	7	20
KS	25	2	0	3	0	0	0	5	4	0	0	0	0	0	1	0	0	4	4	0	1	1	0	0	0	4	0	4	16
KY	48	6	0	3	1	1	0	10	3	3	4	0	1	3	1	2	0	3	5	0	0	1	0	0	1	13	4	17	38
LA	111	5	0	29	2	1	0	18	18	2	1	0	2	7	2	0	0	10	7	1	1	4	0	0	1	18	9	27	77
MA	65	3	0	8	1	0	1	18	5	1	3	0	7	3	2	2	3	5	0	0	1	2	0	0	0	5	1	6	40
MD	138	3	1	18	1	1	0	35	5	2	3	0	11	10	6	9	2	12	3	1	1	12	0	1	1	6	0	6	70
ME	23	5	0	2	0	0	0	6	0	1	1	0	0	0	1	0	0	1	4	0	1	1	0	0	0	4	0	4	10
MI	110	8	0	8	0	1	0	40	3	4	7	0	0	8	5	5	0	14	4	1	0	2	0	0	0	13	8	21	42
MN	87	5	0	5	1	0	2	25	0	7	5	0	3	8	1	5	0	6	4	2	0	8	0	0	0	15	3	18	55
MO	159	8	1	10	2	0	0	43	5	10	5	0	12	7	3	2	1	16	15	0	0	16	0	0	3	21	7	28	116
MS	20	0	0	4	0	0	0	6	2	0	1	0	1	2	0	0	0	3	0	0	0	1	0	0	0	2	2	4	21
MT	16	3	0	0	0	0	0	3	0	1	1	0	0	0	0	0	1	4	1	0	0	2	0	0	0	3	2	5	7
NC	171	11	0	18	4	0	1	44	6	7	13	0	4	10	6	4	0	12	22	1	0	4	0	1	3	14	6	20	91
ND	13	0	0	1	0	0	0	4	1	0	2	0	0	2	0	0	0	1	1	0	1	0	0	0	0	2	0	2	8

Table 33 Continued ▪ NUMBER OF ACCIDENTS BY PRIMARY ACCIDENT TYPE & STATE 2021

	NE	NH	NJ	NM	NV	NY	OH	OK	OR	PA	RI	SC	SD	TN	TX	UT	VA	VT	WA	WI	WV	WY	AS	CNMI	GU	PR	VI	AT	GM	PC
Injuries	10	17	67	19	20	117	74	42	27	34	14	110	5	78	149	32	47	0	38	61	3	5	0	0	0	0	3	11	7	5
Total deaths	1	3	8	1	3	17	19	12	18	9	2	18	2	21	58	11	18	7	14	23	1	1	0	1	1	0	1	2	0	2
Other deaths	0	0	1	0	2	6	7	6	2	0	0	7	1	6	14	0	2	1	3	4	1	1	0	0	0	0	1	1	0	2
Drownings	1	3	7	1	1	11	12	6	16	9	2	11	1	15	44	11	16	6	11	19	0	0	0	1	0	0	0	1	0	0
Other	0	1	3	0	0	1	2	0	0	5	0	3	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
Sudden medical condition	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skier mishap	0	0	4	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sinking	1	4	0	3	1	2	2	6	2	3	0	3	1	6	15	4	10	0	4	10	1	1	0	0	0	0	0	0	0	0
Person struck by vessel	0	0	0	0	0	2	0	0	0	0	0	1	0	1	3	3	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Person struck by propeller	0	0	0	1	1	2	2	1	0	2	0	6	0	2	6	5	0	0	7	1	0	0	0	0	0	0	0	0	0	0
Grounding	1	11	8	2	1	15	18	3	1	1	3	7	1	12	15	5	4	0	7	5	0	0	0	0	0	0	1	0	3	1
Flooding/swamping	1	0	8	4	6	15	12	6	11	2	4	15	2	17	27	3	7	0	5	6	0	2	0	0	0	0	0	0	7	3
Fire/explosion (unknown origin)	0	0	2	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1
Fire/explosion (non-fuel)	0	0	7	0	1	2	0	0	0	1	2	2	0	1	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Fire/explosion (fuel)	0	0	3	0	3	10	2	0	3	0	0	3	0	3	10	4	2	0	5	2	1	0	0	0	0	0	0	0	0	0
Falls overboard	0	0	7	1	2	3	4	3	5	2	1	14	1	10	21	4	13	2	6	10	0	1	0	0	0	0	0	0	0	1
Fall in vessel	0	0	2	0	0	5	7	0	0	1	1	2	0	4	9	0	4	0	0	3	0	0	0	0	0	1	0	0	0	0
Electrocution	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
Ejected from vessel	1	1	5	0	1	6	10	5	2	1	0	3	0	4	12	2	4	0	2	2	0	0	0	0	0	0	0	1	0	0
Departed vessel	0	2	3	0	1	2	4	5	2	2	0	4	0	4	19	2	2	1	2	6	0	0	0	0	0	0	0	0	0	0
Collision with submerged object	0	0	4	1	0	11	7	0	0	4	4	8	3	6	15	1	5	0	4	2	0	0	0	0	0	0	0	0	1	0
Collision with recreational vessel	5	7	29	2	12	44	35	13	9	15	8	82	5	25	48	8	20	1	30	36	1	1	0	0	0	0	0	1	0	0
Collision with governmental vessel	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Collision with commercial vessel	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Collision with floating object	1	0	1	0	0	3	3	0	1	0	3	4	0	2	2	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0
Collision with fixed object	4	2	14	1	1	23	19	2	4	2	3	27	1	11	19	0	10	0	2	14	0	0	0	0	0	0	0	0	0	0
Carbon monoxide	0	0	0	0	0	1	2	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Capsizing	0	2	3	0	1	13	9	4	2	0	4	3	1	7	12	6	6	2	8	9	1	0	0	1	0	0	0	0	0	0
Total accidents	14	34	100	16	32	162	140	49	42	56	33	184	16	123	238	43	89	6	81	111	4	5	0	1	2	0	3	13	3	6

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	**39**	0	4	7	0	1	0	0	14	6	7	0	0	0	0	0	0
Broken bone	**555**	11	5	25	0	1	0	4	288	192	26	0	1	0	2	0	0
Burns	**115**	0	3	42	0	2	0	0	59	4	3	0	0	0	0	0	2
Carbon monoxide	**14**	0	3	9	0	0	0	0	2	0	0	0	0	0	0	0	0
Concussion	**258**	0	2	21	1	0	1	4	129	79	17	0	1	0	1	1	1
Dislocation	**67**	1	0	5	1	0	1	2	36	13	7	1	0	0	0	0	0
Electric shock	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hypothermia	**154**	0	4	11	13	0	2	33	70	7	2	5	5	0	0	1	1
Internal organ injury	**111**	2	1	4	1	0	1	5	53	32	8	2	0	0	2	0	0
Laceration	**606**	9	10	27	3	3	1	6	344	133	61	0	3	0	0	0	6
Scrape/bruise	**316**	9	2	8	1	0	0	2	153	113	22	0	5	0	0	1	0
Shock	**16**	0	0	1	0	0	1	0	10	1	1	0	0	0	0	0	2
Spinal cord injury	**52**	1	0	3	0	0	1	0	32	10	5	0	0	0	0	0	0
Sprain/strain	**125**	2	1	7	0	0	2	3	66	35	8	1	0	0	0	0	0
Other	**24**	0	0	2	0	0	1	0	12	8	0	1	0	0	0	0	0
Unknown	**189**	3	3	10	0	1	1	1	110	37	14	1	1	0	0	0	7
All Injuries	**2641**	**38**	**38**	**182**	**20**	**8**	**12**	**60**	**1378**	**670**	**181**	**11**	**16**	**0**	**5**	**3**	**19**

Table 35 ▪ NUMBER OF FATAL VICTIMS BY LIFE JACKET WEAR, CAUSE OF DEATH & VESSEL TYPE 2021																		
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
	Yes	**1**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	No	**5**	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0
Carbon monoxide	Unknown	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Yes	**7**	0	0	0	0	0	0	2	1	3	0	1	0	0	0	0	0
	No	**5**	0	0	0	0	0	0	0	3	0	1	1	0	0	0	0	0
Cardiac arrest	Unknown	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Yes	**84**	0	5	2	2	0	2	27	23	14	4	2	1	0	2	0	0
	No	**399**	0	5	15	37	3	5	53	179	15	50	18	1	0	13	1	4
Drowning	Unknown	**6**	0	0	0	0	0	0	3	1	0	1	1	0	0	0	0	0
	Yes	**7**	0	0	1	0	0	0	2	2	1	0	0	1	0	0	0	0
	No	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hypothermia	Unknown	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Yes	**2**	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	No	**2**	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
Other	Unknown	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Yes	**35**	0	0	0	0	1	0	1	12	19	1	0	0	0	0	1	0
	No	**49**	0	0	7	0	0	0	0	38	0	4	0	0	0	0	0	0
Trauma	Unknown	**3**	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
	Yes	**9**	0	0	0	0	0	0	2	4	2	0	0	0	0	1	0	0
	No	**23**	0	0	2	1	0	0	3	15	0	2	0	0	0	0	0	0
Unknown	Unknown	**21**	0	1	2	6	0	0	3	4	1	1	0	0	0	2	0	1
All Causes		**658**	**0**	**12**	**35**	**46**	**4**	**7**	**96**	**287**	**55**	**64**	**23**	**4**	**0**	**18**	**2**	**5**

Registration data

Explanation of Registration Data Section

The following section contains fives 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, 1986-2021 (Table 36 & Figure 15, Page 69)
This table provides information about recreational vessel registration for each year from 1986-2021. The accompanying figure displays a trend line from 1986-2021.

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 2020 and 2021. 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 2021 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 703,252 vessels. Out of the total national registration of 11,957,886 California contributed 5.9% ((703,252/11,957,886) × 100) of registered vessels. Please note that percentages have been rounded.

Table 36 ▪ RECREATIONAL VESSELS REGISTERED BY YEAR, 1986-2021

Year	Registered Vessels
1986	9,876,197
1987	9,963,696
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

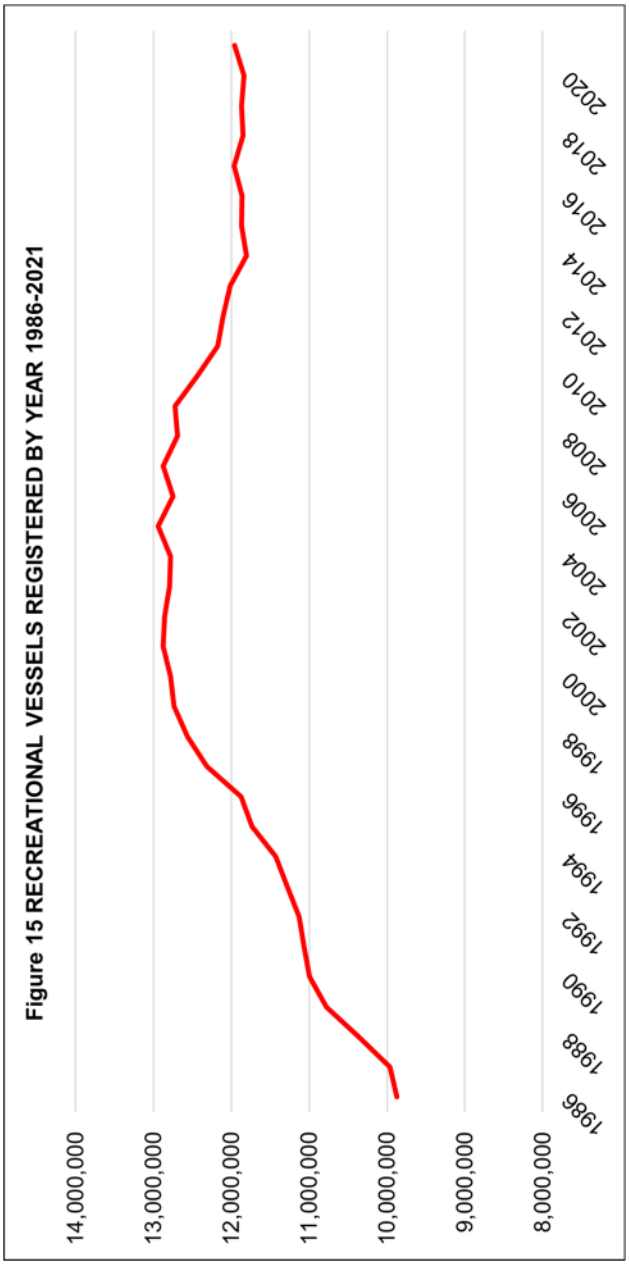


Table 37 ▪ RECREATIONAL VESSEL REGISTRATION BY LENGTH AND MEANS OF PROPULSION 2021	
MECHANICALLY PROPELLED	**11,064,813**
Under 16 feet	3,945,579
16 to less than 26 feet	6,523,188
26 to less than 40 feet	512,792
40 to 65 feet	72,114
Over 65 feet	11,140
NOT MECHANICALLY PROPELLED	**893,073**
Rowboats	52,779
Sailboats	95,583
Paddlecraft	609,771
Other	134,940
TOTAL	**11,957,886**

Table 38 ▪ RECREATIONAL VESSEL REGISTRATION DATA BY STATE 2020-2021

	2021			2020			
	Registration	Deaths	Fatality Rate	Registration	Deaths	Fatality Rate	Scope of Current Boat Registration System
	11,957,886	658	5.5	11,838,188	767	6.5	
AK	47,504	14	29.5	48,011	24	50	All motorboats; non-motorized is voluntary
AL	249,957	10	4.0	248,260	19	7.7	All motorboats, sailboats and boats for hire
AR	233,554	11	4.7	185,378	13	7	All watercraft
AZ	126,127	13	10.3	129,276	10	7.7	All motorized watercraft
CA	703,252	39	5.5	645,951	39	6	All motorboats; sailboats over 8 feet in length
CO	81,856	8	9.8	94,385	17	18	All watercraft powered by motor or sail; sailboards exempt
CT	92,659	7	7.6	86,816	3	3.5	All motorboats; sailboats 19.5 feet or more in length
DC	1,655	0	0.0	1,780	3	168.5	All watercraft
DE	52,621	2	3.8	52,711	6	11.4	All motorboats; non-motorized is voluntary
FL	987,769	61	6.2	959,816	72	7.5	All motorboats; all non-motorized vessels over 16 feet in length
GA	327,053	17	5.2	330,270	11	3.3	All motorboats; sailboats 10 feet or more in length
HI	13,194	5	37.9	12,355	1	8.1	All motorboats; sailboats over 8 feet in length
IA	231,282	3	1.3	215,321	8	3.7	All watercraft with exceptions (a)
ID	86,770	10	11.5	90,290	5	5.5	All motorboats and sailboats
IL	188,086	15	8.0	216,175	19	8.8	All motorboats
IN	204,937	7	3.4	202,093	8	4	All motorboats on public waterways
KS	86,073	4	4.6	84,468	8	9.5	All motorboats and sailboats
KY	171,913	17	9.9	156,800	9	5.7	All motorboats, except electric motors 1 hp or less
LA	312,880	27	8.6	317,711	24	7.6	All motorboats; sailboats more than 12 feet in length
MA	131,000	6	4.6	131,030	8	6.1	All motorboats
MD	172,652	6	3.5	169,902	7	4.1	All motorboats; vessels that may become motorized
ME	118,222	4	3.4	108,721	11	10.1	All motorboats
MI	808,059	21	2.6	785,993	31	3.9	All watercraft with exceptions (b)
MN	830,073	18	2.2	819,377	16	2	All watercraft with exceptions (c)
MO	290,712	28	9.6	287,820	14	4.9	All motorboats; sailboats over 12 feet in length
MS	129,035	4	3.1	128,076	6	4.7	All motorboats and sailboats
MT	97,326	5	5.1	51,207	7	13.7	All motorboats
NC	382,437	20	5.2	370,780	27	7.3	All motorboats; sailboats more than 14 feet in length
ND	65,088	2	3.1	57,806	1	1.7	All motorboats; non-motorized is voluntary
NE	80,392	1	1.2	79,034	2	2.5	All motorboats
NH	105,562	3	2.8	101,312	2	2	All motorboats; sailboats 12 feet or more in length
NJ	146,362	8	5.5	133,463	9	6.7	All watercraft with exceptions (d)
NM	30,230	1	3.3	30,918	4	12.9	All motorboats and sailboats
NV	45,358	3	6.6	41,627	3	7.2	All motorboats; non-motorized is voluntary
NY	439,508	17	3.9	433,457	28	6.5	All motorboats
OH	643,554	19	3.0	593,422	25	4.2	All watercraft
OK	199,407	12	6.0	199,129	17	8.5	All watercraft with exceptions (e)
OR	163,060	18	11.0	164,838	26	15.8	All motorboats; sailboats 12 feet or more in length
PA	308,101	9	2.9	301,450	11	3.6	All motorboats and certain non-powered craft (f)
RI	38,727	2	5.2	38,406	2	5.2	All motorboats and rowboats over 12 feet
SC	339,835	18	5.3	556,226	25	4.5	All watercraft
SD	61,628	2	3.2	60,557	3	5	All motorboats; all other boats over 12 feet in length
TN	251,482	21	8.4	246,190	30	12.2	All motorboats and sailboats
TX	583,306	58	9.9	577,144	59	10.2	All motorboats and sailboats 14 feet or more in length
UT	63,798	11	17.2	68,559	10	14.6	All motorboats and sailboats
VA	227,942	18	7.9	230,195	21	9.1	All motorboats
VT	32,342	7	21.6	26,641	4	15	All motorboats
WA	250,423	14	5.6	254,280	28	11	All motorboats with exceptions (g); sailboats >16 ft in length
WI	618,207	23	3.7	620,812	22	3.5	All motorboats & sailboats over 12 feet in length
WV	48,175	1	2.1	31,018	5	16.1	All motorboats
WY	25,860	1	3.9	26,022	1	3.8	All motorboats; non-motorized is voluntary
AS	101	0	0.0	108	0	0	All watercraft
CNMI	294	1	340.1	307	0	0	All motorboats
GU	880	1	113.6	853	0	0	All motorboats and sailboats over 12 feet
PR	27,397	0	0.0	29,624	0	0	All motorboats; vessels adapted to hold a motor
VI	2,209	1	45.3	4,017	1	24.9	All watercraft
Offshore		4			2		

(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.

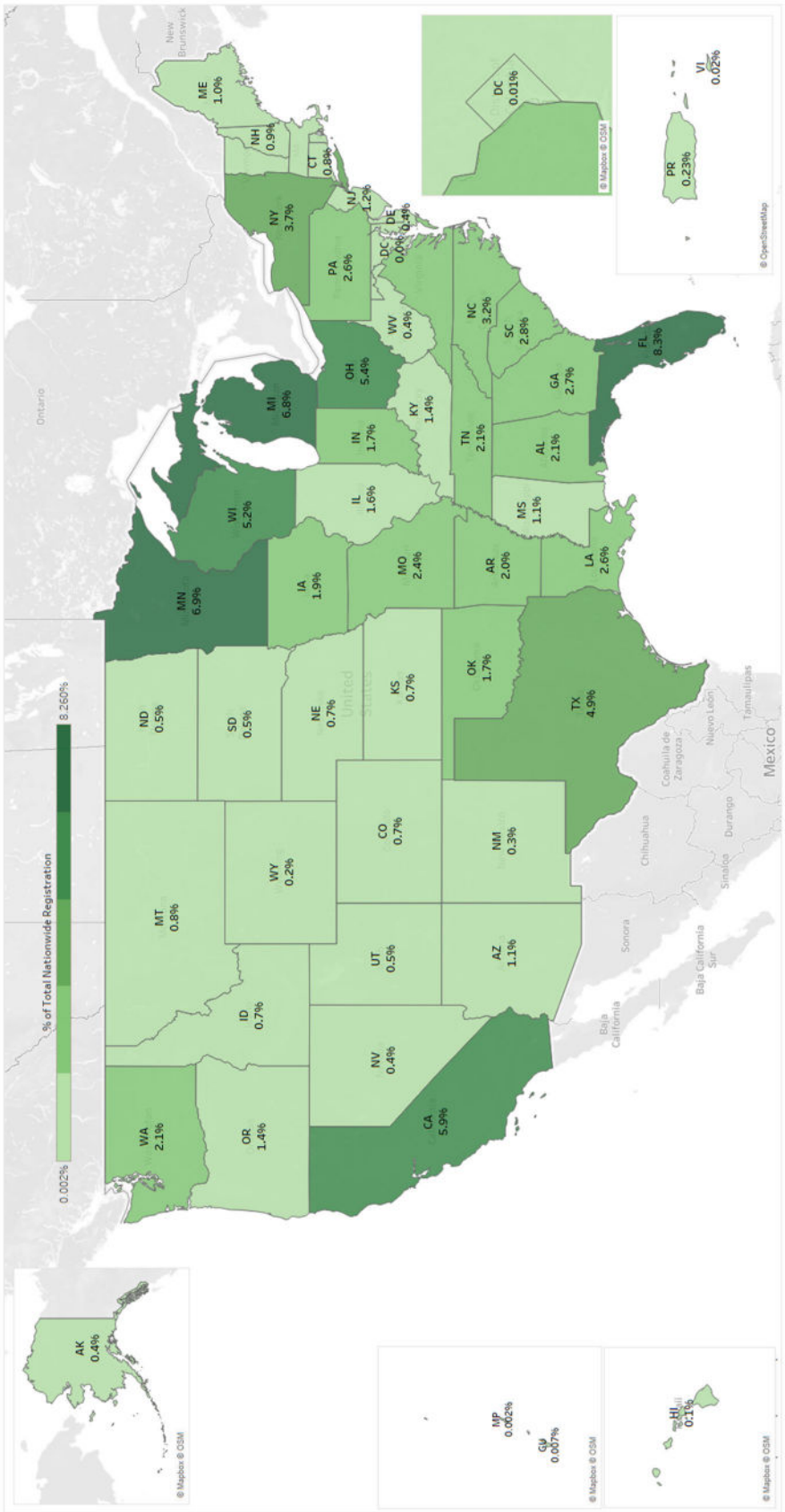


Figure 16 ▪ DISTRIBUTION OF 2021 RECREATIONAL VESSEL REGISTRATION BY STATE

DEPARTMENT OF HOMELAND SECURITY
U.S. Coast Guard
OMB Control Number: 1625-0003

RECREATIONAL BOATING ACCIDENT REPORT

Expires: 07/31/2022

INSTRUCTIONS: 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.

Privacy Act Notice

Authority: 46 U.S.C. 6102 and 33 CFR 173 & 174 authorize the collection of information on boating accidents.
Purpose: 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.
Routine Uses: The Coast Guard shares this information within the agency, and if state and federal law permit it, to the public.

REPORT SUBMISSION

Report required because *(select all that apply)*:

- ☐ At least one person in this accident *died*: If so, how many? _____
- ☐ At least one injured person in this accident *required or was in need of treatment beyond first aid*: If so, how many? _____
- ☐ At least one person in this accident *disappeared* and has not yet been recovered: If so, how many? _____
- ☐ *All* boat and other property *damage (e.g., fishing/hunting gear)* caused by this accident *totaled (or likely totaled)* $2,000 or more:
  - Approximate value of damage to *your* boat: $_____
  - Approximate value of damage to *your* other property: $_____
- ☐ Your or another *boat* in this accident was *(or likely was)* a *total loss*

Report submitted by *(select all that apply)*:

- ☐ Boat Operator *(required if possible)*
- ☐ Boat Owner *(if operator unable, or same as operator)*
- ☐ Other *(describe)*: _____

To be submitted within:
48 hours *(if injury, disappearance or death)*
10 days *(if boat/property damage only)*

To be submitted to: *(Local State Reporting Authority)*

Phone:

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.

For State Agency Use Only

First Name	*Last Name*
Phone:	

First Name	Last Name	Phone	*Primary Cause of Accident*

ACCIDENT SUMMARY

WHEN

Date: *(mm/dd/yyyy)* Time: am ☐ pm ☐ *(select one)*

WHERE

Body of Water Name

Location *(on water)* description

Nearest city/town

County: State:

ACCIDENT DESCRIPTION: *Briefly* describe this accident *(attach extra pages if necessary)*

DAMAGE TO *YOUR* BOAT: *Briefly* summarize any damage to your boat

***YOUR* BOAT – PEOPLE**

# people *on board (including operator)*:	
# people *being towed (e.g., on tubes, skis)*:	
# people *wearing lifejackets (on board or towed)*:	

***OTHER* BOATS INVOLVED IN ACCIDENT**

# of *other* boats involved:	

DAMAGE TO *YOUR* OTHER PROPERTY: *(NOT BOAT)*
Briefly summarize any damage to your other property *(not boat)*

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

YOUR BOAT

BOAT IDENTIFICATION

Your Boat Name:	Manufacturer:
Model Name:	Model Year:
Registration #:	Documentation #:
Hull Identification # *(HIN):*	Rented: ☐ Yes ☐ No

SIZE ESTIMATES

Length: ft.	Depth from transom *(stern)* to keel *(bottommost point)*: ft. in.	Beam width at widest point: ft.

HULL MATERIAL

Type of Hull Material *(select one)*

☐	Fiberglass	☐	Wood	☐	Rubber/vinyl/canvas	☐	Other *(describe):*
☐	Aluminum	☐	Steel	☐	Plastic		

BOAT TYPE

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: ☐ Canoe ☐ Kayak		☐ Propeller	☐ Air thrust
☐ Open motorboat	☐ Houseboat					☐ Sail	☐ Other *(describe):*
☐ Auxiliary sail	☐ Sail *(only)*	☐	Air boat	☐	Standup Paddleboard	☐ Manual	
☐ Pontoon boat	☐ Rowboat	☐	Other (*describe*):			☐ Water jet	

ENGINE

# 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:

SAFETY MEASURES

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? ☐ Yes ☐ No		☐	Federal Agency *(Name):*
US Power Squadrons: VSC Decal? ☐ Yes ☐ 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:	

ACCIDENT DETAILS – EXTERNAL CONDITIONS

WEATHER

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)	

WATER

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

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)*

☐	Recreational
☐	Commercial

Operator/Passenger activities *(select all that apply)*

☐ Fishing	☐ Tubing	☐	Starting engine
☐ 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):*	

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)*

- ☐ Struck the *(e.g., boat, water):*
- ☐ Was struck by a *(e.g., boat, propeller):*
- ☐ Was exposed to carbon monoxide poisoning
- ☐ Received an electric shock
- ☐ Other *(describe):*

Person was wearing lifejacket? ☐ Yes ☐ No

Person received treatment beyond first aid? ☐ Yes ☐ No

Person was admitted to a hospital? ☐ Yes ☐ No

Nature of most serious injury *(select one)*

- ☐ Scrape/bruise
- ☐ Cut
- ☐ Sprain/strain
- ☐ Concussion/brain injury
- ☐ Spinal cord injury
- ☐ Broken/fractured bone
- ☐ Dislocation
- ☐ Internal organ injury
- ☐ Amputation
- ☐ Burn
- ☐ Other *(describe):*

Body part of *most serious* injury *(e.g., head, trunk, leg):*

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)*

- ☐ Struck the *(e.g., boat, water):*
- ☐ Was struck by a *(e.g., boat, propeller):*
- ☐ Was exposed to carbon monoxide poisoning
- ☐ Received an electric shock
- ☐ Other *(describe):*

Nature of death/disappearance *(select one)*

- ☐ Death – by drowning
- ☐ Death – other likely cause *(describe)*
- ☐ Disappeared and not yet recovered

Person was wearing lifejacket? ☐ Yes ☐ No

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 *(select all that apply)*	**On board, prior to accident, was operator wearing:**
☐ None	A lifejacket? ☐ Yes ☐ No
☐ State course	An engine cut-off switch *(Lanyard or wireless device)* if equipped? ☐ Yes ☐ No
☐ USCG Auxiliary course	On board, prior to accident, was operator using:
☐ US Power Squadrons course	Alcohol? ☐ Yes ☐ No
☐ Internet *(name of sponsoring organization)*	Drugs? ☐ Yes ☐ No
☐ Other *(describe)*	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 *(select one)*

☐ 0 to 10 hours ☐ Over 10, up to 100 hours ☐ Over 100, up to 500 hours ☐ Over 500 hours

ACCIDENT DETAILS – OTHER KEY PEOPLE

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.

NAME/ADDRESS

This other key person was a(n) *(select all that apply)*

☐ *Other* boat operator ☐ *Other* boat owner ☐ Owner of *other* damaged property ☐ Passenger on *your* boat ☐ Witness

First Name	MI	Last Name	
Street			
City	State	Zip	Phone
Other boat name *(if any)*		*Other* boat registration # *(if any)*	

NAME/ADDRESS

This other key person was a(n) *(select all that apply)*

☐ *Other* boat operator ☐ *Other* boat owner ☐ Owner of *other* damaged property ☐ Passenger on *your* boat ☐ Witness

First Name	MI	Last Name	
Street			
City	State	Zip	Phone
Other boat name *(if any)*		*Other* boat registration # *(if any)*	

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

YOUR BOAT OPERATOR

NAME/ADDRESS

First Name	MI	Last Name
Street		
City	State	Zip

AGE/GENDER/PHONE

Date of Birth *(mm/dd/yyyy)*	Age	Gender		Male		Female	Phone

YOUR BOAT OWNER

If same as *your* boat *operator* SKIP rest of YOUR BOAT OWNER section.

NAME/ADDRESS/PHONE

First Name	MI	Last Name	
Street			
City	State	Zip	Phone

PERSON SUBMITTING THIS REPORT

If same as *your* boat *operator* OR *owner*, SKIP rest of PERSON SUBMITTING THIS REPORT section.

NAME/ADDRESS/PHONE/ROLE

First Name	MI	Last Name	
Street			
City	State	Zip	Phone

I was a(n) *(select one)*

	Other person on board *this* boat
	Accident witness *not* on board *this* boat
	Other *(describe):*

SIGNATURE OF PERSON SUBMITTING THIS REPORT

Your signature	**Date** *(mm/dd/yyyy)*

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.

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.

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		