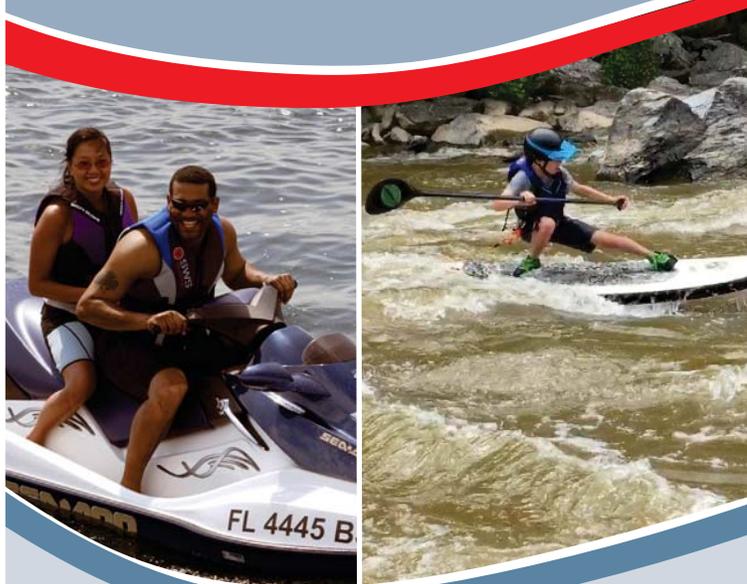


# 2015

## 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 2015, the 57th 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 2015 may be copied and distributed freely in the interest of boating safety. For questions and suggestions regarding content, use the address, telephone number, or email address at the top of this page. For an electronic copy, visit the Boating Safety Division website at [www.uscgboating.org](http://www.uscgboating.org).

*U. B. Gifford Jr.*

VERNE B. GIFFORD  
Captain, U.S. Coast Guard  
Director of Inspections & Compliance

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## 2015 EXECUTIVE SUMMARY

- In 2015, the Coast Guard counted 4,158 accidents that involved 626 deaths, 2,613 injuries and approximately \$42 million dollars of damage to property as a result of recreational boating accidents.
  - The fatality rate was 5.3 deaths per 100,000 registered recreational vessels. This rate represents a 1.9% increase from last year's fatality rate of 5.2 deaths per 100,000 registered recreational vessels.
  - Compared to 2014, the number of accidents increased 2.3%, the number of deaths increased 2.6%, and the number of injuries decreased 2.4%.
- Where cause of death was known, 76% of fatal boating accident victims drowned. Of those drowning victims with reported life jacket usage, 85% were not wearing a life jacket.
- Where instruction was known, 71% of deaths occurred on boats where the operator did not receive boating safety instruction. Only 15% percent of deaths occurred on vessels where the operator had received a nationally-approved boating safety education certificate.
- There were 158 accidents in which at least one person was struck by a propeller. Collectively, these accidents resulted in 27 deaths and 150 injuries.
- Eight out of every ten boaters who drowned were using vessels less than 21 feet in length.
- Operator inattention, operator inexperience, improper lookout, machinery failure, and excessive speed rank as the top five primary contributing factors in accidents.
- Alcohol use is the leading known contributing factor in fatal boating accidents; where the primary cause was known, it was listed as the leading factor in 17% of deaths.
- Twenty-two children under age thirteen lost their lives while boating in 2015. Twelve children (55%) died from drowning. Two children (17%) of those who drowned were wearing a life jacket; half of the remaining ten children who were not wearing a life jacket were not required to do so under State law.
- Where data was known, the most common types of vessels involved in reported accidents were open motorboats (45%), personal watercraft (19%), and cabin motorboats (17%).
- Where data was known, the vessel types with the highest percentage of deaths were open motorboats (46%), kayaks (12%), and canoes (11%).
- The 11,867,049 recreational vessels registered by the states in 2015 represent a 0.5% increase from last year when 11,804,002 recreational vessels were registered.



**Table 1 • 2015 EXECUTIVE SUMMARY**

<b>TOP FIVE PRIMARY ACCIDENT TYPES</b>						
Accident Rank	Accident Type	Number of Accidents		Number of Deaths	Number of Injuries	
1	Collision with recreational vessel	990		36	619	
2	Collision with fixed object	470		58	321	
3	Flooding/swamping	449		56	118	
4	Grounding	350		17	261	
5	Skier mishap	301		12	319	
<b>VESSEL TYPES WITH THE TOP CASUALTY NUMBERS</b>						
Casualty Rank	Type of Boat	Drownings	Other Deaths	Total Deaths	Total Injuries	Total Casualties
1	Open motorboat	180	105	285	1376	1661
2	Personal watercraft	10	23	33	623	656
3	Cabin motorboat	17	19	36	269	305
4	Canoe/kayak	119	20	139	91	230
5	Pontoon	33	13	46	93	139
<b>LIFE JACKET WEAR BY TOP FIVE KNOWN CAUSES OF DEATH</b>						
Known Cause of Death Rank	Cause of Death	Number of Deaths	Life Jacket			
			Worn	Not Worn	Unknown if worn	
1	Drowning	428	63	352	13	
2	Trauma	90	29	49	12	
3	Cardiac arrest	24	8	15	1	
4	Hypothermia	13	10	3	0	
5	Carbon monoxide	7	0	5	2	
<b>TOP TEN KNOWN PRIMARY CONTRIBUTING FACTORS OF ACCIDENTS</b>						
Accident Rank	Contributing Factor	Number of Accidents		Number of Deaths	Number of Injuries	
1	Operator inattention	551		58	353	
2	Operator inexperience	458		37	288	
3	Improper lookout	410		17	278	
4	Machinery failure	307		17	134	
5	Excessive speed	305		18	289	
6	Alcohol use	260		91	228	
7	Hazardous waters	219		80	115	
8	Navigation rules violation	215		8	149	
9	Weather	185		40	60	
10	Force of wave/wake	159		8	136	

### **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 2012-2016 Strategic Plan of the National Recreational Boating Safety Program delineates the Program’s eleven objectives to reduce casualties which include 1) tracking and increasing the number of educated boaters; 2) delivering effective boating safety messages to target audiences; 3) increasing the number of on-the-water boating instruction recipients; 4) studying and increasing life jacket wear rates; 5) increasing boater knowledge of and compliance with navigation rules; 6) decreasing boating under the influence; 7) decreasing the number of defective vessels; 8) increasing boater compliance with vessel carriage requirements; 9) increasing the accuracy and reporting rates of reportable accidents; 10) conducting research and development of boating safety initiatives; and 11) measuring the effectiveness of non-profit organization grants.

To that end, the data in this report is used in many Strategic Plan measurements. Data is used to measure performance against annual and 5-year casualty goals. Contributing factor data is used to measure navigation rules compliance outlined in Objective 5. Alcohol use as a contributing factor is used to measure boating under the influence in Objective 6. Data collection as a whole is focused upon in Objective 9, Accident Reporting. Further, data is used for research endeavors outlined in Objective 10. To view the Strategic Plan of the Program, please visit the Office’s website at <http://www.uscgboating.org/content/strategic-plan.php>.

### **Overview of Statistics**

This report contains statistics on registered recreational vessels and boating accidents during calendar year 2015. Data used to compile the recreational boating accident statistics come from three sources:

1) Boating Accident Report (BAR) data forwarded to the Coast Guard by states with an approved casualty reporting system; and

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.

2) Reports of Coast Guard investigations of fatal boating accidents that occurred on waters under Federal jurisdiction. Recreational boating accident investigation data are used if submitted to the Coast Guard and are relied on as much as possible to provide accurate accident statistics. In the absence of investigation data, information is collected from the accident reports filed by boat operators; and

3) Reports received from news media sources for which the Coast Guard did not receive investigative data. The following table reflects the number of accidents, deaths, injuries, and losses of vessels that were captured in news media sources that met reporting requirements for which the Coast Guard did not receive a report.

<b>Table 2 • NEWS MEDIA ACCIDENTS AND CASUALTIES</b>					
	Accident	Deaths	Injuries	Losses of vessels	Damages
AZ	2	0	2	0	\$0
CA	2	0	1	1	\$202,765
CO	1	1	0	0	\$0
FL	4	3	2	0	\$0
GA	3	3	1	0	\$0
IL	1	0	1	0	\$0
IN	3	2	1	0	\$0
KY	1	1	1	0	\$0
LA	2	2	2	0	\$0
MD	1	1	3	0	\$0
ME	1	0	1	0	\$0
MI	2	2	0	0	\$0
NC	1	0	1	0	\$0
NE	1	0	0	1	\$0
NV	2	1	1	0	\$0
PR	5	5	5	0	\$0
TX	19	11	8	1	\$107,720
VI	2	2	5	0	\$22,370
Offshore, Atlantic Ocean	16	0	5	5	\$3,384,770
Offshore, Gulf of Mexico	5	2	2	1	\$66,795
Offshore, Pacific Ocean	3	0	2	1	\$762,650
<b>Nationally</b>	<b>77</b>	<b>36</b>	<b>44</b>	<b>10</b>	<b>\$4,547,070</b>

**Major Changes to the Publication**

An additional statistic was added to the Executive Summary to present data on victims associated with a propeller strike. A statistic on operator instruction was modified to focus on operators who had not received boating safety instruction.

Four of the statistics in the Executive Summary were changed to remove the records where values were unknown. This new calculation method affects the fourth, fifth, eighth, and tenth bullet points. To find information on the number of “unknown” cases excluded, please reference Tables 35 (on page 65), 22 (on page 45), 5 (on page 19), and 7 (on page 24) respectively.

A series of maps were added to reflect the location of fatal accidents. Figures 12a-d on pages 57-59 plot the location of fatal accidents in the continental United States, Alaska, Hawaii, Puerto Rico and the US Virgin Islands.

**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 72-77.

### **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.

<b>Table 3 Non-Reportable Scenarios with their Casualty Count</b>					
<b>Does not meet Coast Guard policy</b>	Accidents	Deaths	Injuries	Vessels Lost	Damages
A person dies or is injured from natural causes while aboard a vessel where the vessel did not contribute to the casualty.	3	2	1	0	\$0
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.	14	5	10	0	\$100
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.	4	4	0	0	\$2,000
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.	9	8	1	0	\$0
Casualties or damage that occur when the only vessel(s) involved are being used solely for governmental, commercial or criminal activity.	161	19	153	9	\$2,379,681
Casualties or damage that occur when the only vessel(s) involved are foreign vessels and thus not subject to U.S. federal reporting requirements.	2	0	0	0	\$1,510,000
Casualties or damage that occur when the only vessel(s) involved are not numbered and are being used exclusively for racing.	2	1	1	1	\$250,000
Casualties that result from a person climbing aboard an anchored vessel from the water or swimming near an anchored vessel.	1	0	1	0	\$0
Casualties that result from falls from or on docked vessels or vessels that are moored to a permanent structure.	7	6	1	0	\$0
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	0	1	1	\$145,050
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.	8	1	6	3	\$54,895
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.	29	0	0	7	\$343,500
Property damage occurs to a docked or moored vessel due to theft or vandalism.	4	0	2	2	\$47,041
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.	18	0	0	4	\$185,587
<b>Does not meet federal reporting requirements</b>	430	0	32	0	\$310,846
<b>Total</b>	696	46	209	27	\$5,228,700

### **Use of Statistics**

Following are some important points that users of these statistics need to be aware of:

1. An approved casualty reporting system does not include every accident involving a vessel that is being used for recreational purposes. Some accidents are not in the system because they are not required to be reported. Many accidents are not reported because boaters are not aware of the accident reporting regulations or fail to comply with such regulations.

In an attempt to make sure all fatal boating accidents are captured by the casualty reporting system and required data are input into the Boating Accident Report Database (BARD) System, the Coast Guard notifies and provides information from its Marine Information for Safety and Law Enforcement (MISLE) system to state Boating Law Administrators (BLAs) of fatal accidents that occurred in their state. The Coast Guard also sends news media stories to state BLAs on fatal and non-fatal boating accidents that occur in their state to capture accidents that may have been missed.

2. Federal regulations do not require the reporting of accidents on private waters where states have no jurisdiction. Reports of accidents on such waters are included in this report when received by the Coast Guard if they satisfy the other requirements for inclusion.

3. Non-fatal accidents cannot be assumed to have occurred in numbers proportional to the reported statistics because the act of reporting an accident is not a random sampling of accidents in the statistical sense. Rather, selection is based on the ability and willingness of those involved to file a report.

4. The fluctuations in non-fatal accident statistics from year to year may be caused by factors other than the change in the total number of recreational boating accidents. A small change in the low reporting rate may cause a relatively large change in the statistics.

5. Fatal accidents are accidents that involve at least one death. For example, a fatal accident could be a capsizing that resulted in three deaths. It was an accident that had at least one death.

The statistics in this publication are based on accident data submitted by reporting states as of February 29, 2016 with subsequent updates as information is reviewed and standardized. This publication covers only accidents meeting the aforementioned reporting requirements.

# 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 17)**

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, Page 18)**

This table reflects the percentage of accidents that are fatal by time period. The category in which accidents are more frequently fatal span the hours between 2:31am and 4:30am.

### **Primary Contributing Factor of Accidents & Casualties (Table 5, Page 19)**

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 20)**

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 21)**

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

### **Primary Contributing Factor of Deaths (Figure 4, Page 22)**

This figure reflects the first cause listed for all deaths.

### **Primary Contributing Factor of Injuries (Figure 5, Page 23)**

This figure reflects the first cause listed for all injuries.

### **Number of Vessels in Accidents by Vessel Type & Primary Contributing Factor (Table 7, Page 24)**

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 2011-2015 (Table 8, Page 25)**

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 26)**

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 26)**

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 27)**

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 28)**

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-4:30 pm in July on the weekends. However, you could deduce that 2:31 pm-4:30 pm was the time frame during which the highest number of accidents occurred in calendar year 2015. 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 29)**

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 30)**

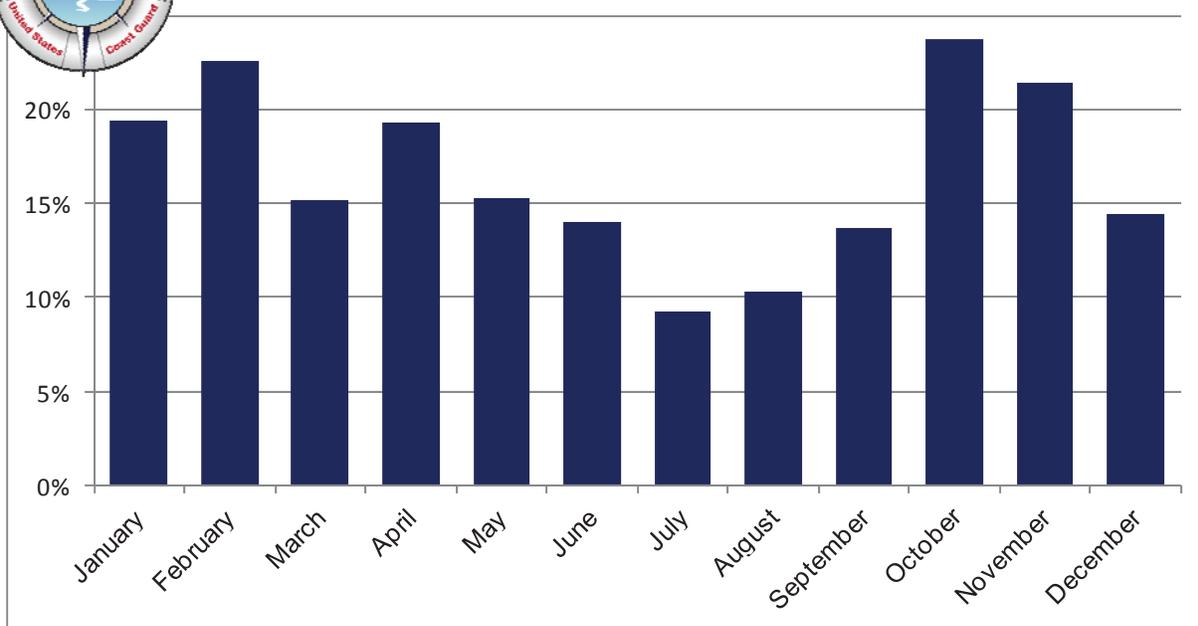
This table examines whether a vessel involved in an accident was rented. It also provides information on whether deaths and injuries occurred on rented vessels.

**Number & Percent of Deaths by Vessel Length (Figure 6 & Table 15, Page 31)**

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.

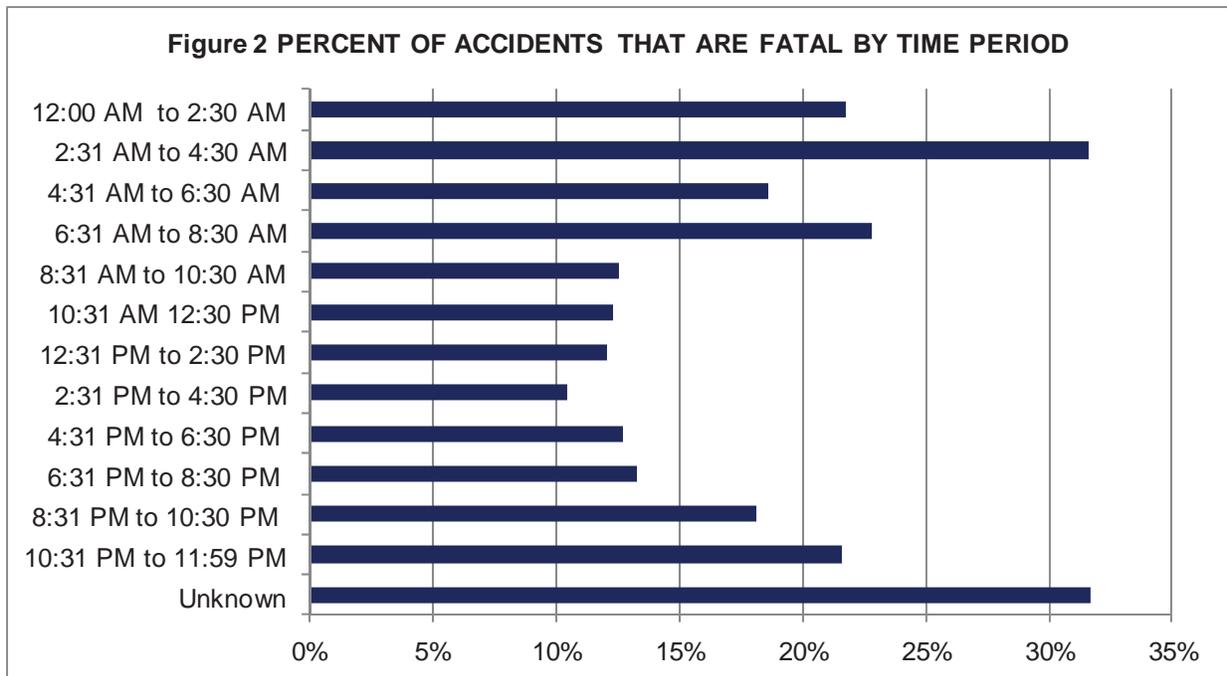


**Figure 1 PERCENT OF ACCIDENTS THAT ARE FATAL BY MONTH**



**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	18	75	93	19%	19
February	19	65	84	23%	20
March	23	129	152	15%	26
April	50	209	259	19%	57
May	73	404	477	15%	78
June	90	553	643	14%	95
July	88	866	954	9%	102
August	73	639	712	10%	80
September	55	348	403	14%	59
October	43	138	181	24%	50
November	25	92	117	21%	28
December	12	71	83	14%	12
Total	569	3589	4158	14%	626





**Table 5 • PRIMARY CONTRIBUTING FACTOR OF ACCIDENTS & CASUALTIES 2015**

		Accidents	Deaths	Injuries
<b>Operation of Vessel</b> <b>2344 Accidents</b> <b>249 Deaths</b> <b>1694 Injuries</b>	Alcohol use	260	91	228
	Drug use	14	10	2
	Excessive speed	305	18	289
	Failure to vent	32	1	41
	Improper lookout	410	17	278
	Inadequate onboard navigation lights	15	1	12
	Navigation rules violation	215	8	149
	Operator inattention	551	58	353
	Operator inexperience	458	37	288
	Restricted vision	40	3	19
	Sharp turn	43	5	34
	Starting in gear	1	0	1
<b>Loading of Passengers or Gear</b> <b>105 Accidents</b> <b>34 Deaths</b> <b>51 Injuries</b>	Improper anchoring	23	3	1
	Improper loading	27	15	7
	Overloading	29	9	24
	People on gunwale, bow or transom	26	7	19
<b>Failure of Boat or Boat Equipment</b> <b>425 Accidents</b> <b>31 Deaths</b> <b>152 Injuries</b>	Equipment failure	61	10	17
	Hull failure	57	4	1
	Machinery failure	307	17	134
<b>Environment</b> <b>645 Accidents</b> <b>142 Deaths</b> <b>355 Injuries</b>	Congested waters	37	0	22
	Dam/lock	10	12	2
	Force of wave/wake	159	8	136
	Hazardous waters	219	80	115
	Missing/inadequate navigation aid	35	2	20
	Weather	185	40	60
<b>Miscellaneous</b> <b>639 Accidents</b> <b>170 Deaths</b> <b>361 Injuries</b>	Carbon monoxide exposure	3	2	5
	Ignition of fuel or vapor	60	2	33
	Sudden medical condition	17	13	5
	Other	371	48	272
	Unknown	188	105	46
<b>All categories combined</b>		<b>4158</b>	<b>626</b>	<b>2613</b>

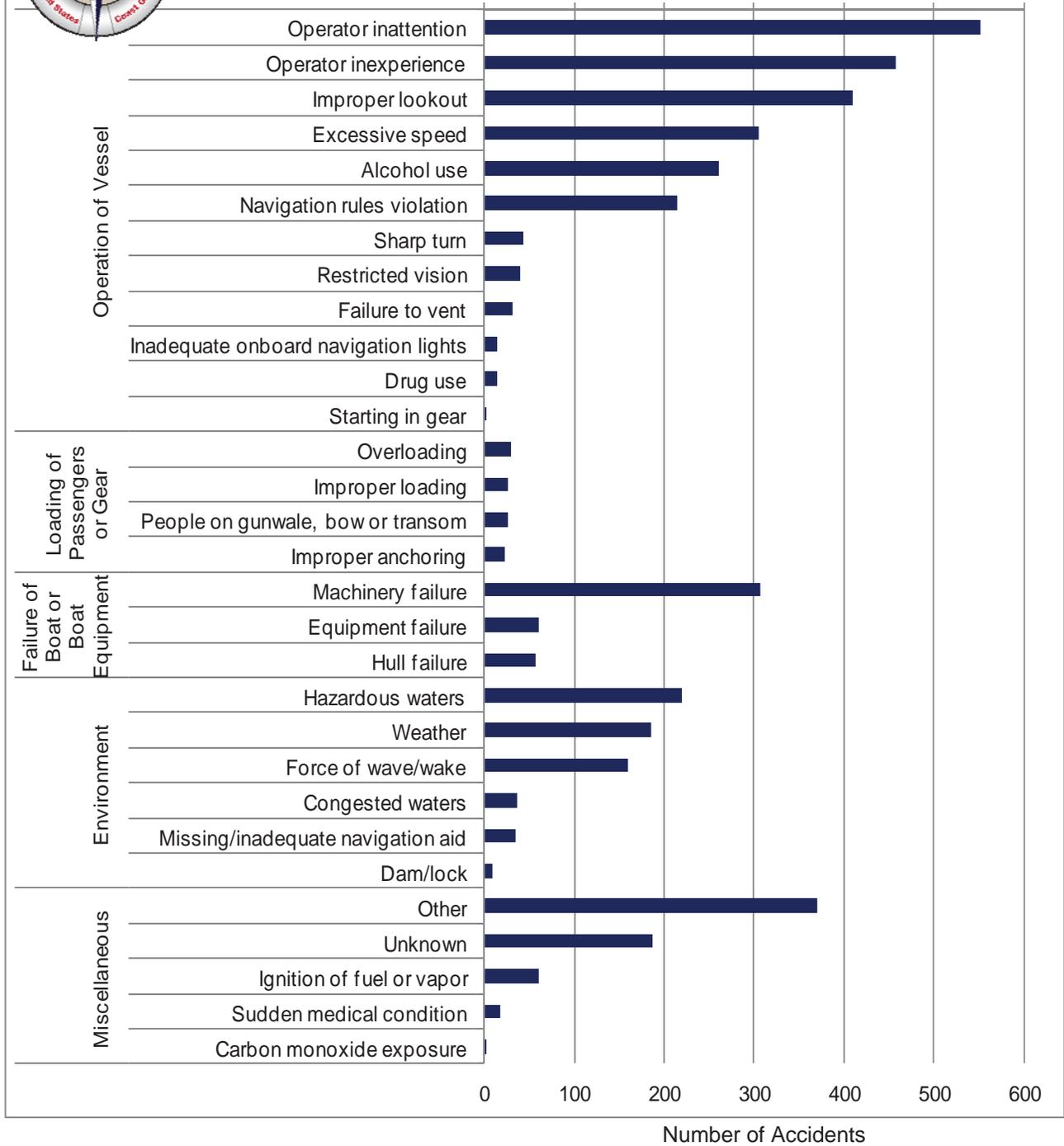


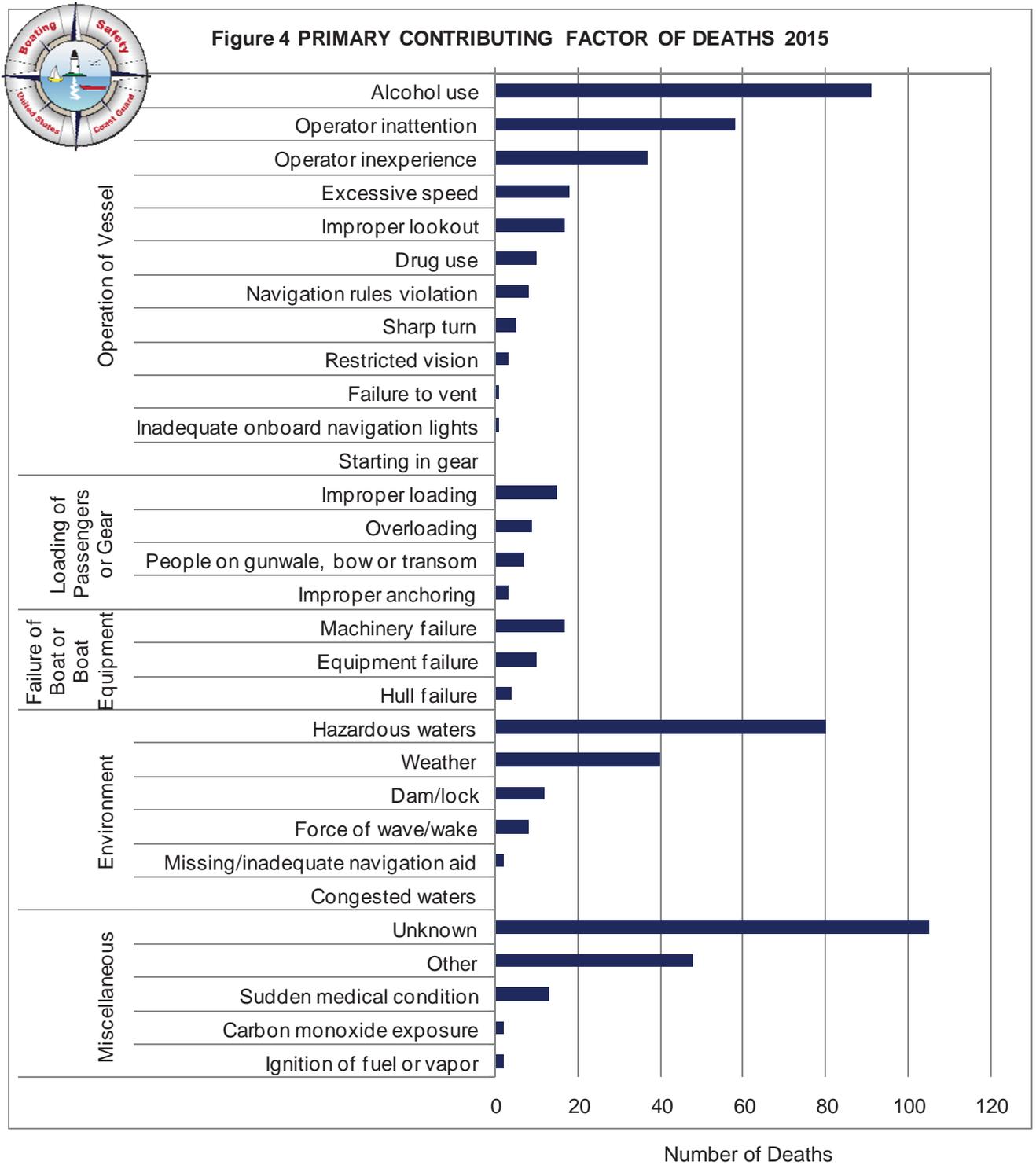
**Table 6 • MACHINERY & EQUIPMENT PRIMARY CONTRIBUTING FACTOR OF ACCIDENTS & CASUALTIES 2015**

		Accidents	Deaths	Injuries
Machinery Failure	Electrical system failure	35	0	7
	Engine failure	157	10	44
	Exhaust system failure	0	0	0
	Fuel system failure	24	0	24
	Shift failure	21	0	4
	Steering system failure	39	3	41
	Throttle failure	21	2	3
	Ventilation system failure	7	1	11
	Not specified	3	1	0
Equipment Failure	Auxiliary equipment failure	29	4	8
	Onboard navigation aid	1	0	0
	Sail dismasting	2	0	0
	Seat broke loose	3	3	0
	Other	19	3	6
	Not specified	7	0	3



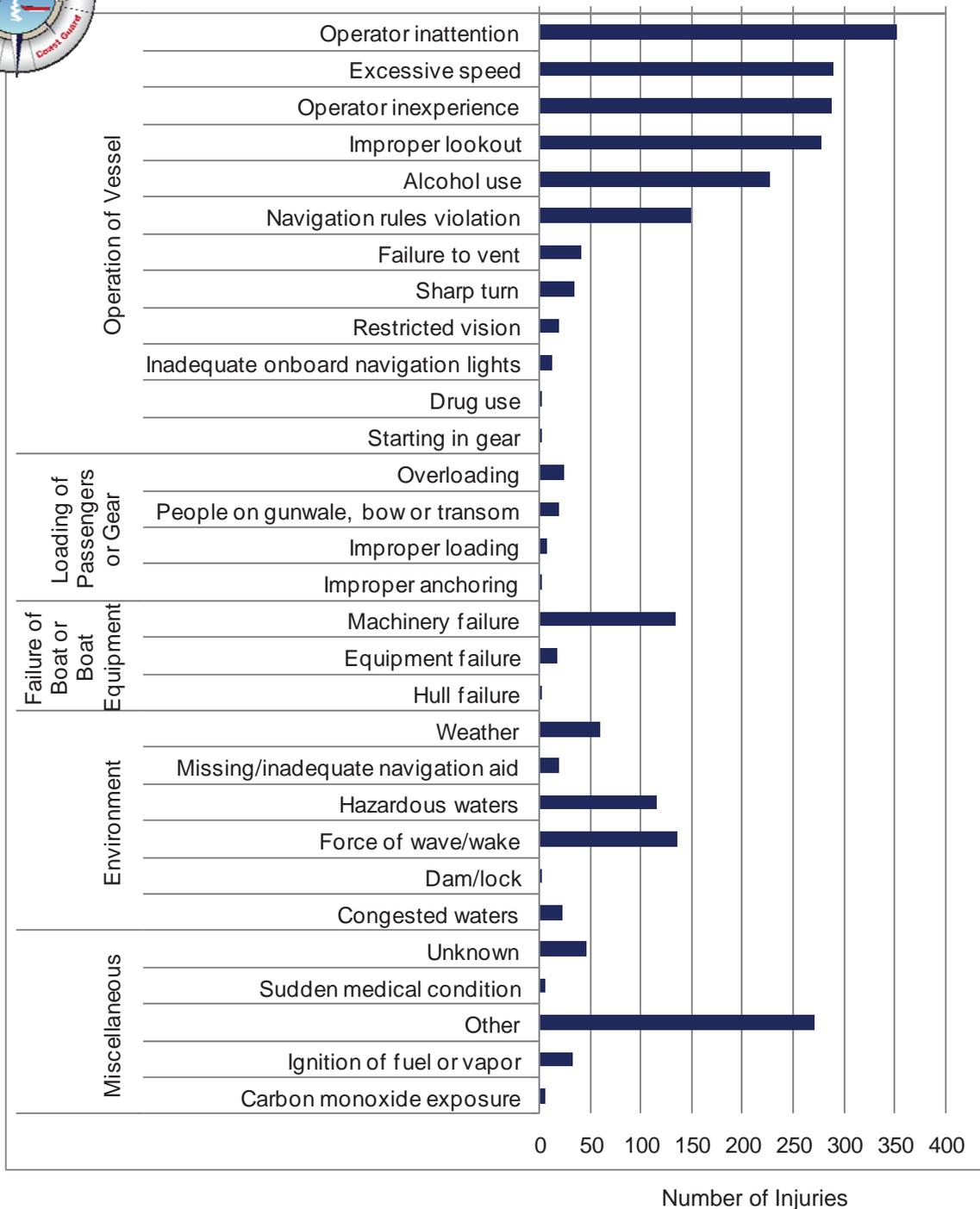
Figure 3 PRIMARY CONTRIBUTING FACTOR OF ACCIDENTS 2015







**Figure 5 PRIMARY CONTRIBUTING FACTOR OF INJURIES 2015**



**Table 7 - NUMBER OF VESSELS IN ACCIDENTS BY VESSEL TYPE & PRIMARY CONTRIBUTING FACTOR 2015**



All vessels	5560	351	3	54	10	16	66	492	32	171	240	58	80	26	27	672	30	366	36	368	804	652	30	26	53	50	1	17	232	387	210
Airboat	37	1	0	2	0	0	0	7	0	0	0	0	0	0	0	3	0	5	0	5	2	5	0	0	0	3	0	0	1	3	0
Auxiliary sailboat	297	13	0	3	0	2	7	11	0	1	15	1	1	4	0	32	1	35	4	22	48	30	0	0	4	3	0	0	32	14	14
Cabin motorboat	908	57	2	6	0	5	12	67	11	11	25	11	28	6	0	90	5	120	3	49	184	79	0	1	13	0	0	0	50	33	40
Canoe	88	11	0	0	1	3	0	1	0	0	25	0	0	0	4	1	0	1	0	0	3	17	4	1	1	0	0	5	0	10	
Houseboat	63	2	1	3	0	0	2	1	0	0	1	0	12	0	0	2	0	5	0	5	8	7	0	0	0	0	0	7	5	2	
Inflatable	40	2	0	0	1	0	0	3	0	0	16	0	0	0	2	1	0	1	0	0	2	4	0	0	1	0	0	1	3	2	
Kayak	133	12	0	0	3	0	0	2	0	4	39	0	0	1	0	1	0	1	0	0	1	9	23	1	0	2	0	2	8	3	21
Open motorboat	2482	170	0	28	4	4	38	193	19	109	92	41	34	13	17	308	17	166	27	124	363	169	23	14	28	21	1	12	97	268	82
Personal watercraft	1023	43	0	5	0	0	2	174	2	27	6	1	2	0	0	181	1	13	0	125	115	270	0	0	1	21	0	0	3	22	9
Pontoon	261	33	0	2	1	1	3	13	0	11	5	3	2	0	1	32	4	16	1	14	45	31	1	9	0	1	0	1	5	22	4
Rowboat	49	2	0	0	0	1	2	1	0	0	10	0	0	1	3	3	0	0	0	2	8	2	0	1	1	0	0	1	3	3	5
Sail (only)	53	3	0	0	0	0	0	2	0	1	1	1	0	0	0	10	0	1	0	2	6	10	0	0	1	0	0	0	11	3	1
Sail (unknown)	7	1	0	0	0	0	0	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Standup paddleboard	8	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	1	0	2
Other	14	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	2	0	1	4	1	0	0	1	0	0	1	0	0	
Unknown	97	1	0	5	0	0	0	13	0	5	2	0	1	1	0	6	1	1	1	18	7	2	1	0	0	1	0	0	5	8	18



**Table 8 - ALCOHOL USE AS A CONTRIBUTING FACTOR IN ACCIDENTS & CASUALTIES BY STATE 2011-2015**

	Accidents					Deaths					Injuries				
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
<b>USA</b>	361	368	305	345	306	149	139	94	137	122	306	313	251	302	258
AL	8	11	7	7	9	6	1	4	5	5	11	13	5	9	4
AK	8	2	2	3	3	8	2	4	3	3	0	0	0	0	0
AZ	7	7	7	7	8	0	3	2	1	2	8	7	9	8	9
AR	7	8	5	7	4	4	2	2	2	2	3	10	3	6	5
CA	13	14	17	14	16	3	6	2	5	3	13	13	15	11	13
CO	3	10	4	2	2	0	4	0	0	1	3	8	5	2	2
CT	1	6	2	2	3	0	4	0	1	0	7	4	1	3	4
DE	0	2	1	2	0	0	1	0	0	0	0	1	2	2	0
DC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FL	25	30	32	30	30	7	9	10	12	11	24	30	22	29	21
GA	16	8	11	7	8	0	4	4	2	4	18	8	7	7	3
HI	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0
ID	7	10	8	4	4	4	2	2	2	2	4	12	8	0	5
IL	18	13	6	17	9	9	5	1	8	5	13	10	3	15	8
IN	7	4	2	10	4	4	0	0	5	1	3	3	2	2	2
IA	2	7	4	6	2	1	7	2	2	1	0	7	0	3	1
KS	3	3	2	1	2	0	1	1	0	1	0	0	1	3	3
KY	4	6	5	11	7	2	2	0	5	2	6	2	6	16	5
LA	6	16	9	20	12	2	6	3	6	4	12	11	12	28	10
ME	6	3	3	5	1	4	1	0	2	1	2	3	2	1	0
MD	12	11	10	7	17	3	4	1	1	8	14	16	5	5	22
MA	5	10	8	5	6	4	5	3	0	3	3	8	6	9	4
MI	11	8	6	8	6	4	1	1	4	4	9	4	4	4	8
MN	8	9	8	8	10	6	3	3	4	7	7	7	5	11	7
MS	4	4	7	2	1	2	1	3	2	0	1	5	5	1	1
MO	9	12	15	16	6	2	2	6	5	2	13	8	20	16	11
MT	1	0	1	3	2	1	0	0	2	2	2	0	0	1	0
NE	4	4	1	1	1	2	1	0	0	0	5	14	2	1	1
NV	4	3	2	6	3	2	0	1	2	2	2	7	1	6	1
NH	2	3	1	2	1	1	2	0	0	1	1	0	4	4	0
NJ	9	6	6	2	3	3	2	0	0	0	2	6	3	3	3
NM	1	3	2	1	0	0	1	0	0	0	0	1	3	1	0
NY	17	16	14	13	14	7	11	6	7	3	19	9	12	7	7
NC	11	11	12	13	20	2	3	4	5	4	8	10	8	11	14
ND	1	2	2	5	2	0	1	1	3	1	0	0	1	3	4
OH	18	10	7	7	8	5	4	1	6	4	21	12	3	0	6
OK	12	8	3	5	7	6	3	3	2	3	6	8	4	5	3
OR	4	1	3	4	7	2	1	3	1	4	1	0	2	5	3
PA	8	9	4	10	3	4	5	1	6	1	2	4	3	9	2
RI	1	1	1	2	3	0	1	0	1	0	0	0	6	0	6
SC	7	14	6	7	7	5	5	4	3	3	3	12	4	5	6
SD	2	1	3	3	4	0	1	0	1	3	1	0	3	1	2
TN	5	6	7	6	10	2	1	3	2	3	6	3	5	7	3
TX	15	21	19	17	7	5	6	5	5	1	8	16	17	12	6
UT	6	1	2	2	2	2	0	1	1	0	5	0	0	1	5
VT	0	0	0	1	1	0	0	0	1	0	0	0	0	0	1
VA	5	3	3	6	4	2	1	0	3	1	10	0	3	3	4
WA	14	14	14	9	11	7	6	5	4	5	11	7	8	7	12
WV	4	1	0	5	4	4	0	0	1	0	2	1	0	5	14
WI	19	14	9	12	11	11	8	2	3	8	17	9	9	12	5
WY	1	2	0	2	0	1	0	0	1	0	0	4	0	2	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	1	0	0	0	0	1	0	0	0	0	2
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
GL	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 2015**

	Vessels Involved	Deaths	Injuries
<b>Totals</b>	5560	626	2613
At anchor	206	23	43
Being towed	32	1	3
Changing direction	509	31	285
Changing speed	555	16	314
Cruising	2413	189	1438
Docking/undocking	144	6	30
Drifting	508	136	214
Idling	48	6	18
Launching/loading	44	8	19
Rowing/paddling	206	117	94
Sailing	96	10	20
Tied to dock/moored	559	4	80
Towing	28	2	5
Trolling	26	11	6
Other	39	4	12
Unknown	147	62	32

**Table 10 • VESSEL ACTIVITY AT THE TIME OF ACCIDENT 2015**

	Vessels Involved	Deaths	Injuries
<b>Totals</b>	5560	626	2613
Boating/relaxation	3545	336	1759
Commercial	66	1	6
Fishing	614	191	226
Fueling	18	0	35
Government	2	0	0
Hunting	39	4	19
Racing	40	8	7
Repairs	44	7	20
Starting engine	66	3	42
Swimming/snorkeling	56	32	22
Towed watersports	437	16	438
Towing	45	1	8
Whitewater	35	22	17
Other	29	3	10
None; not in operation	481	0	0
Unknown	43	2	4



**Table 11 • WEATHER AND WATER CONDITIONS 2015**

		Accidents	Deaths	Injuries
		4158	626	2613
<b>TYPE OF BODY OF WATER</b>	Lakes, Ponds, Reservoirs, Dams, Gravel Pits	1729	285	1233
	Rivers, Streams, Creeks, Swamps, Bayous	968	194	638
	Bays, Inlets, Marinas, Sounds, Harbors, Channels, Canals, Sloughs, Coves	1036	89	505
	Ocean/Gulf	326	43	192
	Great Lakes (not tributaries)	99	15	45
<b>WATER CONDITIONS</b>	Calm (waves less than 6")	2351	281	1587
	Choppy (waves 6" to 2')	1123	150	728
	Rough (waves 2' to 6')	371	63	164
	Very Rough (waves larger than 6')	72	34	36
	Unknown	241	98	98
<b>WIND</b>	None	352	49	273
	Light (0 - 6 mph)	2306	302	1572
	Moderate (7 - 14 mph)	1000	127	567
	Strong (15 - 25 mph)	269	48	106
	Storm (over 25 mph)	53	25	21
	Unknown	178	75	74
<b>VISIBILITY</b>	Poor - Day	77	24	29
	Poor - Night	126	33	84
	Poor - Unknown if day or night	1	0	2
	Fair - Day	172	31	104
	Fair - Night	119	27	80
	Fair- Unknown if day or night	1	0	0
	Good - Day	3063	356	1966
	Good - Night	366	75	236
	Good- Unknown if day or night	4	0	0
	Unknown - Day	152	44	83
	Unknown - Night	61	28	25
Unknown - Unknown if day or night	16	8	4	
<b>WATER TEMPERATURE</b>	39 degrees F and below	31	11	22
	40 - 49 degrees F	89	23	56
	50 - 59 degrees F	267	84	140
	60 - 69 degrees F	664	103	332
	70 - 79 degrees F	1327	150	841
	80 - 89 degrees F	929	104	664
	90 degrees F and above	31	3	23
	Unknown	820	148	535



**Table 12 • TIME RELATED DATA 2015**

	Accidents	Deaths	Injuries	
	4158	626	2613	
<b>Time of Day</b>	12:00 am to 2:30 am	92	24	68
	2:31 am to 4:30 am	38	13	21
	4:31 am to 6:30 am	70	14	34
	6:31 am to 8:30 am	101	24	42
	8:31 am to 10:30 am	247	32	117
	10:31 am 12:30 pm	456	57	289
	12:31 pm to 2:30 pm	679	87	417
	2:31 pm to 4:30 pm	834	97	527
	4:31 pm to 6:30 pm	746	104	521
	6:31 pm to 8:30 pm	496	71	333
	8:31 pm to 10:30 pm	237	54	151
	10:31 pm to 11:59 pm	102	26	74
	Unknown	60	23	19
	<b>Month of Year</b>	January	93	19
February		84	20	35
March		152	26	75
April		259	57	143
May		477	78	276
June		643	95	421
July		954	102	675
August		712	80	476
September		403	59	269
October		181	50	95
November		117	28	64
December		83	12	22
<b>Day of Week</b>	Sunday	1017	131	694
	Monday	374	73	219
	Tuesday	256	53	142
	Wednesday	301	51	180
	Thursday	333	46	194
	Friday	557	95	318
	Saturday	1320	177	866



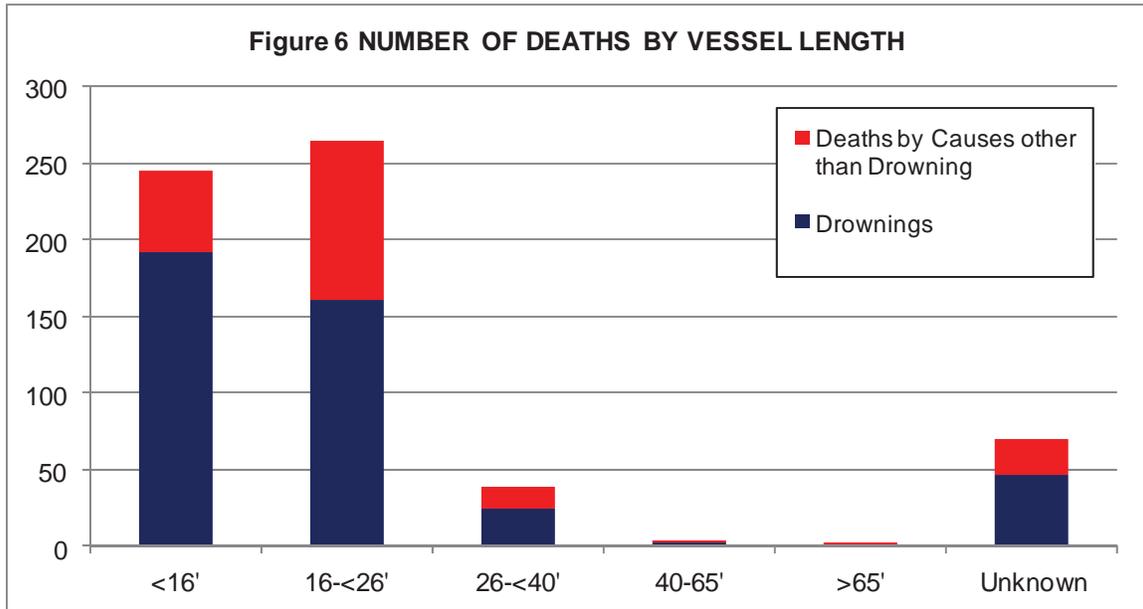
**Table 13 - VESSEL INFORMATION 2015**

		<b>Vessels Involved</b>	<b>Deaths</b>	<b>Injuries</b>
		5560	626	2613
<b>Hull Material</b>	Aluminum	864	171	426
	Fiberglass	4177	291	2012
	Plastic	146	70	68
	Rubber/Vinyl/Canvas	55	34	25
	Steel	32	3	2
	Wood	80	7	23
	Other	8	3	6
	Unknown	198	47	51
	<b>Horsepower</b>	No Engine	359	184
10 hp or less		111	30	44
11 - 25 hp		161	32	78
26 - 75 hp		459	57	216
76 - 150 hp		1113	93	594
151 - 250 hp		765	34	378
Over 250 hp		1037	45	482
Unknown		1555	151	668
<b>Year Built</b>	2015	335	30	181
	2014	284	24	137
	2012 - 2013	348	21	183
	2010 - 2011	180	19	90
	2008 - 2009	238	12	111
	2002 - 2007	1083	71	536
	Prior to 2002	2477	269	1156
	Unknown	615	180	219
<b>Length</b>	Less than 16 feet	1492	246	861
	16 feet to <26 feet	2494	265	1338
	26 feet to <40 feet	809	39	238
	40 feet to 65 feet	378	4	56
	More than 65 feet	55	2	6
	Unknown	332	70	114



**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
		561	4283	716		626	49	459		118	2613	279
<b>All Vessels</b>	5560	561	4283	716	626	49	459	118	2613	279	2075	259
Airboat	37	1	36	0	1	0	1	0	24	0	24	0
Auxiliary sailboat	297	6	247	44	21	0	16	5	38	0	26	12
Cabin motorboat	908	5	794	109	36	1	33	2	269	1	244	24
Canoe	88	17	54	17	68	11	41	16	41	10	27	4
Houseboat	63	10	40	13	2	0	0	2	12	6	2	4
Inflatable	40	3	27	10	26	1	19	6	24	4	13	7
Kayak	133	9	100	24	71	6	53	12	50	2	36	12
Open motorboat	2482	127	2110	245	285	8	228	49	1376	61	1207	108
Personal watercraft	1023	316	604	103	33	7	19	7	623	175	406	42
Pontoon	261	54	168	39	46	9	29	8	93	17	61	15
Rowboat	49	3	38	8	17	0	17	0	26	2	13	11
Sailboat (only)	53	5	42	6	3	2	0	1	17	0	13	4
Sailboat (unknown)	7	0	1	6	0	0	0	0	0	0	0	0
Standup paddleboard	8	2	4	2	7	2	3	2	1	0	1	0
Other	14	2	6	6	1	1	0	0	1	1	0	0
Unknown	97	1	12	84	9	1	0	8	18	0	2	16



**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'	192	54	246	78%
16-<26'	161	104	265	61%
26-<40'	24	15	39	62%
40-65'	3	1	4	75%
>65'	1	1	2	50%
Unknown	47	23	70	67%
<b>Total</b>	<b>428</b>	<b>198</b>	<b>626</b>	<b>68%</b>

# Accident Types



### Explanation of Accident Types Section

The following section contains six tables that examine data related to the events in accidents (termed “accident types”). The tables focus on these events and breaks 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 35)**

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 36-39)**

As mentioned in the introductory 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 449 accidents where flooding/swamping was the first event in the boating accident. There were 56 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 231 accidents and 11 deaths associated with flooding/swamping as a second event and 56 accidents and 15 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 736 accidents and 82 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 40)**

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 41)**

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 42)**

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

**Number of Vessels in Accidents by Primary Accident Type & Engine Type (Table 21, Page 42)**

This table provides information about the number of casualties and vessels associated by propulsion, engine, and primary accident type.



**Table 16 - ACCIDENT, VESSEL & CASUALTY NUMBERS BY PRIMARY ACCIDENT TYPE 2015**

Accident Types	Accidents	Vessels Involved	Drowning Deaths	Other Deaths	Total Deaths	Total Injuries	Damages
<b>All Accident Types</b>	4158	5560	428	198	626	2613	\$41,832,634
Capsizing	299	309	129	41	170	156	\$686,315
Carbon monoxide poisoning	12	12	1	7	8	11	\$3,500
Collision with fixed object	470	562	32	26	58	321	\$4,246,893
Collision with floating object	61	64	5	3	8	28	\$548,321
Collision with commercial vessel	29	61	0	3	3	13	\$934,500
Collision with governmental vessel	4	8	0	0	0	1	\$47,000
Collision with recreational vessel	990	2083	2	34	36	619	\$6,121,064
Collision with submerged object	127	131	7	1	8	56	\$1,965,274
Departed vessel	86	92	46	10	56	33	\$20,615
Ejected from vessel	172	190	14	8	22	143	\$335,480
Electrocution	1	1	0	0	0	1	\$34,000
Fall in vessel	146	158	3	3	6	154	\$65,300
Falls overboard	259	276	125	30	155	107	\$78,750
Fire/explosion (fuel)	174	197	0	3	3	135	\$3,664,941
Fire/explosion (non-fuel)	67	82	0	0	0	4	\$5,807,911
Fire/explosion (unknown origin)	24	30	0	0	0	6	\$5,869,925
Flooding/swamping	449	479	45	11	56	118	\$6,443,335
Grounding	350	359	11	6	17	261	\$4,888,466
Person struck by propeller	42	43	0	2	2	41	\$710
Person struck by vessel	36	45	0	3	3	35	\$2,800
Sinking	0	0	0	0	0	0	\$0
Skier mishap	301	315	7	5	12	319	\$5,490
Sudden medical condition	2	2	0	0	0	2	\$0
Other	57	61	1	2	3	49	\$62,044

Table 17 - FREQUENCY OF EVENTS IN ACCIDENTS & CASUALTIES NATIONWIDE							
 <b>2015</b>	First Event in an Accident	Second Event in an Accident	Third Event in an Accident	Total Times Event Occurred in all Accidents	Deaths Associated with Event in all Accidents	Injuries Associated with Event in all Accidents	Damages Associated with Event in all Accidents
	Capsizing	299	241	56	596	226	293
Carbon monoxide poisoning	12	0	1	13	8	14	\$21,500
Collision with fixed object	470	73	10	553	62	385	\$5,195,040
Collision with floating object	61	5	1	67	11	29	\$578,821
Collision with commercial vessel	29	4	0	33	4	13	\$954,100
Collision with governmental vessel	4	0	0	4	0	1	\$47,000
Collision with recreational vessel	990	59	6	1055	37	650	\$6,575,775
Collision with submerged object	127	2	0	129	8	56	\$1,973,274
Departed vessel	86	39	13	138	70	57	\$308,765
Ejected from vessel	172	576	369	1117	316	931	\$5,696,172
Electrocution	1	1	0	2	0	3	\$44,000
Fall in vessel	146	268	43	457	22	682	\$3,837,367
Falls overboard	259	33	4	296	169	125	\$234,191
Fire/explosion (fuel)	174	4	0	178	3	136	\$3,878,941
Fire/explosion (non-fuel)	67	4	0	71	0	7	\$6,007,411
Fire/explosion (unknown origin)	24	1	0	25	0	6	\$5,875,925
Flooding/swamping	449	231	56	736	82	216	\$13,574,146
Grounding	350	56	32	438	30	312	\$5,706,612
Person struck by propeller	42	94	22	158	27	150	\$106,485
Person struck by vessel	36	228	16	280	35	347	\$780,330
Sinking	0	109	75	184	27	35	\$5,798,853
Skier mishap	301	12	2	315	13	338	\$13,590
Sudden medical condition	2	0	0	2	0	2	\$0
Other	57	10	0	67	3	56	\$83,443
Unknown	0	0	0	0	0	0	\$0
<b>2014</b>							
Capsizing	280	223	47	550	209	287	\$3,438,083
Carbon monoxide poisoning	6	0	0	6	0	8	\$0
Collision with fixed object	452	59	10	521	53	402	\$4,570,680
Collision with floating object	54	4	1	59	4	37	\$882,413
Collision with commercial vessel	18	1	0	19	7	9	\$357,130
Collision with governmental vessel	5	0	0	5	0	0	\$28,700
Collision with recreational vessel	937	45	6	988	42	677	\$7,779,435
Collision with submerged object	118	0	0	118	10	55	\$1,549,583

Table 17 Continued • FREQUENCY OF EVENTS IN ACCIDENTS & CASUALTIES NATIONWIDE							
 <b>2014</b> 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	99	77	17	193	90	102
Ejected from vessel	151	565	298	1014	279	936	\$6,455,578
Electrocution	1	1	0	2	1	1	\$6,300
Fall in vessel	147	251	63	461	25	668	\$3,392,811
Falls overboard	281	29	1	311	168	159	\$97,302
Fire/explosion (fuel)	152	6	2	160	3	117	\$4,333,956
Fire/explosion (non-fuel)	75	5	1	81	2	10	\$5,187,286
Fire/explosion (unknown origin)	36	0	0	36	0	8	\$3,277,185
Flooding/swamping	463	223	56	742	104	259	\$15,724,140
Grounding	359	57	20	436	20	292	\$6,267,509
Person struck by propeller	47	83	23	153	22	148	\$112,345
Person struck by vessel	31	192	22	245	23	313	\$891,727
Sinking	0	100	59	159	25	32	\$4,993,021
Skier mishap	292	21	0	313	8	337	\$11,280
Sudden medical condition	1	3	0	4	3	1	\$10,000
Other	55	14	4	73	2	69	\$1,167,171
Unknown	4	0	0	4	8	0	\$17,500
<b>2013</b>							
Capsizing	256	262	41	559	175	333	\$4,568,312
Carbon monoxide poisoning	11	0	0	11	4	31	\$0
Collision with fixed object	427	64	4	495	60	291	\$4,778,809
Collision with floating object	43	2	0	45	2	17	\$455,023
Collision with commercial vessel	19	1	0	20	5	6	\$270,470
Collision with governmental vessel	9	1	0	10	0	10	\$86,128
Collision with recreational vessel	947	52	3	1002	37	656	\$6,495,709
Collision with submerged object	145	1	0	146	10	60	\$3,022,991
Departed vessel	85	34	11	130	66	61	\$326,635
Ejected from vessel	167	541	319	1027	268	925	\$6,463,758
Electrocution	4	0	0	4	2	2	\$5,000
Fall in vessel	136	286	48	470	22	655	\$4,069,745
Falls overboard	281	31	1	313	156	158	\$89,135
Fire/explosion (fuel)	137	6	0	143	0	101	\$6,309,934
Fire/explosion (non-fuel)	73	1	0	74	0	3	\$5,905,767
Fire/explosion (unknown origin)	9	0	0	9	0	3	\$370,900
Flooding/swamping	430	228	54	712	94	249	\$12,762,290

Table 17 Continued • FREQUENCY OF EVENTS IN ACCIDENTS & CASUALTIES NATIONWIDE							
	First Event in an Accident	Second Event in an Accident	Third Event in an Accident	Total Times Event Occurred in all Accidents	Deaths Associated with Event in all Accidents	Injuries Associated with Event in all Accidents	Damages Associated with Event in all Accidents
Grounding	399	50	12	461	21	278	\$5,771,281
Person struck by propeller	58	85	31	174	23	162	\$160,560
Person struck by vessel	26	207	18	251	24	309	\$653,828
Sinking	0	90	56	146	20	23	\$5,077,352
Skier mishap	332	9	0	341	12	365	\$1,110
Sudden medical condition	4	3	1	8	5	3	\$0
Other	57	9	0	66	1	59	\$436,500
Unknown	7	0	0	7	7	1	\$3,000
<b>2012</b>							
Capsizing	289	295	38	622	194	385	\$3,587,942
Carbon monoxide poisoning	13	0	0	13	3	25	\$0
Collision with fixed object	475	53	3	531	51	367	\$4,110,405
Collision with floating object	33	0	0	33	2	19	\$182,267
Collision with commercial vessel	20	2	0	22	1	16	\$296,968
Collision with governmental vessel	7	1	0	8	0	7	\$26,900
Collision with recreational vessel	1010	33	5	1048	47	727	\$6,787,720
Collision with submerged object	161	1	1	163	12	56	\$1,019,215
Departed vessel	104	40	5	149	96	77	\$113,749
Ejected from vessel	151	618	316	1085	269	1018	\$5,120,544
Electrocution	1	0	0	1	2	6	\$0
Fall in vessel	190	295	61	546	34	776	\$2,588,780
Falls overboard	331	28	1	360	210	183	\$201,491
Fire/explosion (fuel)	157	9	1	167	5	99	\$2,979,827
Fire/explosion (non-fuel)	96	3	0	99	0	7	\$9,929,520
Fire/explosion (unknown origin)	11	0	0	11	2	0	\$940,500
Flooding/swamping	509	220	50	779	101	301	\$11,888,553
Grounding	422	58	16	496	26	286	\$7,811,552
Person struck by propeller	55	99	27	181	19	187	\$125,099
Person struck by vessel	37	215	18	270	30	319	\$741,967
Sinking	0	130	61	191	28	64	\$5,622,918
Skier mishap	387	19	0	406	20	414	\$6,773
Sudden medical condition	2	0	0	2	1	1	\$0
Other	53	4	0	57	4	48	\$71,775
Unknown	1	0	0	1	1	0	\$0

Table 17 Continued • FREQUENCY OF EVENTS IN ACCIDENTS & CASUALTIES NATIONWIDE							
 <b>2011</b>	First Event in an Accident	Second Event in an Accident	Third Event in an Accident	Total Times Event Occurred in all Accidents	Deaths Associated with Event in all Accidents	Injuries Associated with Event in all Accidents	Damages Associated with Event in all Accidents
	Capsizing	316	271	41	628	249	381
Carbon monoxide poisoning	7	0	0	7	3	14	\$0
Collision with fixed object	460	47	6	513	59	406	\$4,928,304
Collision with floating object	42	0	1	43	4	15	\$579,330
Collision with commercial vessel	25	1	0	26	1	23	\$575,665
Collision with governmental vessel	4	1	0	5	1	3	\$13,000
Collision with recreational vessel	1002	48	4	1054	41	691	\$6,575,400
Collision with submerged object	196	2	0	198	19	71	\$2,134,076
Departed vessel	115	38	4	157	97	69	\$71,515
Ejected from vessel	222	597	308	1127	354	1072	\$4,593,528
Electrocution	2	0	0	2	0	2	\$0
Fall in vessel	196	274	51	521	40	735	\$3,164,234
Falls overboard	359	30	1	390	213	182	\$147,764
Fire/explosion (fuel)	135	2	0	137	5	99	\$3,349,516
Fire/explosion (non-fuel)	72	1	0	73	1	8	\$24,142,289
Fire/explosion (unknown origin)	11	0	0	11	1	2	\$1,059,368
Flooding/swamping	501	185	29	715	111	246	\$11,118,756
Grounding	338	36	16	390	24	224	\$5,301,218
Person struck by propeller	57	124	16	197	35	192	\$91,412
Person struck by vessel	36	226	21	283	35	342	\$545,642
Sinking	0	122	46	168	34	51	\$4,079,266
Skier mishap	436	4	0	440	14	461	\$8,700
Sudden medical condition	2	0	0	2	1	1	0
Other	53	4	0	57	1	52	\$64,350
Unknown	1	0	0	1	0	1	\$0



**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	
<b>All lengths</b>	5560	309	12	562	64	61	8	2083	131	92	190	1	158	276	197	82	30	479	359	43	45	0	315	2	61	0	428	198	626	2613	
4 feet	1	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
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	0
6 feet	8	5	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	3	0	3	4	
7 feet	11	1	0	0	0	0	0	7	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	8	
8 feet	88	16	0	6	2	0	0	36	1	0	5	0	3	11	3	0	0	2	1	0	1	0	1	0	0	0	16	1	17	53	
9 feet	108	8	0	6	2	1	0	50	2	1	5	0	6	4	2	0	0	5	6	0	5	0	5	0	0	0	8	3	11	68	
10 feet	498	35	0	34	2	3	0	285	1	4	45	0	16	33	1	0	0	12	10	0	3	0	11	1	2	0	29	19	48	286	
11 feet	303	16	0	18	0	0	2	171	1	1	35	0	6	27	0	0	0	4	6	0	3	0	11	0	2	0	15	4	19	187	
12 feet	159	32	0	10	4	0	0	49	0	3	9	0	7	17	0	0	0	18	3	2	1	0	4	0	0	0	40	10	50	76	
13 feet	55	10	0	9	0	2	0	14	2	0	5	0	1	5	0	1	0	5	0	0	0	0	1	0	0	0	15	2	17	33	
14 feet	137	20	0	11	0	0	0	27	8	1	10	0	2	17	0	0	0	33	3	1	1	0	1	1	1	0	41	9	50	85	
15 feet	124	14	0	12	0	0	0	25	8	1	3	0	2	9	1	0	0	38	7	0	0	0	2	0	2	0	23	6	29	61	
<b>Under 16 ft</b>	1492	158	0	106	10	6	2	664	23	11	118	0	43	126	7	1	0	118	36	3	15	0	36	2	7	0	192	54	246	861	
16 feet	252	23	0	32	5	1	0	59	8	5	3	0	6	29	4	0	1	49	10	0	1	0	16	0	0	0	39	17	56	127	
17 feet	282	18	0	26	4	3	0	70	8	5	14	0	8	17	6	2	0	44	23	3	2	0	26	0	3	0	31	9	40	167	
18 feet	313	10	0	32	2	6	0	103	11	5	10	0	14	7	9	1	0	43	22	5	7	0	23	0	3	0	13	17	30	160	
19 feet	264	6	1	20	3	0	2	90	6	10	7	0	6	6	17	0	1	24	20	4	3	0	36	0	2	0	13	9	22	165	
20 feet	359	7	1	33	3	1	1	116	12	7	2	0	17	12	27	9	0	35	21	6	1	0	42	0	6	0	15	16	31	203	
21 feet	256	6	1	21	3	1	2	80	8	6	5	0	7	9	15	2	1	17	31	2	2	0	32	0	5	0	11	10	21	141	
22 feet	244	2	0	29	6	4	0	72	8	6	1	0	6	4	13	7	1	21	23	5	1	0	30	0	5	0	10	9	19	118	
23 feet	177	6	0	20	3	2	0	50	7	3	4	0	8	6	10	2	2	9	12	3	2	0	24	0	4	0	9	6	15	112	
24 feet	200	3	0	23	7	1	0	68	3	9	3	0	9	6	7	3	1	14	18	4	1	0	15	0	5	0	13	8	21	90	
25 feet	147	2	0	13	2	2	1	49	9	4	7	0	4	7	7	1	0	16	16	1	0	0	5	0	1	0	7	3	10	55	
<b>16 ft to less than 26 ft</b>	2494	83	3	249	38	21	6	757	80	60	56	0	85	103	115	27	7	272	196	33	20	0	249	0	34	0	161	104	265	1338	
26 feet	102	1	0	15	1	0	0	36	1	0	0	0	6	4	6	2	0	12	8	1	0	0	8	0	1	0	5	0	5	47	
27 feet	82	1	0	9	2	1	0	37	0	0	0	1	1	1	6	5	0	4	11	0	0	0	3	0	0	0	3	0	3	25	
28 feet	97	2	2	14	2	2	0	42	3	3	0	0	1	0	6	2	0	4	10	1	1	0	2	0	0	0	1	5	6	32	
29 feet	31	1	1	3	0	2	0	11	1	0	1	0	0	0	3	1	0	1	3	1	0	0	1	0	1	0	0	1	1	12	
30 feet	84	0	0	10	4	1	0	28	3	2	1	0	2	3	8	3	1	4	11	1	0	0	0	0	2	0	5	3	8	22	
31 feet	45	1	0	4	1	0	0	21	0	0	0	0	1	0	5	2	0	2	6	0	0	0	0	0	2	0	0	1	1	6	
32 feet	58	1	3	7	1	2	0	26	1	1	0	0	1	1	1	4	2	2	5	0	0	0	0	0	0	0	2	2	4	25	
33 feet	56	0	0	11	1	1	0	22	3	1	0	0	1	0	3	0	0	4	7	0	2	0	0	0	0	0	1	2	3	8	
34 feet	49	0	0	5	0	1	0	19	2	1	0	0	1	1	2	5	2	2	7	0	0	0	0	0	1	0	3	0	3	12	
35 feet	41	2	0	10	0	1	0	21	0	0	0	0	2	0	1	1	0	2	1	0	0	0	0	0	0	0	0	0	0	9	
36 feet	52	0	0	7	0	0	0	20	0	1	0	0	0	3	10	2	2	0	6	0	0	0	1	0	0	0	1	0	1	9	
37 feet	40	0	1	8	0	0	0	21	1	0	0	0	1	2	3	1	0	0	1	0	0	0	0	0	1	0	1	1	2	6	
38 feet	48	0	0	7	0	2	0	27	0	0	0	0	0	1	3	1	1	2	4	0	0	0	0	0	0	0	1	0	1	20	
39 feet	24	0	0	5	2	0	0	8	1	0	1	0	0	1	0	1	1	1	3	0	0	0	0	0	0	0	1	0	1	5	
<b>26 ft to less than 40 ft</b>	809	9	7	115	14	13	0	339	16	9	3	1	17	17	57	30	9	40	83	4	3	0	15	0	8	0	24	15	39	238	
40 ft to 65 ft	378	3	1	54	0	15	0	178	8	6	0	0	9	3	14	21	7	24	28	0	1	0	0	0	6	0	3	1	4	56	
Over 65 ft	55	2	0	12	0	1	0	30	0	0	0	0	0	0	0	1	4	2	3	0	0	0	0	0	0	0	1	1	2	6	
Unknown	332	54	1	26	2	5	0	115	4	6	13	0	4	27	4	2	3	23	13	3	6	0	15	0	6	0	47	23	70	114	

**Table 19 - NUMBER OF VESSELS IN ACCIDENTS BY VESSEL TYPE & PRIMARY ACCIDENT TYPE WITH NUMBER OF CASUALTIES BY CASUALTY TYPE & VESSEL TYPE 2015**

	Injuries	2613
	Total deaths	626
	Deaths by causes other than drowning	198
	Drownings	428
	Unknown	0
	Other	61
	Sudden medical condition	2
	Skier mishap	315
	Sinking	0
	Person struck by vessel	45
	Person struck by propeller	43
	Grounding	359
	Flooding/swamping	479
	Fire/explosion (unknown origin)	30
	Fire/explosion (non-fuel)	82
	Fire/explosion (fuel)	197
	Falls overboard	276
	Fall in vessel	158
	Electrocution	1
	Ejected from vessel	190
	Departed vessel	92
	Collision with submerged object	131
	Collision with recreational vessel	2083
	Collision with governmental vessel	8
	Collision with commercial vessel	61
	Collision with floating object	64
	Collision with fixed object	562
	Carbon monoxide exposure	12
	Capsizing	309
	All accident types	5560
<b>All vessels</b>		37
Airboat		297
Auxiliary sailboat		908
Cabin motorboat		88
Canoe		63
Houseboat		40
Inflatable		133
Kayak		2482
Open motorboat		1023
Personal watercraft		261
Pontoon		49
Rowboat		53
Sailboat (only)		7
Sailboat (unknown)		8
Standup paddleboard		14
Other		97
Unknown		18





# 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 45)**

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 46)**

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 47)**

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, 2004-2015 (Figure 9 & Table 25, Page 48)**

This table and accompanying figure focus on the percentage of deaths that occurred on each vessel type for the past ten 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, Page 49)**

This table documents the age of fatal accident victims by vessel type. It also delineates the number of drownings, non-drownings, and total deaths by age.

### **Number of Injured Victims by Age & Vessel Type (Table 27, Page 50)**

This table documents the age of injured victims by vessel type.

### **Nature of Primary Injury Type by Area of Injury 2014 (Table 28, Page 51)**

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, 2015 (Figure 10, Page 51)**

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

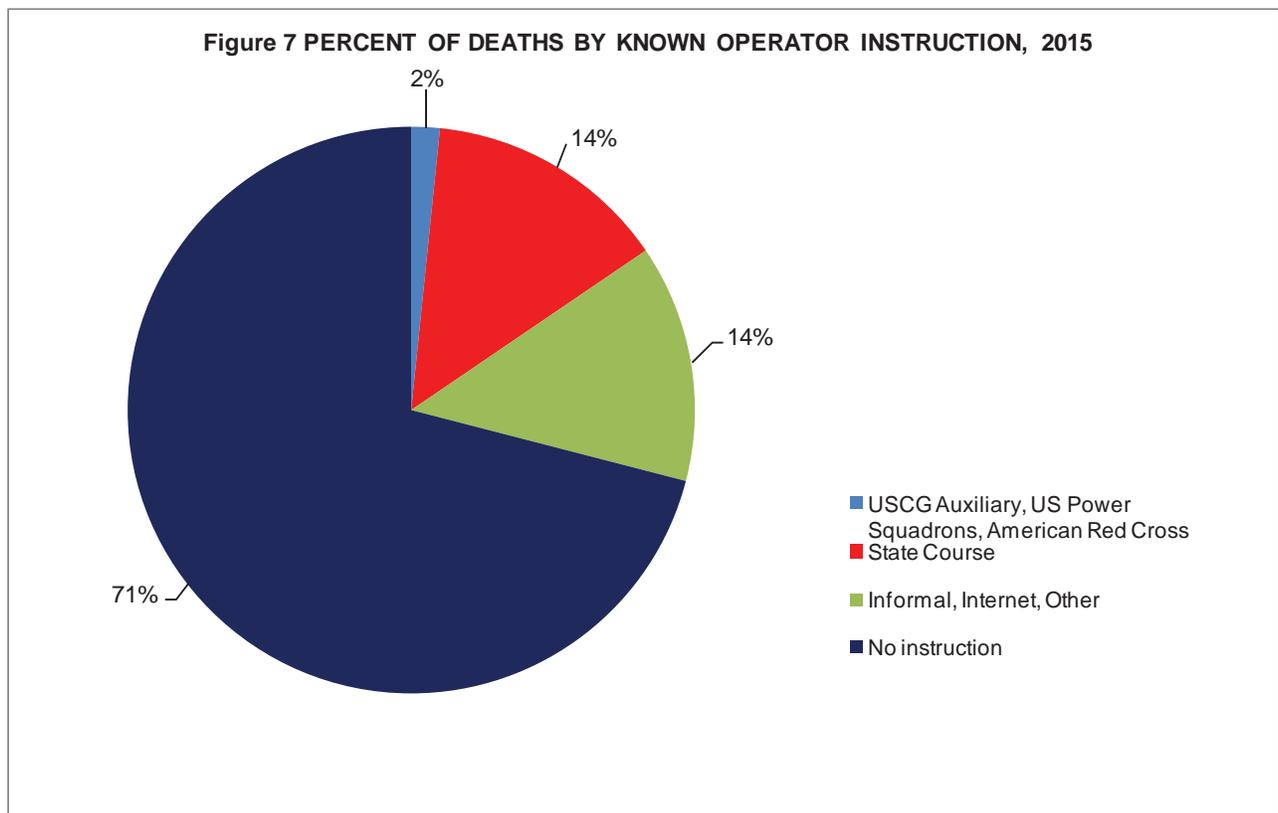
 <b>Table 22 • OPERATOR INFORMATION 2015</b>				
		Vessels Involved	Deaths	Injuries
		5560	626	2613
<b>Age of Operator</b>	12 years and under	16	1	7
	13 to 18 years	230	17	129
	19 to 25 years	540	59	337
	26 to 35 years	830	83	503
	36 to 55 years	1740	207	960
	Over 55 years	1187	198	534
	Unknown	353	47	99
	No operator	664	14	44
<b>Operator's Experience</b>	No Experience	31	9	15
	Under 10 hours	479	58	271
	10 to 100 hours	1003	89	566
	101 to 500 hours	1655	143	896
	Over 500 Hours	615	36	316
	Unknown	1113	277	505
	No Operator	664	14	44
<b>Number of Persons on Board</b>	None	297	0	5
	One	1556	220	502
	Two	1443	174	754
	Three	614	69	387
	Four	491	55	303
	Five	278	39	197
	Six	197	18	142
	Seven	128	12	102
	Eight	97	8	62
	Nine	64	11	59
	Ten	26	4	16
	More than 10	50	2	50
	Unknown	319	14	34
<b>Education of Operator</b>	American Red Cross	5	0	3
	Informal	240	28	122
	Internet Course	74	6	57
	State Course	787	43	444
	US Power Squadrons	60	1	23
	USCG Auxiliary	156	4	74
	Other	207	8	90
	No Education	2183	220	1230
	Unknown	1184	302	526
	No Operator	664	14	44

**BOATING SAFETY INSTRUCTION**



**Table 23 • NUMBER OF DEATHS BY TYPE OF OPERATOR BOATING INSTRUCTION 2015**

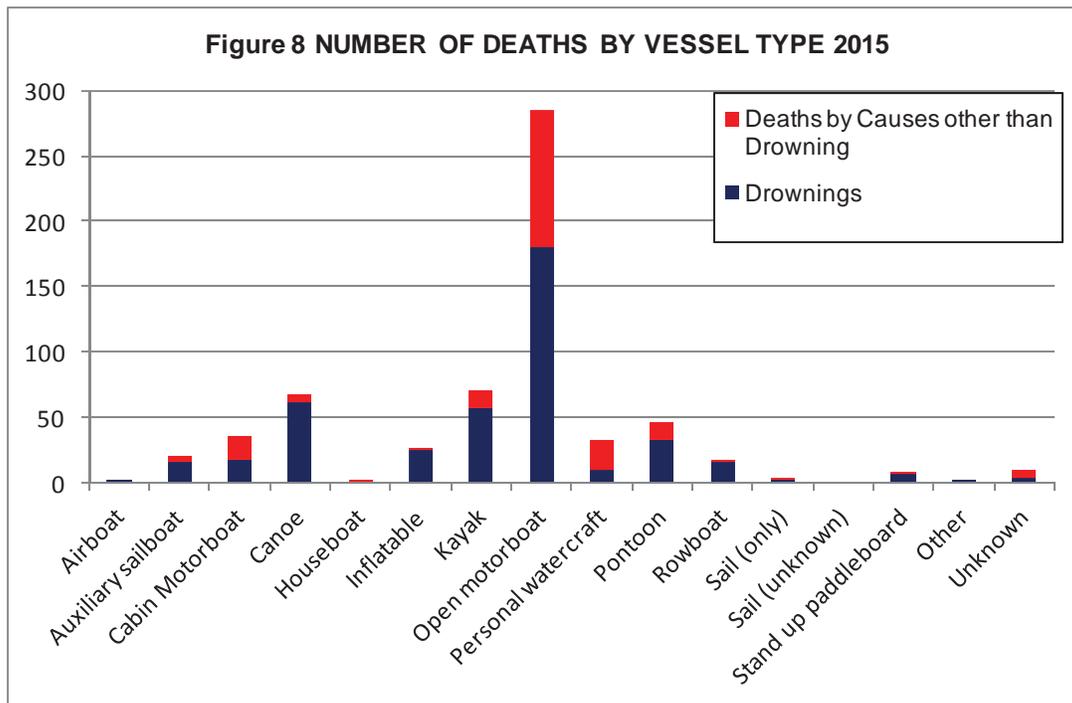
Type of Boating Instruction	Deaths
American Red Cross	0
Informal	28
Internet Course	6
State Course	43
USCG Auxiliary	4
US Power Squadrons	1
Other	8
No Education	220
<b>Total Deaths - Known Operator Instruction</b>	<b>310</b>
<b>Total Deaths - Unknown Operator Instruction</b>	<b>302</b>
<b>Total Deaths - No Operator</b>	<b>14</b>
<b>Total Deaths - Known &amp; Unknown Operator Instruction</b>	<b>626</b>



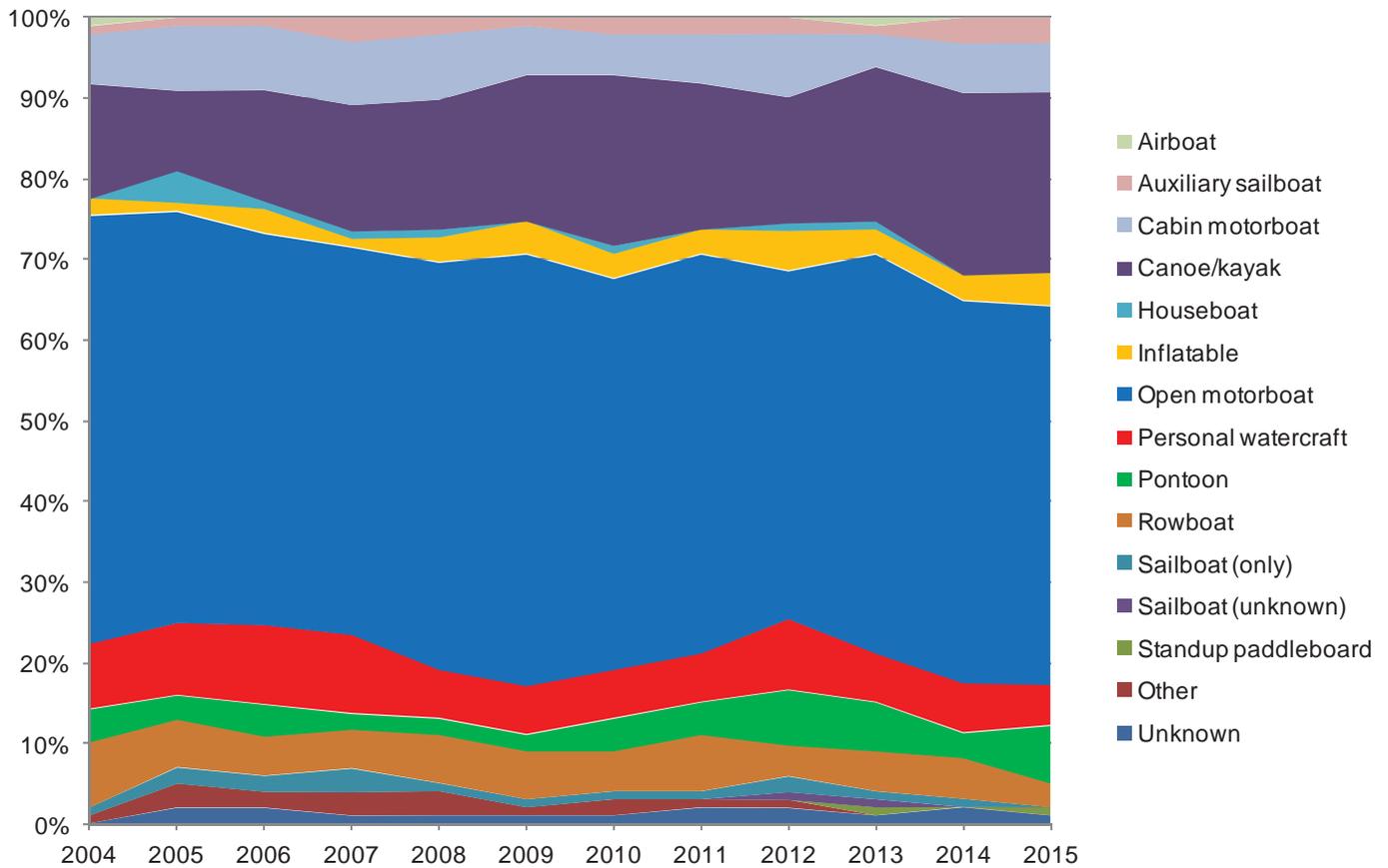


**Table 24 • NUMBER OF DEATHS BY VESSEL TYPE 2015**

Vessel type	Drownings	Deaths by Causes other than Drowning	Total Deaths	Percentage of Deaths from Drowning
Airboat	1	0	1	100%
Auxiliary Sailboat	16	5	21	76%
Cabin Motorboat	17	19	36	47%
Canoe	62	6	68	91%
Houseboat	0	2	2	0%
Inflatable	25	1	26	96%
Kayak	57	14	71	80%
Open Motorboat	180	105	285	63%
Personal Watercraft	10	23	33	30%
Pontoon	33	13	46	72%
Rowboat	15	2	17	88%
Sailboat (only)	2	1	3	67%
Sailboat (unknown)	0	0	0	0%
Standup paddleboard	6	1	7	86%
Other	1	0	1	100%
Unknown	3	6	9	33%
<b>Total</b>	<b>428</b>	<b>198</b>	<b>626</b>	<b>68%</b>



**Figure 9 PERCENT OF DEATHS BY VESSEL TYPE, 2004-2015**



**Table 25 • PERCENT OF DEATHS BY VESSEL TYPE, 2004-2015**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Airboat	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Auxiliary sailboat	1%	1%	1%	3%	2%	1%	2%	2%	2%	1%	3%	3%
Cabin motorboat	6%	8%	8%	8%	8%	6%	5%	6%	8%	4%	6%	6%
Canoe/kayak	14%	10%	14%	16%	16%	18%	21%	18%	16%	19%	22%	22%
Houseboat	0%	4%	1%	1%	1%	0%	1%	0%	1%	1%	0%	0%
Inflatable	2%	1%	3%	1%	3%	4%	3%	3%	5%	3%	3%	4%
Open motorboat	52%	51%	49%	49%	50%	53%	48%	49%	44%	49%	46%	46%
Personal watercraft	8%	9%	10%	10%	6%	6%	6%	6%	9%	6%	6%	5%
Pontoon	4%	3%	4%	2%	2%	2%	4%	4%	7%	6%	3%	7%
Rowboat	8%	6%	5%	5%	6%	6%	5%	7%	4%	5%	5%	3%
Sailboat (only)	1%	2%	2%	3%	1%	1%	1%	1%	2%	1%	1%	0%
Sailboat (unknown)	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%
Standup paddleboard	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%
Other	1%	3%	2%	3%	3%	1%	2%	1%	1%	0%	0%	0%
Unknown	0%	2%	2%	1%	1%	1%	1%	2%	2%	1%	2%	1%



**Table 26 - NUMBER OF DECEASED VICTIMS BY AGE AND VESSEL TYPE  
2015**

Age of Deceased Victim	Type of Vessel															Drownings	Other deaths	Total deaths	
	Airboat	Auxiliary sailboat	Cabin motorboat	Canoe	Houseboat	Inflatable	Kayak	Open motorboat	Personal watercraft	Pontoon	Rowboat	Sailboat (only)	Sailboat (unknown)	Standup paddleboard	Other				Unknown
Total	1	21	36	68	2	26	71	285	33	46	17	3	0	7	1	9	428	198	626
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	1	2
3	0	0	0	1	0	0	0	2	0	1	0	0	0	0	0	0	3	1	4
4	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	0	2
5	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	1	2	3
6	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3	3
8	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
9	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
10	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	1	2
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	1	2
0-12	0	1	1	3	0	2	1	11	0	3	0	0	0	0	0	0	12	10	22
13 - 19	1	1	1	2	0	2	5	10	6	3	0	0	0	0	0	0	16	15	31
20 - 29	0	3	4	13	0	5	19	34	7	5	0	2	0	2	0	2	63	33	96
30 - 39	0	0	3	13	0	7	12	35	5	6	2	0	0	1	1	3	69	19	88
40 - 49	0	2	8	13	0	3	8	37	7	4	1	0	0	0	0	0	57	26	83
50 - 59	0	4	12	19	1	4	12	53	6	8	8	0	0	1	0	0	90	38	128
60 - 69	0	5	5	4	1	2	11	65	2	9	2	1	0	3	0	1	77	34	111
70 - 79	0	5	0	1	0	1	3	32	0	6	3	0	0	0	0	0	36	15	51
80 and Over	0	0	2	0	0	0	0	7	0	1	1	0	0	0	0	0	7	4	11
Unknown	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3	1	4	5



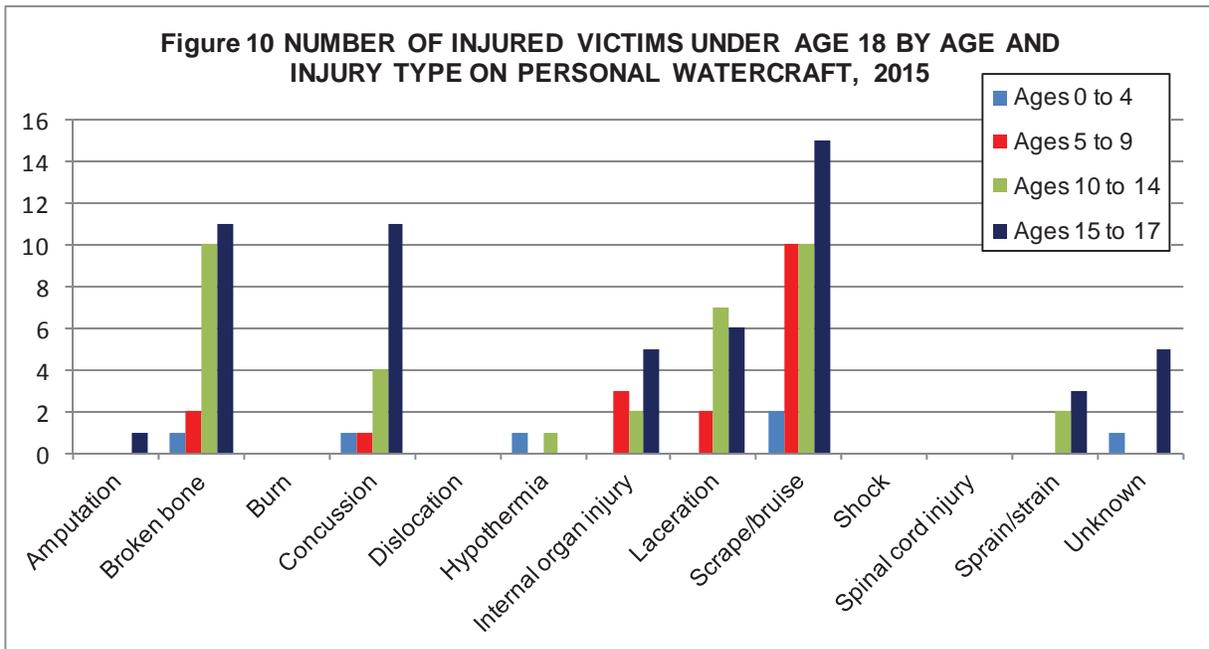
**Table 27 • NUMBER OF INJURED VICTIMS BY AGE AND VESSEL TYPE 2015**

Age of Injured Victim	Total injuries	Airboat	Auxiliary sailboat	Cabin motorboat	Canoe	Houseboat	Inflatable	Kayak	Open motorboat	Personal watercraft	Pontoon	Rowboat	Sailboat (only)	Sailboat (unknown)	Standup paddleboard	Other	Unknown
<b>Total</b>	2613	24	38	269	41	12	24	50	1376	623	93	26	17	0	1	1	18
0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
1	5	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0
2	4	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0
3	3	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0
4	9	0	0	1	0	0	0	0	8	0	0	0	0	0	0	0	0
5	9	0	0	1	0	0	0	0	6	2	0	0	0	0	0	0	0
6	11	0	0	0	0	0	0	1	5	4	0	1	0	0	0	0	0
7	12	0	0	0	0	0	0	0	4	7	1	0	0	0	0	0	0
8	14	0	1	1	1	0	0	0	8	2	1	0	0	0	0	0	0
9	18	0	0	0	0	1	0	0	13	3	1	0	0	0	0	0	0
10	23	0	1	1	1	0	0	0	14	4	1	0	0	0	0	0	1
11	23	0	0	1	1	0	0	0	17	3	1	0	0	0	0	0	0
12	19	0	0	0	0	0	0	0	11	4	3	0	1	0	0	0	0
0 - 12	151	0	2	5	3	1	0	1	93	35	8	1	1	0	0	0	1
13 - 19	383	4	0	23	9	0	2	4	194	124	9	8	4	0	0	1	1
20 - 29	569	12	2	46	9	2	4	14	274	187	12	3	1	0	1	0	2
30 - 39	366	1	5	31	5	0	5	3	197	100	12	5	0	0	0	0	2
40 - 49	357	3	3	47	3	2	5	8	193	79	9	1	3	0	0	0	1
50 - 59	326	4	10	39	3	2	5	5	179	55	18	2	3	0	0	0	1
60 - 69	203	0	5	40	3	1	3	5	116	14	10	4	2	0	0	0	0
70 - 79	77	0	2	15	0	1	0	5	42	5	6	1	0	0	0	0	0
80 and Over	22	0	1	5	0	0	0	0	11	1	2	1	1	0	0	0	0
Unknown	159	0	8	18	6	3	0	5	77	23	7	0	2	0	0	0	10



**Table 28 • NATURE OF PRIMARY INJURY TYPE BY AREA OF INJURY 2015**

	All Areas	Arm	Body	Foot	Hand	Head	Leg	Neck	Trunk	Other	Unknown
<b>All primary injury types</b>	2613	234	250	126	115	651	501	73	487	0	176
Amputation	25	2	0	3	18	0	2	0	0	0	0
Broken bone	487	67	0	43	23	60	160	2	122	0	10
Burn	125	22	15	6	6	16	36	0	10	0	14
Carbon monoxide	14	0	14	0	0	0	0	0	0	0	0
Concussion	240	0	0	0	0	240	0	0	0	0	0
Dislocation	54	33	0	2	1	1	13	0	1	0	3
Electric shock	0	0	0	0	0	0	0	0	0	0	0
Hypothermia	173	0	173	0	0	0	0	0	0	0	0
Internal organ injury	147	2	4	2	0	4	3	0	123	0	9
Laceration	592	44	9	43	44	231	156	3	26	0	36
Scrape/bruise	355	42	24	8	11	63	86	12	69	0	40
Shock	6	0	6	0	0	0	0	0	0	0	0
Spinal cord injury	48	0	0	0	0	0	0	8	40	0	0
Sprain/strain	161	14	3	17	8	6	28	32	47	0	6
Other	6	0	2	0	0	3	0	0	1	0	0
Unknown	180	8	0	2	4	27	17	16	48	0	58



# 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, 1997-2015 (Figure 11 & Table 29, Page 54)**

This figure and table document the number of accidents and casualties from 1997-2015.

### **Accident, Casualty & Damage Data by State (Table 30, Page 55)**

This table provides accident, casualty, and damage information by state for the year 2015. Accidents are broken down into three levels of severity— fatal accidents, non-fatal injury accidents, and property damage only accidents. This table also provides the number of casualties and property damage by state.

### **Distribution of Recreational Boating Deaths by State (Figure 12, Page 56)**

This figure provides the percentage that each state contributed to the national death count. So, for instance, Michigan had 24 deaths. Out of the total national death count of 626, Michigan contributed 3.8% ( $(24/626) * 100$ ) of deaths to the national count. Please note that percentages have been rounded.

### **Fatal Accidents by Location (Figures 12a-d, Pages 57-59)**

These figures plot the location of fatal accidents in five different regions. 12a represents the continental United States. 12b represents Alaska. 12c represents Hawaii. 12d represents Puerto Rico and the US Virgin 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. Plots are color-coded whereby red dots indicate a single-fatality accident and yellow dots indicate an accident in which more than one person died

### **Annual Recreational Boating Fatality Rates, 1997-2015 (Figure 13 & Table 31, Page 60)**

This table and accompanying figure provide two fatality rates for years 1997-2015. 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 2015 Fatality Rate (Figure 14, Page 61)**

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 that 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 2014-2015 to view the Scope of each state's registration system.

### **Five-year Summary of Selected Accident Data by State, 2011-2015 (Table 32, Page 62)**

This table examines the number of accidents, fatal accidents, and fatalities by state for years 2011-2015.

### **Number of Accidents by Primary Accident Type & State (Table 33, Page 63-64)**

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 65)**

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 65)**

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.



Figure 11 DEATHS, INJURIES, & ACCIDENTS BY YEAR, 1997-2015

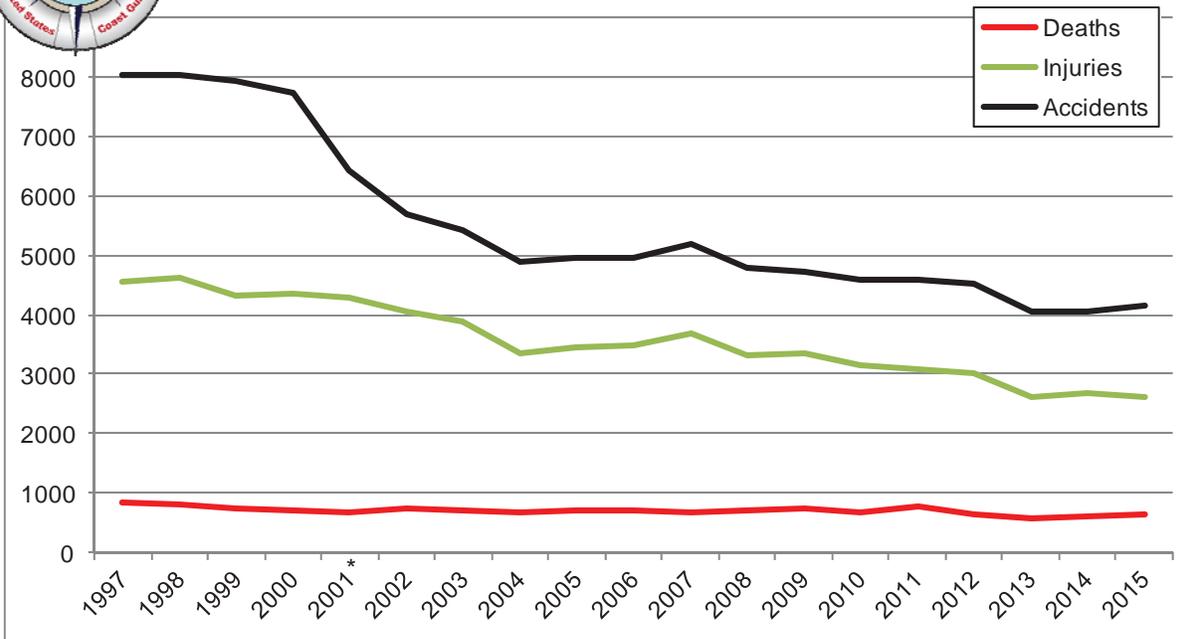


Table 29 • DEATHS, INJURIES, & ACCIDENTS BY YEAR, 1997-2015			
Year	Deaths	Injuries	Accidents
1997	821	4555	8047
1998	815	4612	8061
1999	734	4315	7931
2000	701	4355	7740
2001*	681	4274	6419
2002	750	4062	5705
2003	703	3888	5438
2004	676	3363	4904
2005	697	3451	4969
2006	710	3474	4967
2007	685	3673	5191
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

\* On July 2, 2001, the Federal threshold of property damage for reports of accidents involving recreational vessels changed from \$500 to \$2000.

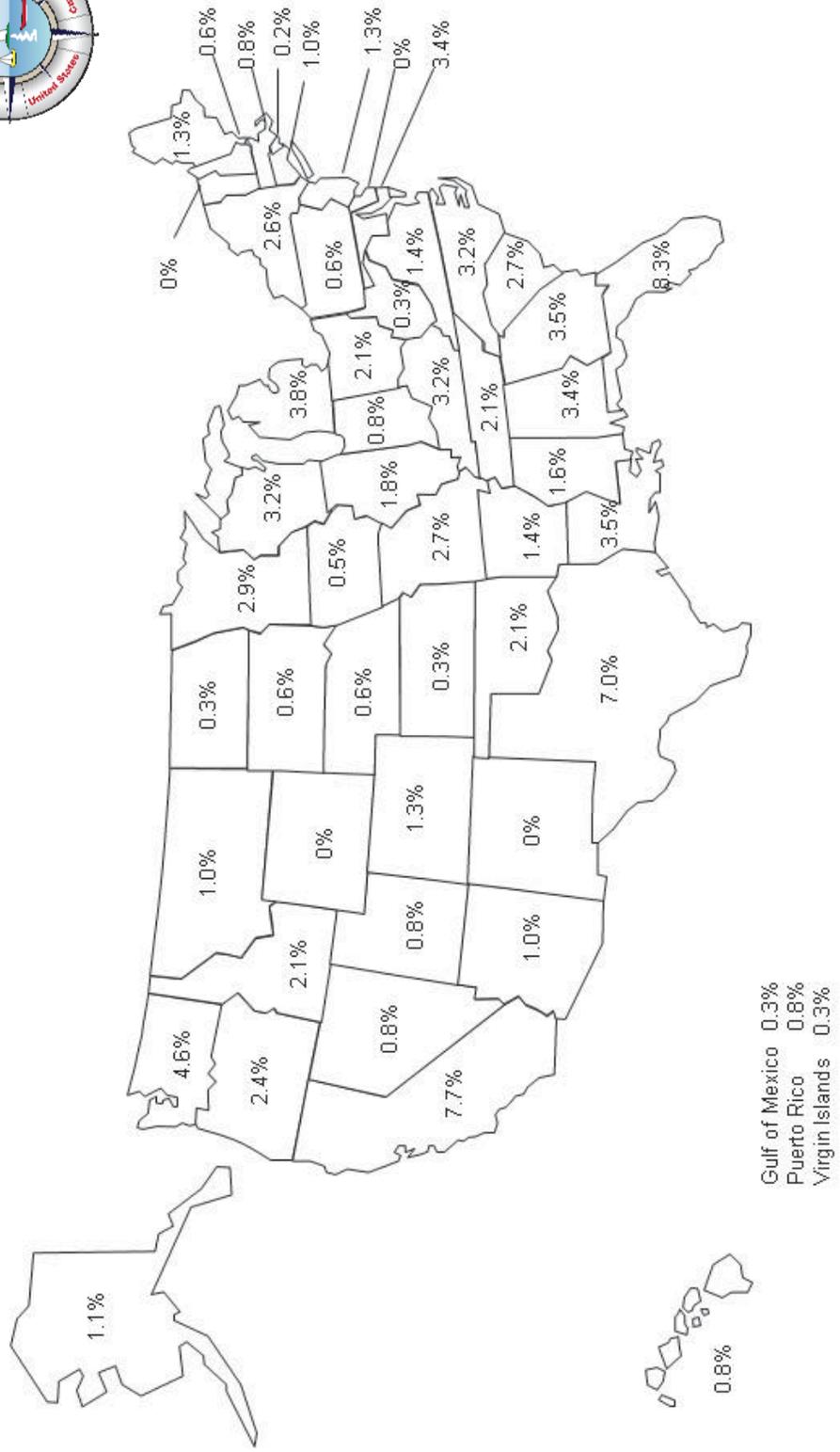
Table 30 • ACCIDENT, CASUALTY &amp; DAMAGE DATA BY STATE 2015

	Number of Accidents				Persons Involved		Damages
	Total	Fatal	Non-Fatal Injury	Property Damage	Deaths	Injured	
<b>Totals</b>	4158	569	1844	1745	626	2613	\$41,832,634
AK	25	7	10	8	7	12	\$533,650
AL	79	17	27	35	21	37	\$1,137,475
AR	49	9	13	27	9	26	\$311,257
AZ	97	6	58	33	6	80	\$389,401
CA	369	41	154	174	48	227	\$3,101,217
CO	36	8	21	7	8	22	\$27,310
CT	58	6	31	21	6	47	\$1,148,978
DC	0	0	0	0	0	0	\$0
DE	13	0	7	6	0	8	\$79,500
FL	671	49	274	348	52	390	\$9,770,134
GA	85	19	41	25	22	51	\$390,838
HI	12	5	3	4	5	9	\$806,005
IA	36	3	18	15	3	24	\$124,100
ID	39	9	17	13	13	25	\$346,900
IL	66	11	33	22	11	46	\$324,978
IN	43	5	21	17	5	22	\$375,800
KS	25	2	17	6	2	22	\$35,590
KY	41	12	22	7	20	38	\$256,475
LA	87	20	39	28	22	69	\$620,855
MA	89	5	28	56	5	37	\$1,940,718
MD	146	20	84	42	21	125	\$1,074,391
ME	32	7	11	14	8	22	\$388,400
MI	90	22	40	28	24	53	\$176,580
MN	87	16	48	23	18	65	\$380,997
MO	109	17	52	40	17	70	\$816,823
MS	30	7	9	14	10	10	\$148,700
MT	14	6	5	3	6	7	\$34,475
NC	162	18	73	71	20	90	\$1,492,426
ND	11	2	5	4	2	10	\$50,156
NE	32	4	21	7	4	33	\$111,850
NH	53	4	18	31	4	20	\$330,707
NJ	122	7	44	71	8	64	\$134,000
NM	10	0	6	4	0	6	\$16,500
NV	38	5	22	11	5	26	\$137,675
NY	174	15	72	87	16	96	\$1,119,974
OH	100	13	39	48	13	57	\$754,360
OK	58	11	22	25	13	44	\$206,900
OR	65	15	25	25	15	41	\$258,984
PA	52	4	35	13	4	41	\$112,193
RI	37	1	10	26	1	18	\$3,500,400
SC	123	15	59	49	17	80	\$958,290
SD	15	4	5	6	4	10	\$52,482
TN	107	13	51	43	13	65	\$492,834
TX	154	39	73	42	44	105	\$791,579
UT	79	5	44	30	5	55	\$222,151
VA	70	9	29	32	9	39	\$425,551
VT	4	0	2	2	0	3	\$98,670
WA	107	28	40	39	29	59	\$764,347
WI	103	19	44	40	20	57	\$629,223
WV	11	2	5	4	2	17	\$80,000
WY	8	0	5	3	0	8	\$19,450
AS	0	0	0	0	0	0	\$0
CNMI	0	0	0	0	0	0	\$0
GU	4	0	3	1	0	6	\$93,800
PR	5	4	1	0	5	5	\$0
VI	2	1	1	0	2	5	\$22,370
Atlantic Ocean*	16	0	4	12	0	5	\$3,384,770
Gulf of Mexico*	5	2	2	1	2	2	\$66,795
Pacific Ocean*	3	0	1	2	0	2	\$762,650

\*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. NJ did not submit property damage estimates to boats. However, NJ noted that accidents submitted to the Coast Guard that did not have an injury or death were considered to have \$2000 or more in damages. The Coast Guard adjusted NJ's property damages to boats such that each accident without an injury or death had \$2000 damages.



Figure 12 DISTRIBUTION OF 2015 DEATHS BY STATE



American Samoa, Guam, the Northern Mariana Islands, and District of Columbia did not have deaths.

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

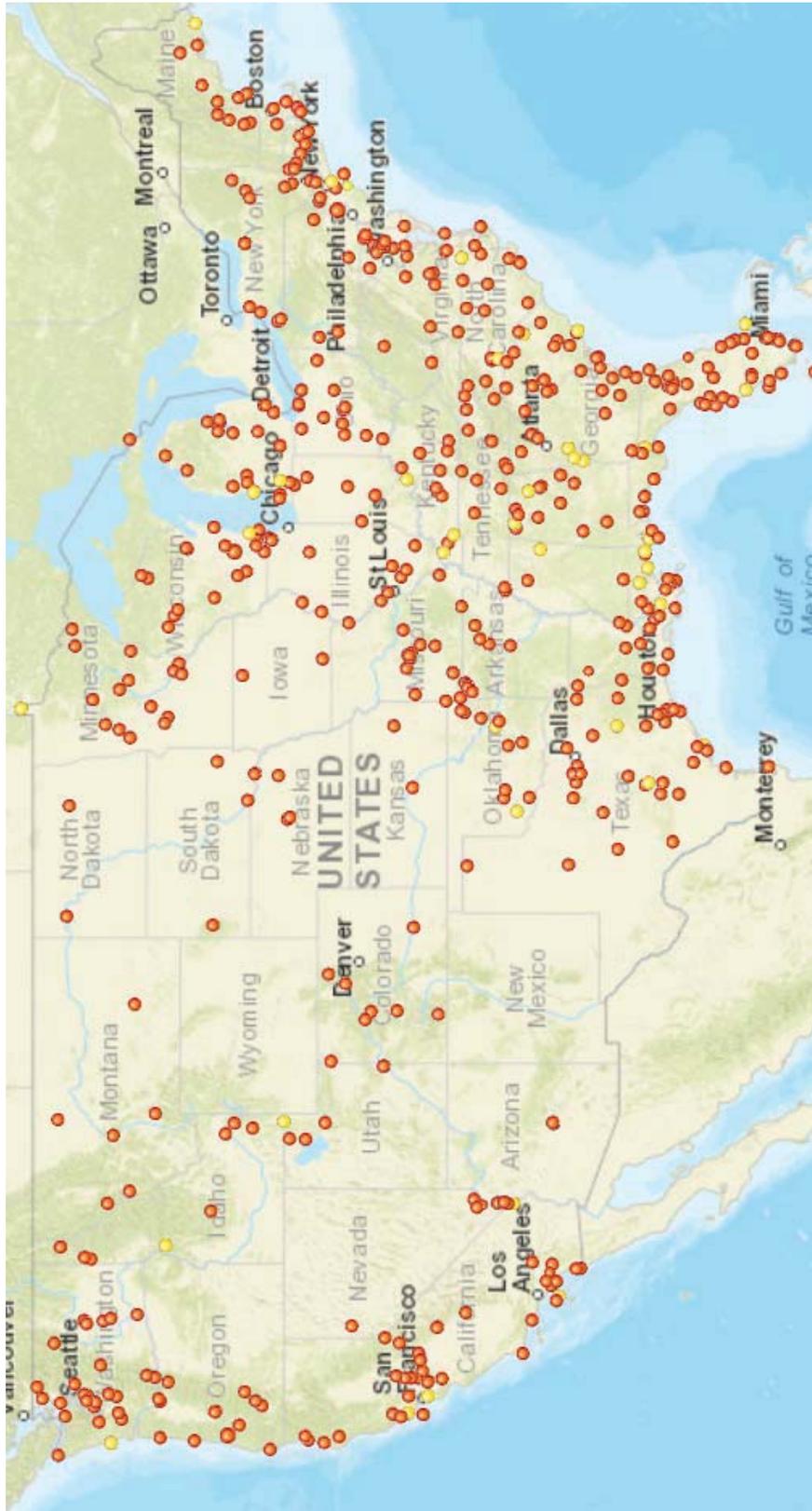


Figure 12b • FATAL ACCIDENTS BY LOCATION– ALASKA



Figure 12c • FATAL ACCIDENTS BY LOCATION– HAWAII



Figure 12d • FATAL ACCIDENTS BY LOCATION– PUERTO RICO AND US VIRGIN ISLANDS



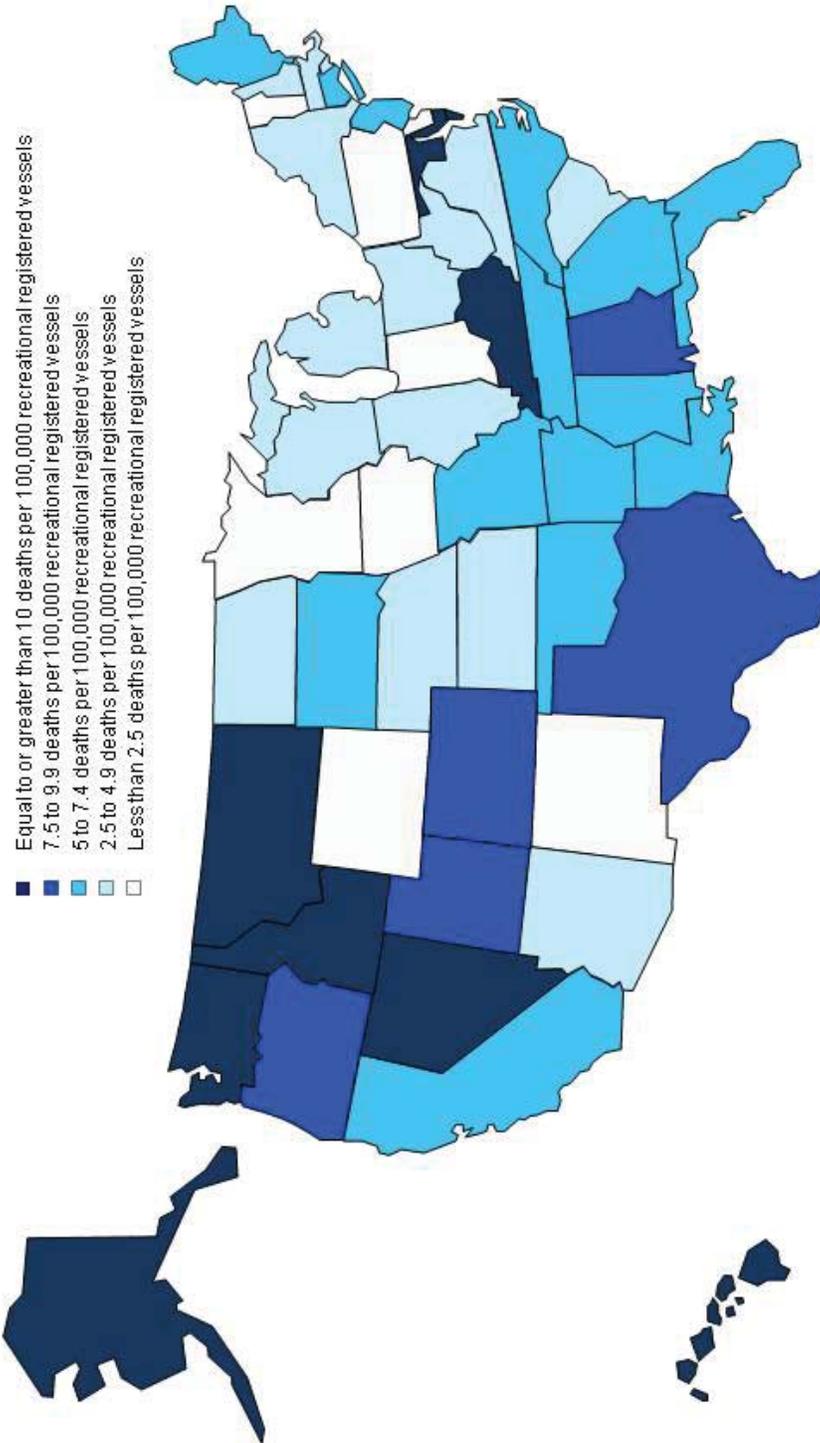


Figure 13 ANNUAL RECREATIONAL BOATING FATALITY RATES, 1997-2015



Table 31 - ANNUAL RECREATIONAL BOATING FATALITY RATES 1997-2015						
	All Deaths	All Registered Vessels	Fatality Rate	Motorized Vessel Deaths	Registered Motorized Vessels	Motorized Vessel Fatality Rate
1997	821	12,312,982	6.7	645	11,591,194	5.6
1998	815	12,565,930	6.5	637	11,637,361	5.5
1999	734	12,738,271	5.8	586	11,811,562	5.0
2000	701	12,782,143	5.5	543	11,648,769	4.7
2001	681	12,876,346	5.3	484	12,100,439	4.0
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

Figure 14 STATES CODED BY THEIR 2015 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, only the contiguous jurisdictions, Hawaii, and Alaska are represented on this map.

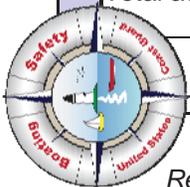
Table 32 • FIVE YEAR SUMMARY OF SELECTED ACCIDENT DATA BY STATE 2011-2015															
	Total Number of Accidents					Fatal Accidents					Deaths				
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
<b>Totals</b>	4588	4515	4062	4064	4158	686	578	510	548	569	758	651	560	610	626
Alabama	73	71	62	71	79	14	16	10	12	17	19	17	10	13	21
Alaska	20	23	18	18	25	13	15	7	10	7	15	22	10	11	7
Arizona	158	99	95	87	97	10	3	9	7	6	11	4	9	7	6
Arkansas	55	68	56	54	49	13	8	13	7	9	15	8	15	8	9
California	399	365	426	379	369	47	37	34	29	41	52	49	37	38	48
Colorado	58	46	32	57	36	9	8	2	12	8	10	9	2	12	8
Connecticut	42	49	35	40	58	8	6	1	5	6	8	6	1	5	6
Delaware	10	13	8	15	13	3	2	0	1	0	3	2	0	1	0
DC	4	2	5	2	0	1	0	0	0	0	1	0	0	0	0
Florida	685	662	685	581	671	56	48	51	62	49	61	50	58	70	52
Georgia	96	111	92	92	85	14	11	15	12	19	14	13	16	13	22
Hawaii	17	28	14	9	12	6	5	4	3	5	6	5	4	3	5
Idaho	57	66	42	43	39	11	11	5	10	9	12	11	5	10	13
Illinois	106	101	59	84	66	20	15	8	17	11	23	17	9	22	11
Indiana	50	43	44	40	43	10	2	4	9	5	10	2	5	9	5
Iowa	38	33	24	33	36	4	8	3	6	3	4	11	3	7	3
Kansas	40	27	24	17	25	7	2	5	6	2	7	2	5	6	2
Kentucky	46	47	31	46	41	9	7	4	8	12	10	8	5	9	20
Louisiana	112	116	96	113	87	30	23	15	18	20	36	25	15	18	22
Maine	48	48	54	35	32	11	6	3	5	7	12	6	4	5	8
Maryland	184	145	110	130	146	17	11	13	10	20	19	11	14	12	21
Massachusetts	46	68	83	82	89	9	16	12	5	5	9	17	12	6	5
Michigan	129	103	92	97	90	24	14	19	18	22	26	16	21	19	24
Minnesota	75	84	75	50	87	14	12	10	14	16	16	15	12	14	18
Mississippi	34	57	41	25	30	11	11	12	2	7	11	12	13	3	10
Missouri	128	141	111	142	109	17	10	16	13	17	20	12	16	14	17
Montana	19	17	16	14	14	9	9	6	3	6	10	10	6	3	6
Nebraska	22	45	25	26	32	4	8	0	1	4	5	8	0	1	4
Nevada	42	57	48	47	38	7	3	5	7	5	7	4	5	11	5
New Hampshire	36	40	40	44	53	2	4	1	1	4	2	4	1	1	4
New Jersey	119	115	123	111	122	8	7	8	3	7	8	7	8	3	8
New Mexico	24	18	16	13	10	1	1	2	0	0	2	1	2	0	0
New York	173	197	180	175	174	25	21	15	27	15	28	27	18	27	16
North Carolina	144	145	139	124	162	27	22	14	22	18	28	23	16	26	20
North Dakota	10	10	5	11	11	3	1	2	4	2	5	1	2	5	2
Ohio	135	136	108	100	100	13	11	13	15	13	15	11	13	22	13
Oklahoma	57	71	42	50	58	10	12	8	6	11	11	15	9	6	13
Oregon	66	70	59	61	65	10	17	12	7	15	10	19	12	7	15
Pennsylvania	87	59	71	66	52	22	9	16	20	4	22	11	17	21	4
Rhode Island	26	31	42	40	37	2	3	1	3	1	2	3	1	3	1
South Carolina	93	108	104	124	123	17	13	26	13	15	19	14	27	14	17
South Dakota	13	18	10	8	15	2	3	1	1	4	2	4	1	1	4
Tennessee	117	147	119	111	107	21	16	17	13	13	22	21	20	14	13
Texas	197	162	146	167	154	34	32	28	34	39	37	32	31	39	44
Utah	109	99	76	80	79	8	6	10	5	5	8	8	12	5	5
Vermont	7	3	2	5	4	3	0	1	1	0	3	0	1	1	0
Virginia	121	89	64	60	70	19	13	10	15	9	21	15	11	17	9
Washington	93	105	94	122	107	14	28	17	22	28	15	30	17	22	29
West Virginia	17	19	16	24	11	6	4	3	3	2	8	4	3	3	2
Wisconsin	110	110	79	102	103	19	23	12	9	19	22	23	12	9	20
Wyoming	16	9	6	11	8	5	1	0	4	0	6	1	0	4	0
Guam	2	1	1	2	4	2	0	1	2	0	2	0	1	3	0
Puerto Rico	3	1	2	3	5	1	1	2	2	4	1	2	2	2	5
Virgin Islands	0	2	0	2	2	0	1	0	0	1	0	1	0	0	2
AS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CNMI	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
*AT	9	4	10	10	16	2	0	3	1	0	4	0	4	1	0
*GL	4	6	3	4	5	1	1	0	0	2	2	1	0	0	2
*PC	1	4	2	5	3	0	1	1	3	0	0	1	7	4	0

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



Table 33 Continued - NUMBER OF ACCIDENTS BY PRIMARY ACCIDENT TYPE & STATE 2015

Injuries	33
Total deaths	4
Other deaths	1
Drownings	3
Unknown	0
Other	2
Sudden medical condition	0
Skier mishap	4
Sinking	0
Person struck by vessel	1
Person struck by propeller	0
Grounding	2
Flooding/swamping	3
Fire/explosion (unknown origin)	1
Fire/explosion (non-fuel)	0
Fire/explosion (fuel)	0
Falls overboard	5
Fall in vessel	1
Electrocution	0
Ejected from vessel	2
Departed vessel	1
Collision with submerged object	0
Collision with recreational vessel	6
Collision with governmental vessel	0
Collision with commercial vessel	0
Collision with floating object	0
Collision with fixed object	1
Carbon monoxide	0
Capsizing	3
Total accidents	32
NE	53
NH	122
NJ	10
NM	38
NV	174
NY	100
OH	58
OK	65
OR	52
PA	37
RI	123
SC	15
SD	107
TN	154
TX	79
UT	70
VA	4
VT	107
WA	103
WI	11
WV	8
WY	0
AS	0
CNMI	0
GU	4
PR	5
VI	2
AT	16
GL	5
PC	3

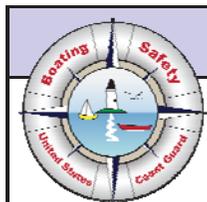




**Table 34 - NUMBER OF INJURED VICTIMS BY PRIMARY INJURY & VESSEL TYPE**

Primary Injury	Number of Injuries	Airboat	Auxiliary sailboat	Cabin motorboat	Canoe	Houseboat	Inflatable	Kayak	Open motorboat	Personal watercraft	Pontoon	Rowboat	Sailboat (only)	Sailboat (unknown)	Standup paddleboard	Other	Unknown
Amputation	25	1	1	1	0	0	0	0	14	6	1	0	0	0	1	0	0
Broken bone	487	8	5	42	0	1	3	1	244	169	9	3	1	0	0	0	1
Burns	125	0	2	62	0	2	0	0	55	2	0	0	0	0	0	0	2
Carbon monoxide	14	0	0	8	0	0	0	0	6	0	0	0	0	0	0	0	0
Concussion	240	0	5	24	1	0	1	2	125	65	11	0	4	0	0	0	2
Dislocation	54	1	1	3	0	0	2	1	35	8	2	0	1	0	0	0	0
Electric shock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hypothermia	173	0	5	9	24	0	2	30	71	16	2	7	4	0	0	0	3
Internal organ injury	147	0	3	11	7	0	4	5	62	48	4	1	2	0	0	0	0
Laceration	592	5	6	61	2	2	7	4	361	106	29	3	0	0	0	0	6
Scrape/bruise	355	5	3	26	1	3	4	1	170	116	14	6	5	0	0	1	0
Shock	6	0	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0
Spinal cord injury	48	1	1	4	0	0	0	0	33	7	2	0	0	0	0	0	0
Sprain/strain	161	1	1	9	2	1	0	3	100	34	8	2	0	0	0	0	0
Other	6	0	0	0	0	0	0	0	5	0	0	1	0	0	0	0	0
Unknown	180	2	5	9	3	3	1	3	90	46	11	3	0	0	0	0	4
<b>All Injuries</b>	<b>2613</b>	<b>24</b>	<b>38</b>	<b>269</b>	<b>41</b>	<b>12</b>	<b>24</b>	<b>50</b>	<b>1376</b>	<b>623</b>	<b>93</b>	<b>26</b>	<b>17</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>18</b>

**Table 35 - NUMBER OF FATAL VICTIMS BY LIFE JACKET WEAR, CAUSE OF DEATH & VESSEL TYPE 2015**



**Cause of Death**

	Life jacket worn?	Number of deaths	Airboat	Auxiliary sailboat	Cabin motorboat	Canoe	Houseboat	Inflatable	Kayak	Open motorboat	Personal watercraft	Pontoon	Rowboat	Sailboat (only)	Sailboat (unknown)	Standup paddleboard	Other	Unknown
Carbon monoxide	Yes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	No	5	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0
	Unknown	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Cardiac arrest	Yes	8	0	0	0	1	0	0	1	3	3	0	0	0	0	0	0	0
	No	15	0	0	0	0	0	0	0	10	0	3	1	1	0	0	0	0
	Unknown	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Drowning	Yes	63	0	5	0	9	0	7	18	13	6	3	0	1	0	1	0	0
	No	352	1	11	17	48	0	17	39	162	4	30	15	1	0	5	1	1
	Unknown	13	0	0	0	5	0	1	0	5	0	0	0	0	0	0	0	2
Hypothermia	Yes	10	0	0	0	1	0	0	5	4	0	0	0	0	0	0	0	0
	No	3	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0
	Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trauma	Yes	29	0	0	0	0	0	0	0	10	17	2	0	0	0	0	0	0
	No	49	0	0	6	0	0	0	1	38	0	3	0	0	0	0	0	1
	Unknown	12	0	0	2	0	1	1	0	6	2	0	0	0	0	0	0	0
Unknown	Yes	3	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0
	No	29	0	1	2	1	0	0	2	13	1	4	1	0	0	1	0	3
	Unknown	32	0	4	1	1	0	0	5	18	0	1	0	0	0	0	0	2
<b>All Causes</b>		<b>626</b>	<b>1</b>	<b>21</b>	<b>36</b>	<b>68</b>	<b>2</b>	<b>26</b>	<b>71</b>	<b>285</b>	<b>33</b>	<b>46</b>	<b>17</b>	<b>3</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>9</b>

# Registration Data



### Explanation of Registration Data Section

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

#### **Recreational Vessel Registration by Year, 1980-2015 (Table 36 & Figure 15, Page 68)**

This table provides information about recreational vessel registration for each year from 1980-2015. The accompanying figure displays a trend line from 1980-2015.

#### **Recreational Vessel Registration by Length & Means of Propulsion (Table 37, Page 69)**

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 and engine type. The bottom section of the table focuses on manually-propelled vessels.

#### **Registration Data by State (Table 38, Page 70)**

This table examines recreational vessel registration, deaths, and fatality rates by state for years 2014 and 2015. 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. This table also specifies the scope of the state's registration program.

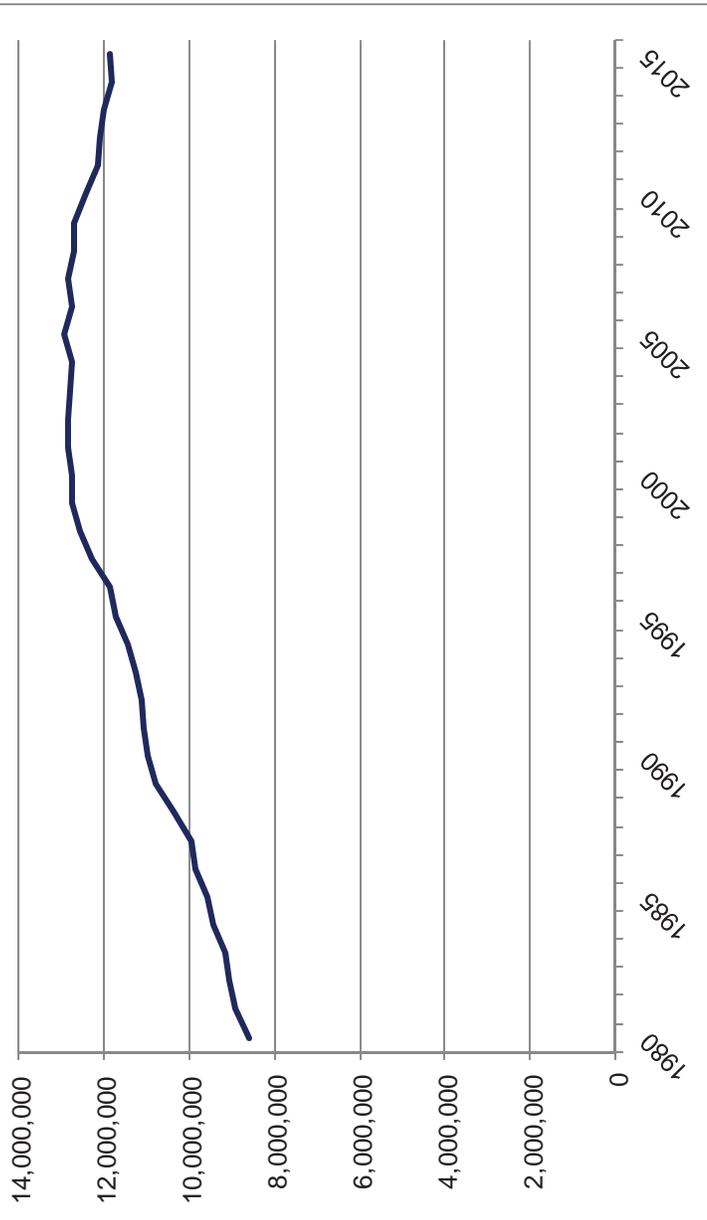
#### **Distribution of 2015 Recreational Vessel Registration by State (Figure 16, Page 71)**

This figure provides the percentage that each state contributed to national registration figures. So, for instance, California registered 772,542 vessels. Out of the total national registration of 11,867,049, California contributed 6.5%  $((772,542/11,867,049) * 100)$  of registered vessels. Please note that percentages have been rounded.

Table 36 - RECREATIONAL VESSELS REGISTERED BY YEAR, 1980-2015	
Year	Registered Vessels
1980	8,577,857
1981	8,905,097
1982	9,073,972
1983	9,165,094
1984	9,420,011
1985	9,589,483
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



Figure 15 RECREATIONAL VESSELS REGISTERED BY YEAR 1980-2015





**Table 37 • RECREATIONAL VESSEL REGISTRATION BY LENGTH AND MEANS OF PROPULSION 2015**

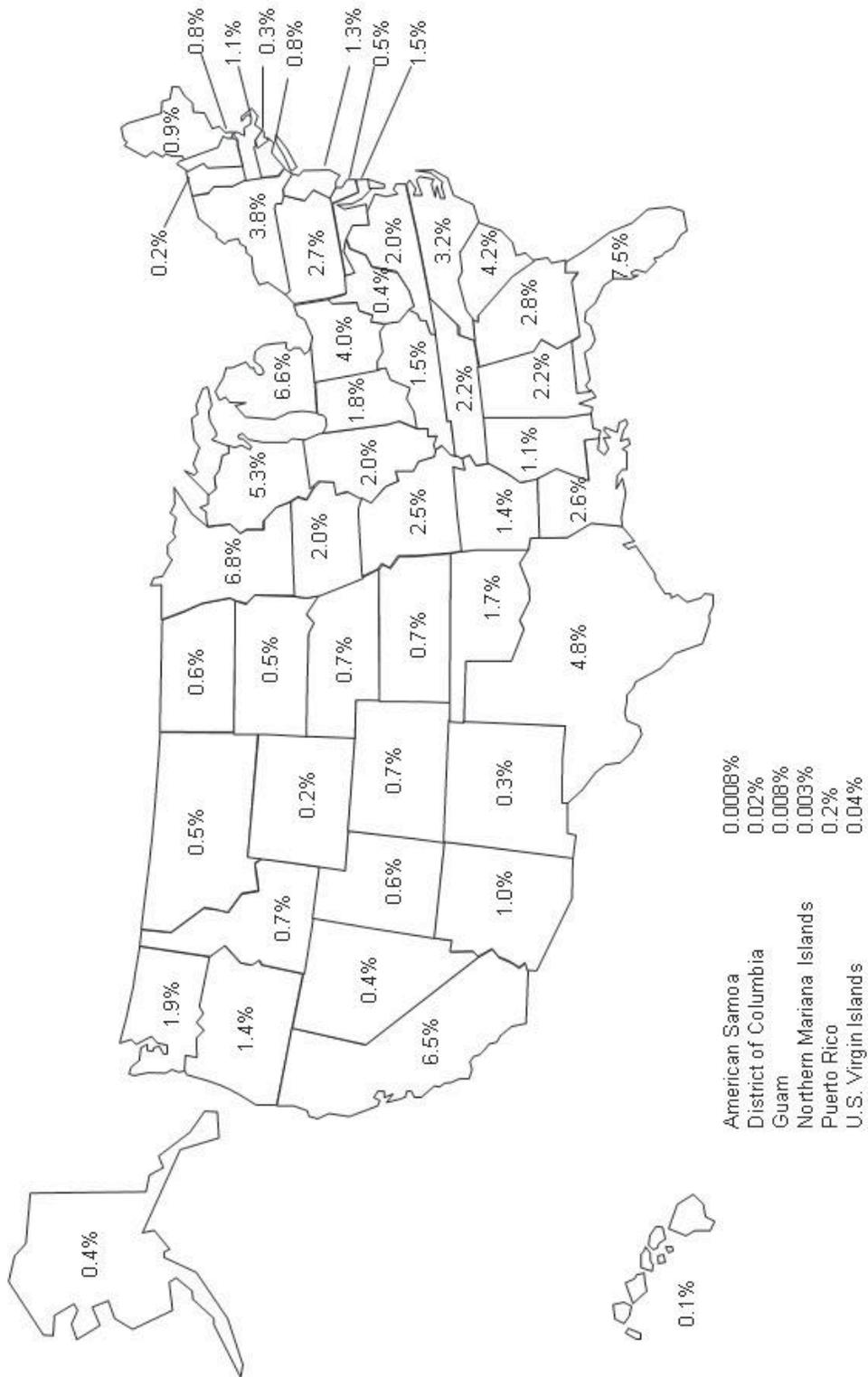
Mechanically Propelled	Not Mechanically Propelled			Total		
11,034,479	832,570			11,867,049		
STATE REGISTERED BOATS THAT ARE MECHANICALLY PROPELLED						
	Means of Mechanical Propulsion			Auxiliary Sail		Total
	Inboard	Outboard	Stern Drive	Inboard	Outboard	
Under 16 feet	1,236,077	2,826,218	175,002	5,626	15,591	4,258,514
16 to less than 26 feet	680,382	4,392,892	1,090,946	11,947	35,416	6,211,583
26 to less than 40 feet	155,107	131,157	150,789	36,885	8,877	482,815
40 to 65 feet	44,719	7,244	12,242	5,648	641	70,494
Over 65 feet	6,230	1,883	2,842	94	24	11,073
<b>Total</b>	<b>2,122,515</b>	<b>7,359,394</b>	<b>1,431,821</b>	<b>60,200</b>	<b>60,549</b>	<b>11,034,479</b>
STATE REGISTERED BOATS NOT MECHANICALLY PROPELLED						
Rowboats	Sailboats	Canoes/Kayaks		Other Boats	Total	
97,067	110,261	419,536		205,706	832,570	

**Table 38 - RECREATIONAL VESSEL REGISTRATION DATA BY STATE 2014-2015**

	2015			2014			Scope of Current Boat Registration System
	Registration	Deaths	Fatality Rate	Registration	Deaths	Fatality Rate	
	<b>11,867,049</b>	<b>626</b>	<b>5.3</b>	<b>11,804,002</b>	<b>610</b>	<b>5.2</b>	
AK	50,781	7	13.8	50,123	11	21.9	All undocumented powerboats
AL	261,183	21	8.0	262,926	13	4.9	All motorboats, sailboats and rental boats
AR	171,268	9	5.3	206,283	8	3.9	All watercraft
AZ	124,076	6	4.8	124,425	7	5.6	All motorized watercraft
CA	772,542	48	6.2	728,679	38	5.2	All motorboats; sailboats over 8 feet in length
CO	84,111	8	9.5	83,683	12	14.3	All watercraft powered by motor or sail - sailboards exempt
CT	95,527	6	6.3	99,658	5	5.0	All motorboats; sailboats 19.5 feet or more in length
DC	2,120	0	0	1,963	0	0.0	All watercraft
DE	59,467	0	0	59,337	1	1.7	All motorboats
FL	889,350	52	5.8	873,507	70	8.0	All motorboats
GA	327,657	22	6.7	321,740	13	4.0	All motorboats; sailboats 12 feet or more in length
HI	10,807	5	46.3	12,033	3	24.9	All motorboats; sailboats over 8 feet in length
IA	236,466	3	1.3	221,939	7	3.2	All watercraft with exceptions (a)
ID	86,969	13	14.9	86,270	10	11.6	All motorboats and sailboats
IL	236,513	11	4.7	274,906	22	8.0	All watercraft, except non-powered vessels on private waters
IN	209,867	5	2.4	212,466	9	4.2	All motorboats on public waterways
KS	80,979	2	2.5	82,016	6	7.3	All motorboats and sailboats
KY	172,315	20	11.6	174,358	9	5.2	All motorboats, except electric motors 1 hp or less
LA	306,731	22	7.2	307,059	18	5.9	All motorboats; sailboats more than 12 feet in length
MA	134,678	5	3.7	135,750	6	4.4	All motorboats
MD	178,798	21	11.7	178,573	12	6.7	All motorboats
ME	107,475	8	7.4	106,328	5	4.7	All motorboats
MI	787,637	24	3.0	789,458	19	2.4	All watercraft with exceptions (b)
MN	808,627	18	2.2	809,292	14	1.7	All watercraft with exceptions (c)
MO	293,660	17	5.8	294,009	14	4.8	All motorboats; sailboats over 12 feet in length
MS	134,991	10	7.4	133,406	3	2.2	All motorboats and sailboats
MT	60,087	6	10.0	47,427	3	6.3	All motorboats; sailboats 12 feet or more in length
NC	374,823	20	5.3	380,670	26	6.8	All motorboats; sailboats more than 14 feet in length
ND	69,581	2	2.9	53,560	5	9.3	All watercraft
NE	86,853	4	4.6	86,778	1	1.2	All motorboats
NH	92,979	4	4.3	92,258	1	1.1	All motorboats; sailboats 12 feet or more in length
NJ	151,450	8	5.3	152,889	3	2.0	All watercraft with exceptions (d)
NM	33,933	0	0	34,647	0	0.0	All motorboats and sailboats
NV	41,794	5	12.0	44,196	11	24.9	All motorboats
NY	446,582	16	3.6	451,862	27	6.0	All motorboats
OH	474,185	13	2.7	459,778	22	4.8	All watercraft
OK	203,829	13	6.4	214,468	6	2.8	All watercraft
OR	168,175	15	8.9	163,358	7	4.3	All motorboats; sailboats 12 feet or more in length
PA	318,873	4	1.3	322,195	21	6.5	All motorboats and certain non-powered craft (e)
RI	40,075	1	2.5	36,291	3	8.3	All motorboats and rowboats over 12 feet
SC	502,210	17	3.4	462,680	14	3.0	All watercraft
SD	58,972	4	6.8	57,209	1	1.7	All motorboats; all other boats over 12 feet in length
TN	257,172	13	5.1	256,862	14	5.5	All motorboats and sailboats
TX	572,666	44	7.7	566,897	39	6.9	All motorboats and sailboats 14 feet or more in length
UT	66,497	5	7.5	66,804	5	7.5	All motorboats and sailboats
VA	234,052	9	3.8	236,521	17	7.2	All motorboats
VT	28,179	0	0	27,861	1	3.6	All motorboats
WA	228,528	29	12.7	226,662	22	9.7	All motorboats with exceptions (f); sailboats >16 ft in length
WI	623,217	20	3.2	627,352	9	1.4	All motorboats; sailboats over 12 feet in length
WV	50,324	2	4.0	48,139	3	6.2	All motorboats
WY	27,711	0	0	27,117	4	14.8	All motorboats and sailboats
AS	91	0	0	86	0	0.0	All watercraft
CNMI	310	0	0	289	0	0.0	All motorboats
GU	948	0	0	889	3	337.5	All motorboats 7 feet or more, personal watercraft, and sailboats
PR	23,746	5	21.1	24,019	2	8.3	All motorboats; vessels adapted to hold a motor
VI	4,612	2	43.4	4,051	0	0.0	All watercraft
Offshore		2			5		

(a) Iowa excludes inflatables under 7 feet in length and canoes/kayaks under 13 feet in length. (b) Michigan excludes manually propelled boats 16 feet or less in length, and privately-owned non-motorized rafts, canoes, and kayaks. (c) Minnesota excludes non-motorized boats ten feet or less in length, duckboats during duckhunting season, and riceboats during harvest season and seaplanes. (d) New Jersey excludes non-motorized boats less than 12 feet in length and canoes, kayaks, racing shells and rowing sculls. (e) Pennsylvania registers non-powered craft using lakes or access areas owned by the State Fish & Boat Commission. (f) Washington excludes motorboats < 16 feet with motors 10 horsepower or less used solely on exclusive state waters.

Figure 16 DISTRIBUTION OF 2015 RECREATIONAL VESSEL REGISTRATION BY STATE



DEPARTMENT OF HOMELAND SECURITY  
U.S. Coast Guard  
**RECREATIONAL BOATING ACCIDENT REPORT**

OMB Control Number: 1625-0003  
Expires: 12/31/2015

**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
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**ACCIDENT SUMMARY**

<b>WHEN</b>	<b>ACCIDENT DESCRIPTION:</b> Briefly describe this accident (attach extra pages if necessary)	
Date: _____ Time: _____ am <input type="checkbox"/> pm <input type="checkbox"/> (mm/dd/yyyy) (select one)		
<b>WHERE</b>		
Body of Water Name		
Location (on water) description		
Nearest city/town	<b>DAMAGE TO YOUR BOAT:</b> Briefly summarize any damage to your boat	
County: _____ State: _____		
<b>YOUR BOAT – PEOPLE</b>		
# people on board (including operator): _____		
# people being towed (e.g., on tubes, skis): _____		
# people wearing lifejackets (on board or towed): _____		
<b>OTHER BOATS INVOLVED IN ACCIDENT</b>		
# of other boats involved: _____	<b>DAMAGE TO YOUR OTHER PROPERTY: (NOT BOAT)</b> 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**

<b>BOAT IDENTIFICATION</b>									
Your Boat Name:					Manufacturer:				
Model Name:					Model Year:				
Registration #:					Documentation #:				
Hull Identification # (HIN)					Rented: <input type="checkbox"/> Yes <input type="checkbox"/> No				

<b>SIZE ESTIMATES</b>									
Length: ft.		Depth from transom (stern) to keel (bottommost point): ft.			in.		Beam width at widest point: ft.		

<b>HULL MATERIAL</b>									
Type of Hull Material (select one)									
Fiberglass		Wood		Rubber/vinyl/canvas		Other (describe):			
Aluminum		Steel		Plastic					

<b>BOAT TYPE</b>										
Boat Type (select one)					Available Propulsion (select all that apply)					
Cabin motorboat		Inflatable		Canoe		Personal watercraft (PWC) (e.g., Wave Runner™, Jet Ski™, Sea-Doo™)		Propeller		Air thrust
Open motorboat		Houseboat		Rowboat		Other (describe)		Sail		Other (describe):
Auxiliary sail		Sail (only)		Air boat				Manual		
Pontoon boat		Kayak						Water jet		

<b>ENGINE</b>												
# Engines		Engine type and horsepower (select one)				Fuel type (select all that apply)						
Manufacturer		Outboard		Sterndrive (I/O)		Inboard		None		Gasoline	Diesel	Electric
		Total horsepower: hp										

<b>SAFETY MEASURES</b>									
Organizations that have conducted a vessel safety check (VSC) on board your boat within the past year (including carriage of safety equipment, e.g., lifejackets, anchor and line, fire extinguishers):									
US Coast Guard Auxiliary: VSC Decal? <input type="checkbox"/> Yes <input type="checkbox"/> No					Federal Agency (Name)				
US Power Squadrons: VSC Decal? <input type="checkbox"/> Yes <input type="checkbox"/> No					State Agency (Name)				
					Other Agency (Name)				
# Life jackets on board:		# Fire extinguishers on board:		Type of fire extinguishers (e.g., ABC):					
		# Fire extinguishers used:		Amount of fire extinguishers used:					

**ACCIDENT DETAILS – EXTERNAL CONDITIONS**

<b>WEATHER</b>									
Overall weather was (select one)				It was (select one)		Visibility was (select one)		Wind was (select one)	
Clear		Raining		Day		Good		0 mph (none)	
Cloudy		Snowing		Night		Fair		Over 0, up to 12 mph (light)	
Foggy		Hazy				Poor		Over 12, up to 25 mph (moderate)	
Other (describe):				Approximate air temperature: °F				Over 25, up to 55 mph (strong)	
								Over 55 mph (stormy)	

<b>WATER</b>									
Overall water conditions (select one):					Other water conditions:				
Up to 6 in. waves (calm)					Approximate water temperature: °F				
Over 6 in., up to 2 ft. waves (choppy)					Strong current?			Yes No	
Over 2 ft., up to 6 ft. waves (rough)					Hazardous waters? (e.g., rapid tidal flow, currents)			Yes No	
Over 6 ft. waves (very rough)					Congested waters?			Yes No	

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

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

**OPERATOR/PASSENGER ACTIVITIES**

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

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

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

**BOAT OPERATIONS**

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

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

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

**CONTRIBUTING FACTORS**

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

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

Other (describe):

**ACCIDENT DETAILS – YOUR BOAT**

**MACHINERY/EQUIPMENT FAILURE**

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

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

Onboard navigation aids (e.g., GPS)

**ACCIDENT DETAILS – EVENTS ON YOUR BOAT**

**ACCIDENT EVENTS**

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

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

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

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

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

**INJURED PERSON**

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

**INJURY DETAILS**

Injury caused when person (select all that apply)				Nature of most serious injury (select one)			
Struck the (e.g., boat, water):				Scrape/bruise		Dislocation	
Was struck by a (e.g., boat, propeller):				Cut		Internal organ injury	
Was exposed to carbon monoxide poisoning				Sprain/strain		Amputation	
Received an electric shock				Concussion/brain injury		Burn	
Other (describe):				Spinal cord injury		Other (describe):	
Person was wearing lifejacket?		Yes	No	Broken/fractured bone			
Person received treatment beyond first aid?		Yes	No	Body part of most serious injury (e.g., head, trunk, leg):			
Person was admitted to a hospital?		Yes	No				

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

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

**PERSON WHO DIED/DISAPPEARED**

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

**DETAILS OF DEATH/DISAPPEARANCE**

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

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

**ACCIDENT DETAILS – YOUR BOAT OPERATOR**

OPERATOR INSTRUCTION		OPERATOR SAFETY MEASURES			
Boating safety instruction completed <i>(select all that apply)</i>		On board, prior to accident, was operator wearing:			
None		A lifejacket?	Yes	No	
State course		An engine cut-off switch <i>(Lanyard or wireless device)</i> if equipped?	Yes	No	
USCG Auxiliary course		On board, prior to accident, was operator using:			
US Power Squadrons course			Alcohol?	Yes	No
Internet <i>(name of sponsoring organization)</i>		Drugs?	Yes	No	
Other <i>(describe)</i>		Operator arrested for Boating Under the Influence?	Yes	No	
		Weather reports consulted prior to accident?	Yes	No	

**OPERATOR EXPERIENCE**

Experience operating this type of boat *(select one)*

0 to 10 hours	Over 10, up to 100 hours	Over 100, up to 500 hours	Over 500 hours
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**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 <i>(if any)</i>		Other boat registration # <i>(if any)</i>		

**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 <i>(if any)</i>		Other boat registration # <i>(if any)</i>		

USCG Boating Accident Report Form

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

**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)

<input type="checkbox"/>	Other person on board <i>this</i> boat
<input type="checkbox"/>	Accident witness <i>not</i> on board <i>this</i> boat
<input type="checkbox"/>	Other (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 estimated 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 boat propelled by an engine producing air thrust. This type of boat does not include ground effect vessels or air cushion vehicles (hovercraft).

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

**Auxiliary Sailboat** - A sailboat also equipped with an engine.

**Cabin Motorboat** - A motorboat equipped with accommodation spaces, i.e., bunks or berths.

**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.

**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 (plastic) 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 designed primarily with accommodation spaces with little or no foredeck or cockpit, with low freeboard and with a low length to beam ratio.

**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.

**Inflatable** - A vessel constructed with its sides and bow made of flexible tubes containing pressurized gas. On smaller inflatables, the floor and hull beneath it is often flexible.

**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.

**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** - Craft of open construction specifically built for operating with a motor, including boats canopied or fitted with temporary partial shelters.

**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 not permanently affixed to the structure of the craft, regardless of the method or location used to mount the engine, e.g., motor wells, "kicker pits", motor pockets, etc.

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

**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** - Craft designed to be operated by a person or persons sitting, standing or kneeling on the craft rather than within the confines of a hull.

**Pontoon Boat** - A boat consisting of a rigid structure connecting at least two parallel fore (front) and aft (back) rigid sealed buoyancy chambers.

**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** - A open boat propelled by one or more persons using oars.

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

**Sailboat (only)** - Any boat whose sole source of propulsion is the natural element (i.e., wind) or a boat designed or intended to be propelled primarily by sail, regardless of size or type.

**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 Paddelboard** - 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 inboard/outboard engine system, with the engine inside the hull connected to an external lower unit containing a propeller. Steering is achieved by turning the lower unit.

**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	GL	Gulf of Mexico
NV	Nevada	PC	Pacific Ocean
NH	New Hampshire		