

# New York State 2012 Recreational Boating Report



New York State  
*Andrew M. Cuomo, Governor*

Office of Parks, Recreation & Historic Preservation  
*Rose Harvey, Commissioner*



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## Summary

This recreational boating report has been prepared in order to provide information as to why accidents happen while affording possible insights into how to improve recreational boating by reducing accidents, deaths and injuries.

Recreational boating in New York State is a \$2 billion industry enjoyed by millions of residents and visitors alike. With nearly 460,000 registered powerboats and perhaps another 300,000 non-powered watercraft, New York ranks 7<sup>th</sup> in the nation for registered boats. In fact, New York has more registered watercraft than five of our neighboring New England states combined. Clearly, recreational boating is large piece of our economy in the Empire State.

Each year the states report all of their recreational boating accidents to the US Coast Guard. In the Coast Guard's 2011 report, New York accounted for 3.7% of all reported boating deaths - 6<sup>th</sup> nationally for such tragedies. Historically however a state's fatality rate has been a function of the reported deaths to the



number of power driven boats registered within the state. In 2011, the USCG reported New York's fatality rate at 6 deaths/100,000 registered watercraft putting New York 32<sup>nd</sup> in the nation with respect to the Coast Guard's fatality rate. This however does not tell the entire story. In examining the reports we know that a multitude of factors are involved in boating deaths. For instance we now know from a recent Coast Guard survey that the northeast has a larger percentage of paddle craft than the rest of the country and a closer examination reveals that states like New York also have a far higher percentage of paddle craft related deaths. When you separate the deaths involving non-mechanically propelled watercraft from boating deaths overall it reduces the fatality rate to 3.21 deaths / 100,000 registered watercraft in 2011, which is significantly less than the national average of 4.64.

Since 1980 recreational boating deaths in New York State have declined 57% while registered watercraft have increased 45%. So how might boating accidents be further reduced? New York has long recognized and stressed the importance of educating boaters beginning as early as 1959 with the youthful boater education course, known at the time as "Make Sure, Make Shore", to the more recent educational requirement for all personal watercraft operators. In fact New York ranks 4<sup>th</sup> in the nation for students receiving classroom delivered courses of instruction and 6<sup>th</sup> in overall number of students receiving boating safety training. Nearly 20,000 students take the state's nationally recognized boating safety course each year, bringing the total number of students instructed over the past 12 years to just over 250,000.



What causes deaths on the water and what have the accident data told us? Clearly the preponderance of boating deaths are attributable to drowning. The Coast Guard has suggested that nearly 80% of all boating fatalities might have been prevented had the victims been simply wearing a life jacket.

More importantly, we also know how deadly unexpected cold water immersion can be in the early and late boating seasons as evidenced by a higher rate of fatal accidents when compared to the total number of accidents at that time of year. Recent information reveals that cold water immersion can overcome a victim significantly faster than the effects of hypothermia. This is because the physiology of cold water immersion involves uncontrollable physical reactions such as a gasp reflex,

hyperventilation, unconsciousness, elevated heart rate and vasodilation. All of which can quickly overcome a boater in distress. A properly donned life jacket is the surest way to ensure survival in such an event. Coupled with the fact that the vast majority of boating deaths (80%) involve boats less than 21 feet in length is the reason that, in 2009, New York made the proactive decision to require everyone on watercraft less than 21 feet in length to wear a life jacket between November 1<sup>st</sup> and May 1<sup>st</sup>.

Alcohol is another leading cause of fatal boating accidents in New York. Between 2005 and 2012 alcohol use was found to be a primary contributing factor in 38 fatalities or about 22% of all boating deaths. Alcohol impairs an operator's judgment and reaction time making them more susceptible to injuries such as hypothermia and shock.

In summary we may now better understand that by taking some simple proactive steps we can reasonably assure a safe day on the water.

First, always assess the risks and wear a life jacket when conditions dictate.

Never mix alcohol and boating especially since,

along with the environmental stressors of being on the water, it greatly affects one's ability to comprehend and react. Of course it's essential to understand as much about boating before heading out so consider taking a safe boating class. Always equip your boat with the required safety equipment, file a float plan and don't forget to bring a communication device should you need to summon assistance.

The New York State Office of Parks Recreation and Historic Preservation (OPRHP) has been charged with the responsibility of providing the public with a safe and enjoyable environment in which to boat. The goal is to develop safe boating habits through education combined with enforcement of the Navigation.



# Law Enforcement Activity

Law Enforcement Agency	Total Vessel Hours	Total MLE Hours	Searches and Assists	Total Vessel Inspections	BWI Arrests	Total Arrests
<b>County</b>						
Allegany	382	885	17	85	0	6
Cattaraugus	527	736	46	56	0	0
Cayuga	1417	3303	35	118	1	15
Chautauqua	1048	2134	163	1160	0	72
Chenango	8	49	1	2	0	0
Clinton	339	4128	24	245	0	15
Columbia	249	680	7	57	1	40
Cortland	9	63	0	2	0	0
Dutchess	652	1473	38	37	0	1
Erie	1508	3016	123	110	3	106
Greene	72	162	6	4	0	0
Hamilton	1391	1584	28	140	0	25
Herkimer	582	633	23	0	0	1
Jefferson	320	758	19	45	2	34
Lewis	41	104	0	0	0	0
Livingston	2400	2940	63	18	0	8
Madison	72	284	2	16	0	0
Monroe	1052	5856	209	100	3	131
Nassau	17235	43327	39	383	9	669
Niagara	971	3389	100	401	0	37
Oneida	769	2071	42	16	1	76
Onondaga	1005	3077	11	466	18	184
Ontario	1353	678	30	523	1	12
Orange	285	506	5	36	1	28
Orleans	420	3841	55	54	0	2
Oswego	535	2628	31	348	0	29
Otsego	123	256	3	68	0	10
Putnam	279	663	28	85	0	0
Rockland	600	2720	69	109	0	18
St. Lawrence	296	296	0	187	0	1
Saratoga	337	553	13	476	0	34
Schuyler	168	477	38	138	2	12
Seneca	373	1058	10	2	0	0
Steuben	545	1211	48	277	0	10
Suffolk (Police Dept.)	5121	14400	390	621	19	323
Sullivan	58	128	15	0	0	4
Tioga	2	4	0	0	0	0
Tompkins	181	361	4	3	0	0
Ulster	684	648	16	12	0	7
Warren	735	1176	184	122	0	11
Wayne	510	3051	68	34	0	27
<i>Westchester</i>	1061	2219	90	193	1	119
Wyoming	153	159	11	0	0	0

Law Enforcement Agency	Total Vessel Hours	Total MLE Hours	Searches and Assists	Total Vessel Inspections	BWI Arrests	Total Arrests
<b>County</b>						
Yates	1043	2953	41	3557	1	84
New York City	99584	196266	378	1620	1	286
<b>Municipalities</b>						
Village of Asharoken	480	700	8	25	0	0
Carmel	544	609	32	69	0	4
Town of Evans	140	140	7	18	0	3
Town of Hamburg	111	350	5	25	0	0
Huntington	2490	7000	100	2853	1	537
Mamaroneck	1678	3304	63	184	1	63
New Rochelle	1620	5008	45	95	0	50
Ossining	157	314	7	0	0	0
Quogue	442	615	20	134	0	42
Riverhead	550	2200	22	81	1	6
Rye	502	3382	70	93	0	45
Smithtown	2654	9448	83	186	0	86
Southold	700	2415	50	32	4	63
<b>Other Agencies</b>						
State Park Police	1539	3588	103	261	20	115
State Police	617	1201	7	77	5	26
Lake George Park Commision	3132	4166	266	335	6	210
<b>TOTALS</b>	<b>163846</b>	<b>361340</b>	<b>3411</b>	<b>16394</b>	<b>102</b>	<b>3687</b>



## 2012 Vessel Registrations by County and Length

County	Total	Uncoded	Class A <16'	Class 1 16-25'	Class 2 26-39'	Class 3 40-64'	Class 4 ≥ 65'
ALBANY	9240	25	3727	4882	564	26	16
ALLEGANY	1884	6	819	1039	20	0	0
BRONX	2408	7	874	1064	412	36	15
BROOME	6994	19	3273	3395	281	14	12
CATTARAUGUS	2861	7	1140	1624	80	4	6
CAYUGA	5292	20	2014	3002	247	9	0
CHAUTAUQUA	6622	28	2323	3900	349	19	3
CHEMUNG	4214	2	1764	2246	188	10	4
CHENANGO	2294	0	1272	966	51	4	1
CLINTON	5856	17	2858	2723	244	11	3
COLUMBIA	2901	4	1307	1469	112	8	1
CORTLAND	2159	7	1001	1088	58	5	0
DELAWARE	1252	0	610	590	51	0	1
DUTCHESS	6925	4	3053	3274	555	33	6
ERIE	24498	64	8590	13531	2115	172	26
ESSEX	4411	11	1968	2301	122	5	4
FRANKLIN	4340	3	2277	2000	55	0	5
FULTON	4471	9	2059	2224	176	3	0
GENESEE	2245	3	929	1237	64	8	4
GREENE	2352	6	933	1232	169	11	1
HAMILTON	1966	7	968	974	12	4	1
HERKIMER	3623	11	1690	1843	78	1	0
JEFFERSON	11051	52	4534	5738	687	37	3
KINGS	4436	3	1590	1717	986	114	26
LEWIS	2136	2	1153	948	32	1	0
LIVINGSTON	3884	8	1712	2087	71	6	0
MADISON	4356	6	1800	2370	171	8	1
MONROE	27285	71	10908	14421	1763	106	16
MONTGOMERY	2027	11	961	992	61	1	1
NASSAU	30889	68	9646	14648	5794	685	48



<b>County</b>	<b>Total</b>	<b>Uncoded</b>	<b>Class A &lt;16'</b>	<b>Class 1 16-25'</b>	<b>Class 2 26-39'</b>	<b>Class 3 40-64'</b>	<b>Class 4 &gt;= 65'</b>
<b>NEW YORK</b>	4623	3	1275	1996	1131	193	25
<b>NIAGARA</b>	8600	40	3056	4849	622	26	7
<b>ONEIDA</b>	11137	34	4771	5919	390	21	2
<b>ONONDAGA</b>	21307	59	8365	11503	1277	93	10
<b>ONTARIO</b>	7568	18	2663	4592	276	17	2
<b>ORANGE</b>	9015	31	4369	3974	586	44	11
<b>ORLEANS</b>	2148	1	954	1082	107	4	0
<b>OSWEGO</b>	9147	14	4186	4438	489	19	1
<b>OTSEGO</b>	2526	5	1099	1373	43	4	2
<b>PUTNAM</b>	2979	5	1160	1564	226	23	1
<b>QUEENS</b>	6588	12	2328	3121	1013	82	32
<b>RENSSELAER</b>	5873	8	2554	3011	274	24	2
<b>RICHMOND</b>	3821	9	1318	1667	749	69	9
<b>ROCKLAND</b>	4337	8	1972	1642	635	64	16
<b>ST LAWRENCE</b>	10312	14	4995	5015	270	14	4
<b>SARATOGA</b>	13285	16	5077	7471	686	32	3
<b>SCHENECTADY</b>	5826	15	2496	3004	293	13	5
<b>SCHOHARIE</b>	1120	0	560	517	39	3	1
<b>SCHUYLER</b>	1627	5	620	931	68	2	1
<b>SENECA</b>	2846	3	1085	1610	135	12	1
<b>STEUBEN</b>	5242	3	2113	2989	133	4	0
<b>SUFFOLK</b>	67038	241	19586	34302	11650	1194	65
<b>SULLIVAN</b>	3193	2	1619	1473	91	4	4
<b>TIOGA</b>	2421	3	1150	1185	82	1	0
<b>TOMPKINS</b>	3553	7	1244	2041	242	18	1
<b>ULSTER</b>	5548	7	2456	2605	451	27	2
<b>WARREN</b>	7366	41	2446	4372	488	9	10
<b>WASHINGTON</b>	3504	13	1561	1825	102	3	0
<b>WAYNE</b>	6741	22	2744	3590	364	20	1
<b>WESTCHESTER</b>	11839	20	3773	5390	2268	344	44
<b>WYOMING</b>	1716	1	631	1058	22	4	0
<b>YATES</b>	2502	4	859	1575	60	2	2

<b>County</b>	<b>Total</b>	<b>Uncoded</b>	<b>Class A &lt;16'</b>	<b>Class 1 16-25'</b>	<b>Class 2 26-39'</b>	<b>Class 3 40-64'</b>	<b>Class 4 &gt;= 65'</b>
<b>Out of State</b>	13319	2	4776	7238	1162	131	10
<b>TOTAL</b>	<b>463539</b>	<b>1147</b>	<b>177614</b>	<b>238447</b>	<b>41992</b>	<b>3861</b>	<b>478</b>

# ACCIDENTS

The chart below illustrates registration and accident figures for the years 1982 thru 2012. While during that time period vessel registrations have generally risen, accidents, injuries and fatalities have all, in general, steadily decreased.

A collision between two or more vessels is still the most common type of boating accident and results in the most injuries. Boaters must recognize that the waterways are increasingly more crowded and that vessel operation must be adjusted accordingly. Operators must be constantly aware of what is happening around them. Mixing alcohol, drugs and boating adds to the danger. Not only is it illegal, but the lessening of one's judgment and balance can have deadly consequences. Alcohol and drugs have been shown to be important contributing factors in many fatal incidents.

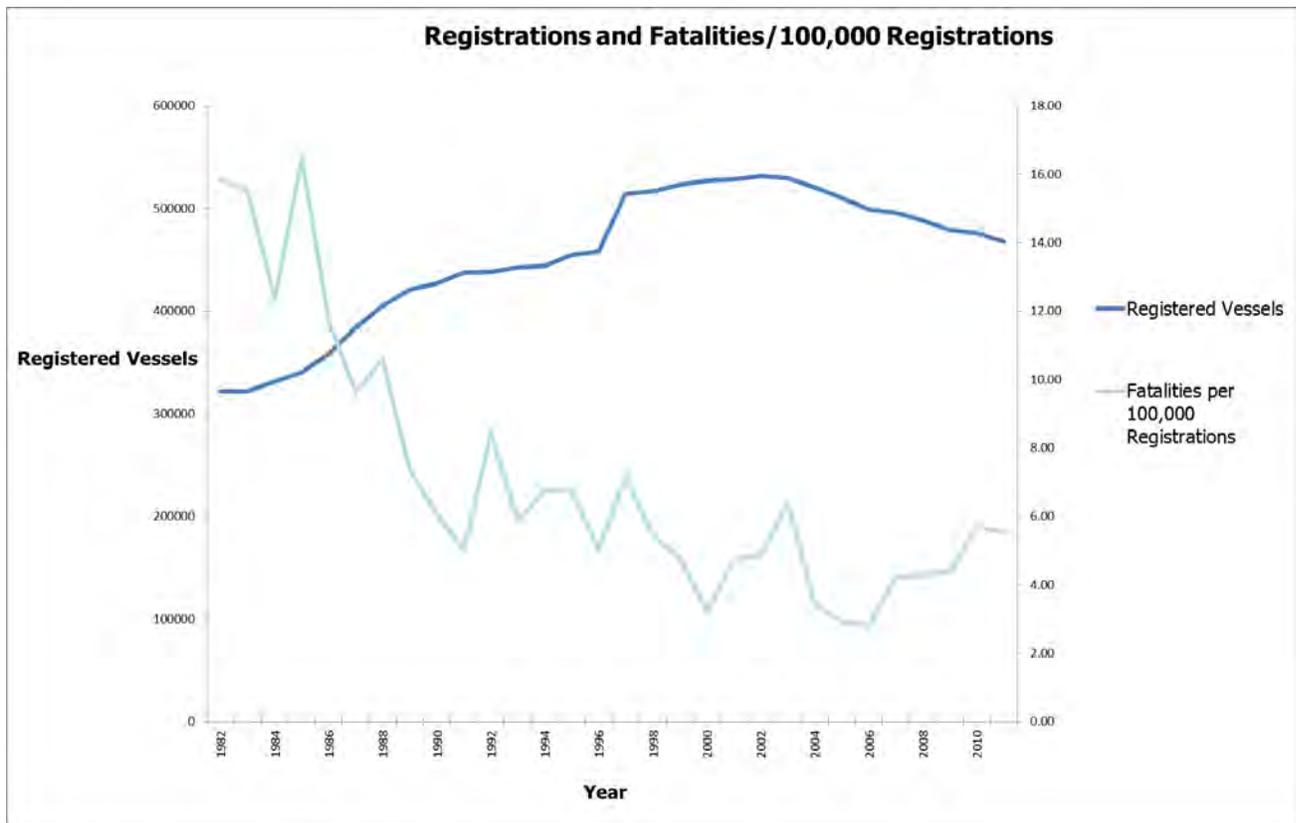
A reduction of collisions and fatalities can also be achieved through consideration of other boaters. Boating education classes are also important, but boaters must be willing to apply what they have learned. Tougher laws are also making it possible to remove dangerous boaters from our waterways. Education and enforcement must be combined with, and complemented by, fair enforceable laws.

It is also vitally important to increase use of life jackets, especially in the off-season when the water is cold and when help may not be able to respond quickly. Roughly one quarter of all fatalities occur when boaters are operating during the off-season, in boats less than twenty-one feet in length, when victims may end up in the water without the benefit of a life jacket. While new legislation mandates that life jackets be worn in those instances, it is still incumbent upon the boater to use their best judgment; if the water is cold, wear a life jacket, and dress for the weather!

## Reportable Accidents

For Recreational Vessels:

- Loss of Life or Disappearance
- Injury Involving More Than Basic First Aid
- Total Property Damage to any one party in Excess of \$1000



## Accident Data: 1982 - 2012

Year	Fatalities per 100,000 Registrations	Registered Vessels	Accidents	Injuries	Fatalities
1982	15.84	321881	309	180	51
1983	15.53	321881	390	248	50
1984	12.36	331742	271	153	41
1985	16.46	340300	319	182	56
1986	11.72	358400	298	157	42
1987	9.64	383868	310	163	37
1988	10.61	405331	362	120	43
1989	7.37	420885	333	109	31
1990	6.09	426617	323	119	26
1991	5.03	437579	265	119	22
1992	8.44	438342	228	130	37
1993	5.87	442745	226	138	26
1994	6.76	443856	222	90	30
1995	6.81	455189	291	130	31
1996	5.02	458092	325	168	23
1997	7.19	514538	322	182	37
1998	5.42	516738	326	181	28
1999	4.78	523321	315	193	25
2000	3.22	527426	288	127	17
2001	4.73	528113	288	140	25
2002	4.89	531579	284	152	26
2003	6.42	529844	303	137	34
2004	3.46	520758	204	93	18
2005	2.94	510185	219	143	15
2006	2.80	499301	183	101	14
2007	4.24	495623	206	133	21
2008	4.30	488167	215	104	21
2009	4.38	479161	191	78	21
2010	5.68	475688	243	128	27
2011	5.56	467828	226	190	26
2012	5.61	463539	241	126	26

## Accidents by County and Waterway

County / Waterway	Accidents	Injures	Fatalities
<b>Albany</b>	<b>2</b>	<b>1</b>	<b>0</b>
Hudson River	2	1	0
<b>Allegany</b>	<b>1</b>	<b>2</b>	<b>0</b>
Rushford Lake	1	2	0
<b>Bronx</b>	<b>5</b>	<b>1</b>	<b>0</b>
Eastchester Bay	3	1	0
Westchester Creek	2	0	0
<b>Broome</b>	<b>1</b>	<b>1</b>	<b>0</b>
Arctic Lake	1	1	0
<b>Cattaraugus</b>	<b>1</b>	<b>0</b>	<b>1</b>
Kinzua Reservoir	1	0	1
<b>Cayuga</b>	<b>4</b>	<b>4</b>	<b>1</b>
Cayuga Lake	1	0	1
Lake Ontario	2	3	0
Owasco Lake	1	1	0
<b>Chautauqua</b>	<b>10</b>	<b>7</b>	<b>0</b>
Chautauqua Lake	10	7	0
<b>Clinton</b>	<b>2</b>	<b>1</b>	<b>1</b>
Lake Champlain	1	0	1
Narrows-Chateaugay Lake	1	1	0
<b>Dutchess</b>	<b>3</b>	<b>2</b>	<b>2</b>
Hudson River	2	2	2
Whaley Lake	1	0	0
<b>Erie</b>	<b>3</b>	<b>2</b>	<b>0</b>
Buffalo Outer Harbor	1	0	0
East Niagara River	1	1	0
Lake Erie	1	1	0
<b>Essex</b>	<b>2</b>	<b>2</b>	<b>0</b>
Lake George	1	1	0
Lake Placid	1	1	0
<b>Franklin</b>	<b>1</b>	<b>1</b>	<b>0</b>
Upper Saranac Lake	1	1	0
<b>Fulton</b>	<b>2</b>	<b>2</b>	<b>0</b>
Sacandaga Lake	1	1	0
Sacandaga River	1	1	0
<b>Greene</b>	<b>2</b>	<b>3</b>	<b>0</b>
Hudson River	2	3	0
<b>Hamilton</b>	<b>2</b>	<b>2</b>	<b>0</b>
Lake Pleasant	1	1	0
Raquette Lake	1	1	0
<b>Jefferson</b>	<b>11</b>	<b>7</b>	<b>1</b>
Lake of Isle	1	0	0
Lake Ontario	1	1	1

County / Waterway	Accidents	Injures	Fatalities
St Lawrence River	9	6	0
<b>Kings</b>	<b>2</b>	<b>0</b>	<b>0</b>
Jamaica Bay	1	0	0
Plum Beach Channel	1	0	0
<b>Livingston</b>	<b>2</b>	<b>1</b>	<b>0</b>
Conesus Lake	2	1	0
<b>Monroe</b>	<b>6</b>	<b>1</b>	<b>2</b>
Genesee River	1	1	0
Irondequoit Bay	2	0	2
Lake Ontario	3	0	0
<b>Nassau</b>	<b>27</b>	<b>26</b>	<b>4</b>
Atlantic Ocean	3	9	0
Domar Canal	1	0	0
East Bay	1	1	0
East Rockaway Channel	1	0	0
East Rockaway Inlet	1	0	1
Goose Creek and Seamoan's Creek	1	2	0
Great Sand Creek	1	0	0
Jones Inlet	1	0	0
Long Creek	2	4	0
Long Island Sound	8	8	3
Massapequa Cove	1	1	0
Oyster Bay	1	0	0
Reynolds Channel	2	0	0
Sea Dog Creek	2	1	0
Sloop Channel	1	0	0
<b>New York</b>	<b>4</b>	<b>4</b>	<b>0</b>
East River	2	2	0
Harlem River	1	0	0
Hudson River	1	2	0
<b>Niagara</b>	<b>3</b>	<b>1</b>	<b>0</b>
Lake Ontario	2	0	0
Lower Niagara River	1	1	0
<b>Oneida</b>	<b>5</b>	<b>1</b>	<b>4</b>
Hinckley Lake	1	0	0
NYS Barge Canal	1	0	0
Oneida Lake	3	1	3
<b>Onondaga</b>	<b>3</b>	<b>0</b>	<b>1</b>
Oneida River	1	0	0
Otisco Lake	1	0	0
Seneca River	1	0	1
<b>Ontario</b>	<b>7</b>	<b>4</b>	<b>1</b>
Canandaigua Lake	3	2	1
Canandaigua Outlet	1	1	0

County / Waterway	Accidents	Injures	Fatalities
Honeoye Lake	3	1	0
<b>Orange</b>	<b>2</b>	<b>1</b>	<b>0</b>
Glenmere Reservoir	1	1	0
Hudson River	1	0	0
<b>Oswego</b>	<b>4</b>	<b>1</b>	<b>1</b>
Lake Ontario	1	1	0
Oneida Lake	1	0	0
Sandy Pond	2	0	1
<b>Putnam</b>	<b>1</b>	<b>0</b>	<b>0</b>
Lake Mahopac	1	0	0
<b>Queens</b>	<b>6</b>	<b>3</b>	<b>0</b>
East River	1	0	0
Far Rockaway	1	1	0
Flushing Bay	1	0	0
Hawtree Creek	1	0	0
Jamaica Bay	1	2	0
Long Island Sound	1	0	0
<b>Richmond</b>	<b>5</b>	<b>8</b>	<b>1</b>
Great Kills	1	0	0
Great Kills Harbor	1	1	0
Lower Bay	2	3	0
Raritan Bay	1	4	1
<b>Rockland</b>	<b>2</b>	<b>0</b>	<b>0</b>
Hudson River	2	0	0
<b>Saratoga</b>	<b>4</b>	<b>1</b>	<b>0</b>
Sacandaga Lake	2	1	0
Saratoga Lake	2	0	0
<b>Schenectady</b>	<b>1</b>	<b>0</b>	<b>0</b>
Mohawk River	1	0	0
<b>St Lawrence</b>	<b>3</b>	<b>1</b>	<b>1</b>
Oswegatchie River	1	0	0
St Lawrence River	2	1	1
<b>Suffolk</b>	<b>56</b>	<b>22</b>	<b>5</b>
3 Mile Harbor	1	0	0
Atlantic Ocean	2	1	0
Bellport Bay	2	0	1
Block Island Sound	3	1	0
Dering Harbor	1	0	0
East Creek	1	0	0
Fishers Island Sound	1	0	1
Flanders Bay	1	1	0
Great Peconic Bay	1	0	1
Great Sodus Bay	1	0	0
Great South Bay	9	4	1
Greenport Harbor	1	1	0

County / Waterway	Accidents	Injures	Fatalities
Hemlock Cove	1	1	0
Huntington Harbor	1	0	0
Lake Montauk	1	1	0
Little Peconic Bay	3	3	0
Long Island Sound	7	1	0
Mecox Bay	1	0	1
<b>Suffolk (Continued)</b>			
Moriches Bay	2	1	0
Northport Bay	1	0	0
Peconic Bay	2	1	0
Peconic River	1	0	0
Quantuck Bay	1	1	0
Sag Harbor	1	0	0
Sag Harbor Bay	3	2	0
Shelter Island Sound	1	1	0
Shinnecock Bay	3	1	0
Shinnecook Canal	1	0	0
W Riviera Drive Canal	1	0	0
West Neck	1	1	0
<b>Ulster</b>	<b>1</b>	<b>0</b>	<b>0</b>
Hudson River	1	0	0
<b>Warren</b>	<b>20</b>	<b>8</b>	<b>0</b>
Lake George	20	8	0
<b>Wayne</b>	<b>5</b>	<b>4</b>	<b>0</b>
Great Sodus Bay	3	4	0
Lake Ontario	2	0	0
<b>Westchester</b>	<b>17</b>	<b>1</b>	<b>1</b>
Harbor Island	2	0	0
Hudson River	5	0	0
Long Island Sound	10	1	1
<b>Yates</b>	<b>3</b>	<b>0</b>	<b>0</b>
Keuka Lake	3	0	0



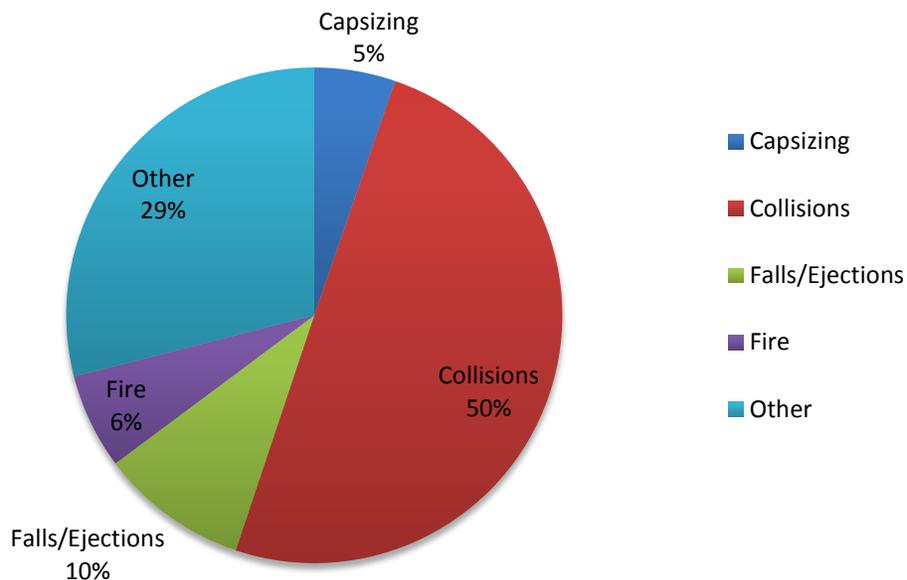


County / Waterway	Accidents	Injures	Fatalities
			

## Accident Types

Accident Type	Vessels	Injuries	Fatalities
Capsizing	17	12	7
Carbon Monoxide Poisoning	1	0	1
Collision w/ Fixed Object	24	13	4
Collision w/ Floating Object	6	1	0
Collision With Commercial Boat	2	2	0
Collision With Recreational Boat	128	21	1
Fall Onboard Boat	7	8	0
Falls Into Boat	4	4	0
Falls Overboard	4	1	3
Fire/Explosion (Fuel)	9	3	0
Fire/Explosion (Other)	11	2	0
Flooding/Swamping	10	12	1
Grounding	24	5	0
Other	4	2	0
Person Ejected From Vessel	16	16	2
Sinking	3	2	0
Skier Mishap	16	13	3
Struck by Boat	10	4	0
Struck by Propeller	2	1	1
Struck Submerged Object	18	3	1
Sudden Medical Condition	1	0	1
Unknown	4	1	1

### Summary of Accident Types





## Accident Type and Vessel Operation

Accident Type	Operation	Vessels	Injuries	Fatalities
Capsizing	Changing Speed	2	0	0
	Cruising	2	2	0
	Cruising, Changing Direction	1	4	3
	Drifting	4	3	1
	Rowing or Paddling	1	0	1
	Rowing or Paddling, Changing Direction	1	1	0
	Sailing	2	1	0
	Tied to Dock/Mooring	2	0	0
	Unknown	2	1	2
Carbon Monoxide Poisoning	Cruising	1	0	1
Collision w/ Fixed Object	Changing Direction	1	3	0
	Changing Speed	1	1	1
	Cruising	11	5	3
	Cruising, Changing Direction	2	0	0
	Docking/Undocking	2	2	0
	Drifting	1	0	0
	Launching	2	0	0
	Rowing or Paddling	1	2	0
	Sailing	1	0	0
	Tied to Dock/Mooring	2	0	0
Collision w/ Floating Object	Changing Direction	1	0	0
	Cruising	3	1	0
	Drifting	1	0	0
	Unknown	1	0	0
Collision With Commercial Boat	Cruising	2	2	0
Collision With Recreational Boat	At Anchor	3	0	0
	Changing Direction	6	4	0
	Changing Speed	5	2	0
	Changing Speed, Changing Direction	1	0	0
	Changing Speed, Docking/Undocking	1	0	0
	Cruising	43	8	1
	Cruising, Changing Direction	1	2	0
	Docking/Undocking	16	0	0
	Docking/Undocking, Changing Direction	1	0	0
	Drifting	15	3	0
	Drifting, Tied to Dock/Mooring	2	0	0
	Launching	1	0	0
	Tied to Dock/Mooring	30	0	0

Accident Type	Operation	Vessels	Injuries	Fatalities
Collision With Recreational Boat	Towing another vessel	1	2	0
	Unknown	2	0	0
Fall Onboard Boat	Changing Direction	1	2	0
	Cruising	3	3	0
	Docking/Undocking	1	1	0
	Sailing	2	2	0
Falls Into Boat	At Anchor	1	1	0
	Cruising	3	3	0
Falls Overboard	Changing Direction	1	0	1
	Cruising	1	1	0
	Drifting	1	0	1
	Unknown	1	0	1
Fire/Explosion (Fuel)	Changing Speed	1	1	0
	Changing Speed, Cruising	1	0	0
	Changing Speed, Docking/Undocking, Changing Direction	1	0	0
	Cruising	1	1	0
	Drifting	1	0	0
	Launching, Tied to Dock/Mooring	1	0	0
	Tied to Dock/Mooring	3	1	0
Fire/Explosion (Other)	At Anchor	1	0	0
	Cruising	3	2	0
	Tied to Dock/Mooring	6	0	0
	Unknown	1	0	0
Flooding/Swamping	At Anchor	3	10	1
	Cruising	4	2	0
	Tied to Dock/Mooring	2	0	0
	Towing another vessel	1	0	0
Grounding	At Anchor	1	0	0
	Changing Direction	1	0	0
	Changing Speed	1	1	0
	Cruising	17	4	0
	Cruising, Changing Direction	1	0	0
	Drifting	1	0	0
	Sailing	2	0	0
Other	Tied to Dock/Mooring	1	0	0
	Cruising	1	1	0
	Sailing	1	1	0
	Unknown	1	0	0
Person Leaves Or Is Ejected From Vessel	At Anchor	1	0	1
	Changing Direction	4	5	0
	Changing Speed, Changing Direction	1	1	0
	Cruising	5	6	0

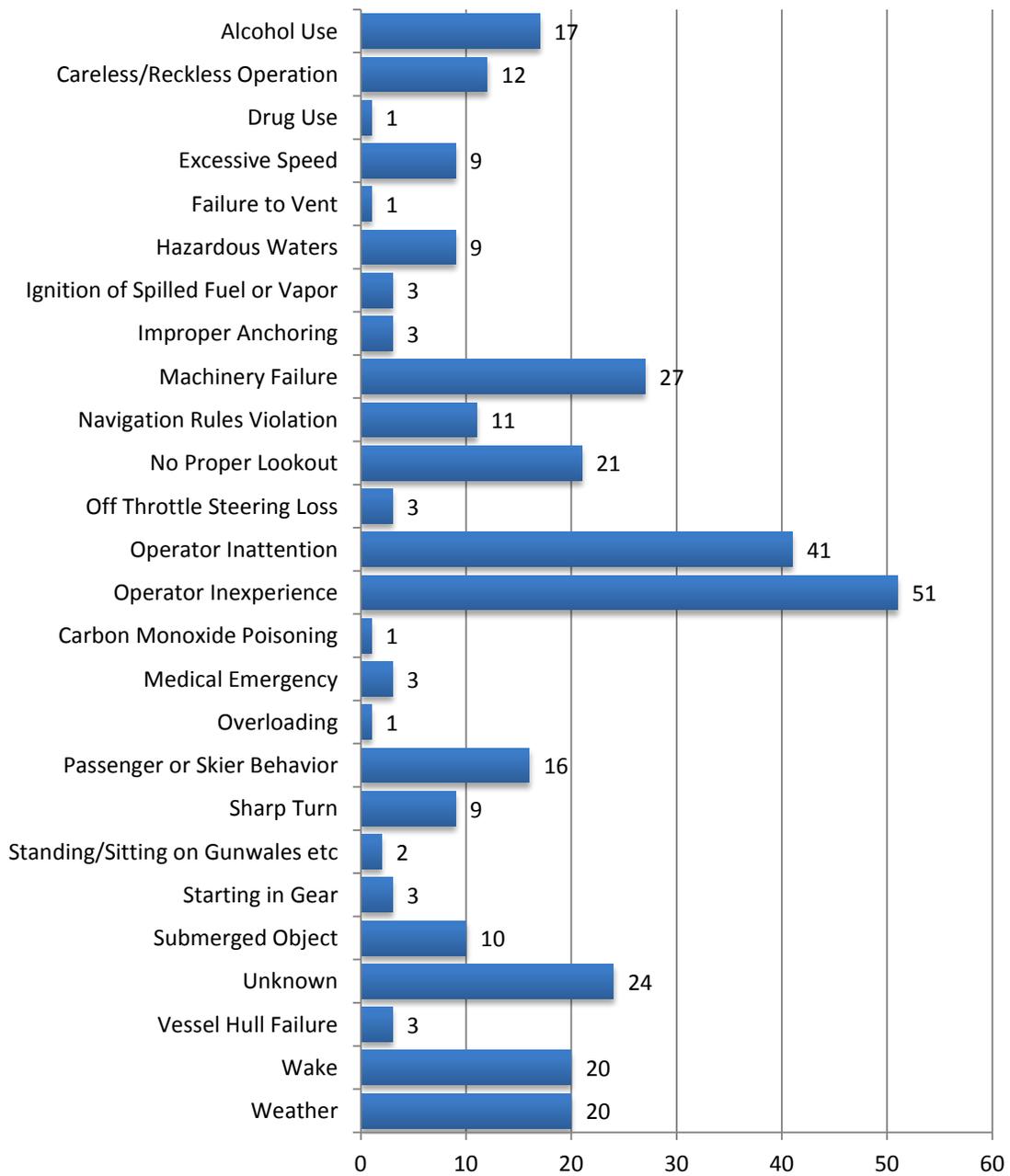
Accident Type	Operation	Vessels	Injuries	Fatalities
	Drifting	2	1	1
Person Leaves Or Is Ejected From Vessel	Rowing or Paddling	1	1	0
	Sailing	1	1	0
	Tied to Dock/Mooring	1	1	0
Sinking	At Anchor	1	0	0
	Drifting	1	1	0
	Rowing or Paddling	1	1	0
Skier Mishap	At Anchor	1	0	0
	Changing Direction	1	1	0
	Changing Speed, Cruising	1	1	0
	Cruising	12	10	3
	Cruising, Changing Direction	1	1	0
Struck by Boat	At Anchor	1	1	0
	Changing Speed	1	1	0
	Cruising	2	2	0
	Tied to Dock/Mooring	6	0	0
Struck by Propeller or Propulsion Unit	Changing Speed	1	0	1
	Drifting	1	1	0
Struck Submerged Object	Changing Speed	1	0	0
	Changing Speed, Cruising	1	0	0
	Cruising	14	2	1
	Docking/Undocking	1	0	0
	Rowing or Paddling	1	1	0
Sudden Medical Condition	Unknown	1	0	1
Unknown	Cruising	1	1	0
	Unknown	3	0	1



Accident Type	Operation	Vessels	Injuries	Fatalities
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## Cause of Accident by Vessel





## Accident Type and Cause

Accident Type	Cause	Vessels	Injures	Fatalities
Capsizing	Alcohol Use	1	1	2
	Excessive Speed	1	1	0
	Hazardous Waters	2	2	0
	Operator Inattention	1	1	0
	Operator Inexperience	1	0	1
	Overloading	1	4	3
	Passenger or Skier Behavior	1	1	0
	Standing/Sitting on Gunwales etc	1	0	0
	Unknown	1	0	0
	Vessel Hull Failure	2	0	0
	Weather	5	2	1
Carbon Monoxide Poisoning	Carbon Monoxide Poisoning	1	0	1
Collision w/ Fixed Object	Alcohol Use	1	1	0
	Careless/Reckless Operation	3	0	0
	Excessive Speed	1	1	3
	Hazardous Waters	1	2	0
	Machinery Failure	2	0	0
	Operator Inattention	6	2	0
	Operator Inexperience	2	4	0
	Passenger or Skier Behavior	3	3	1
	Submerged Object	1	0	0
	Wake	4	0	0
Collision w/ Floating Object	Alcohol Use	2	1	0
	No Proper Lookout	2	0	0
	Operator Inattention	2	0	0
Collision With Commercial Boat	Alcohol Use	2	2	0
Collision With Recreational Boat	Alcohol Use	5	2	1
	Careless/Reckless Operation	6	1	0
	Excessive Speed	5	2	0
	Improper Anchoring	2	0	0
	Machinery Failure	8	2	0
	Medical Emergency	2	0	0
	Navigation Rules Violation	10	3	0
	No Proper Lookout	15	0	0
	Off Throttle Steering Loss	3	0	0
	Operator Inattention	13	2	0
	Operator Inexperience	25	4	0
	Passenger or Skier Behavior	1	0	0
	Poor Visibility (Restricted Vision)	1	0	0
	Sharp Turn	3	3	0
	Starting in Gear	3	0	0
Unknown	14	0	0	

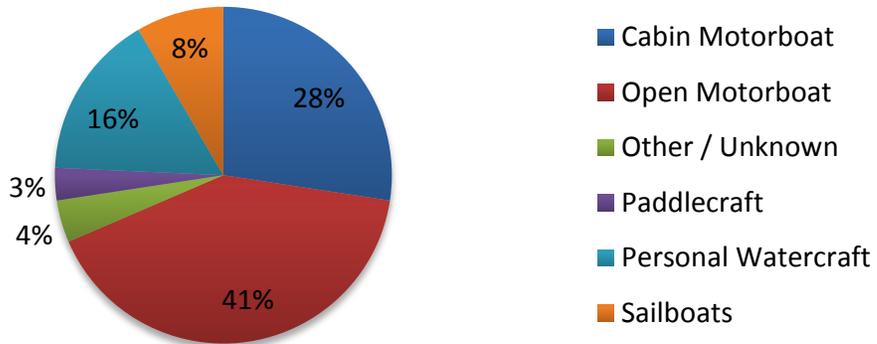
Accident Type	Cause	Vessels	Injures	Fatalities
Collision With Recreational Boat	Wake	2	0	0
	Weather	10	2	0
Fall Onboard Boat	Operator Inattention	1	1	0
	Operator Inexperience	1	1	0
	Passenger or Skier Behavior	2	2	0
	Standing/Sitting on Gunwales etc	1	1	0
	Wake	1	1	0
	Weather	1	2	0
Falls Into Boat	Operator Inattention	1	1	0
	Wake	2	2	0
	Weather	1	1	0
Falls Overboard	Alcohol Use	1	0	1
	Sharp Turn	1	0	1
	Unknown	1	0	1
	Wake	1	1	0
Fire/Explosion (Fuel)	Failure to Vent	1	0	0
	Ignition of Spilled Fuel or Vapor	3	2	0
	Machinery Failure	5	1	0
Fire/Explosion (Other)	Machinery Failure	7	2	0
	Unknown	4	0	0
Flooding/Swamping	Hazardous Waters	2	0	0
	Improper Anchoring	1	6	0
	Operator Inexperience	1	0	0
	Unknown	1	2	0
	Unknown	1	0	0
	Wake	2	4	1
	Weather	2	0	0
Grounding	Alcohol Use	1	0	0
	Careless/Reckless Operation	1	0	0
	Hazardous Waters	4	1	0
	Machinery Failure	1	0	0
	No Proper Lookout	1	0	0
	Operator Inattention	5	1	0
	Operator Inexperience	6	2	0
	Sharp Turn	1	0	0
	Submerged Object	1	0	0
	Unknown	1	0	0
	Weather	2	1	0
Other	Operator Inattention	1	1	0
	Operator Inexperience	1	1	0
	Unknown	1	0	0
	Weather	1	0	0
Person Leaves Or Is Ejected From Vessel	Alcohol Use	2	0	2
	Careless/Reckless Operation	1	1	0
	Excessive Speed	1	1	0
	Machinery Failure	1	2	0

Accident Type	Cause	Vessels	Injures	Fatalities
	Operator Inattention	1	1	0
Person Leaves Or Is Ejected From Vessel	Operator Inexperience	1	1	0
	Passenger or Skier Behavior	1	1	0
	Sharp Turn	3	4	0
	Unknown	1	1	0
	Wake	2	2	0
	Weather	2	2	0
Sinking	Machinery Failure	1	0	0
	Vessel Hull Failure	1	1	0
	Wake	1	1	0
Skier Mishap	Drug Use	1	0	2
	Operator Inexperience	2	0	1
	Passenger or Skier Behavior	8	8	0
	Unknown	1	1	0
	Wake	4	4	0
Struck by Boat	Alcohol Use	1	1	0
	Careless/Reckless Operation	1	0	0
	Machinery Failure	1	1	0
	Navigation Rules Violation	1	1	0
	No Proper Lookout	1	1	0
	Operator Inattention	1	0	0
	Operator Inexperience	4	0	0
Struck by Propeller or Propulsion Unit	Operator Inattention	1	1	0
	Operator Inexperience	1	0	1
Struck Submerged Object	No Proper Lookout	1	0	0
	Operator Inattention	5	0	1
	Operator Inexperience	3	1	0
	Submerged Object	8	0	0
	Unknown	1	2	0
Sudden Medical Condition	Medical Emergency	1	0	1
Unknown	Operator Inattention	1	0	0
	Unknown	3	1	1

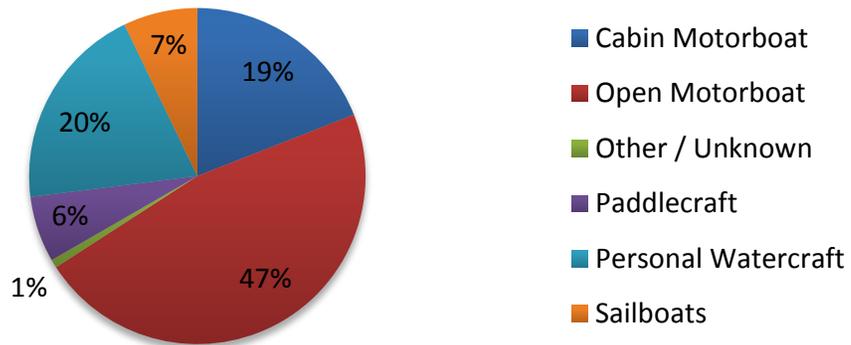


Accident Type	Cause	Vessels	Injures	Fatalities
				

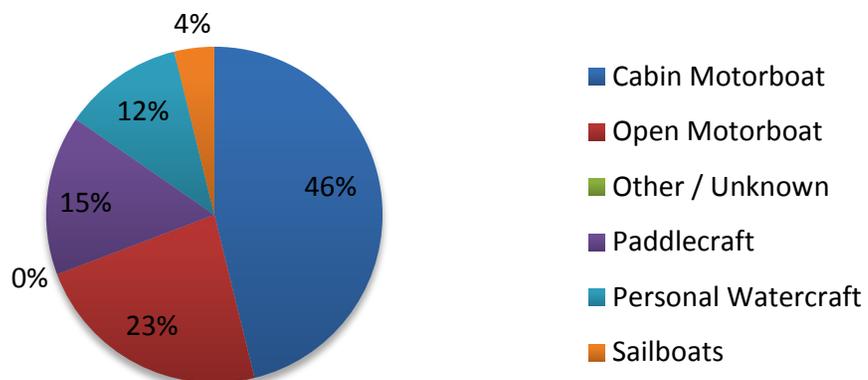
## Vessel Types



## Injuries



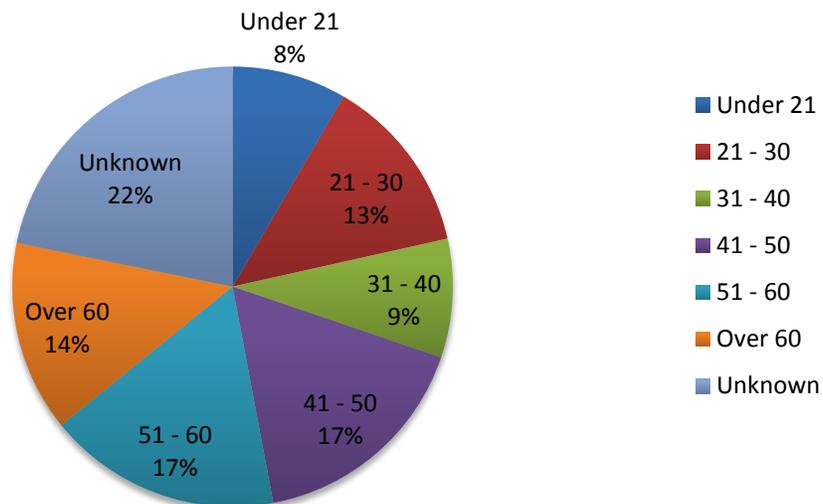
## Fatalities



## Operator Age

Age Group	Vessels	Injures	Fatalities
Under 21	27	18	1
21 - 30	42	20	4
31 - 40	28	15	9
41 - 50	54	34	5
51 - 60	55	16	5
Over 60	45	19	1
Unknown	70	4	1

## Vessels by Operator Age



## Age of Operator and Boating Education

Age Group	Education	Vessels	Injuries	Fatalities
Under 21	Unknown	4	4	0
	None	12	9	0
	State Course	9	4	1
	USCG Auxiliary	2	1	0
21 - 30	Unknown	13	7	3
	None	17	8	1
	State Course	11	4	0
	USCG Auxiliary	1	1	0
31 - 40	Unknown	10	7	5
	None	8	4	0
	State Course	7	3	4
	US Power Squadron	1	0	0
	USCG Auxiliary	2	1	0
41 - 50	Unknown	15	8	1
	None	20	11	0
	State Course	13	13	4
	US Power Squadron	1	0	0
	USCG Auxiliary	5	2	0
51 - 60	Unknown	21	5	4
	None	17	5	1
	State Course	11	4	0
	US Power Squadron	1	0	0
	USCG Auxiliary	5	2	0
Over 60	Unknown	14	6	0
	None	20	10	1
	State Course	6	0	0
	US Power Squadron	1	1	0
	USCG Auxiliary	4	2	0
Unknown	Unknown	68	1	1
	None	1	1	0
	State Course	1	2	0



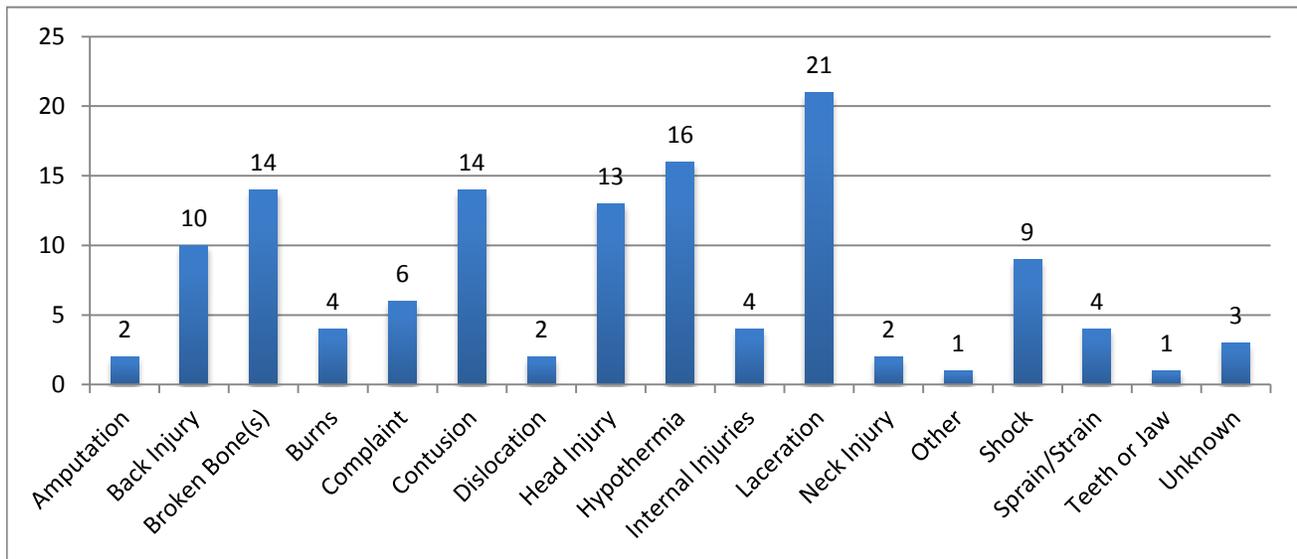




## Age of Operator and Boating Experience

Operator Age	Experience	Vessels	Injuries	Fatalities
Under 21	None	3	1	0
	Under 10 Hours	5	3	1
	10 to 100 Hours	12	9	0
	Unknown	7	5	0
21 - 30	Under 10 Hours	10	5	1
	10 to 100 Hours	9	5	0
	100-500 Hrs.	10	3	0
	Over 500 Hrs.	2	0	0
	Unknown	11	7	3
31 - 40	Under 10 Hours	4	2	0
	10 to 100 Hours	4	3	1
	100-500 Hrs.	6	2	2
	Over 500 Hrs.	8	3	3
	Unknown	6	5	3
41 - 50	Under 10 Hours	2	1	0
	10 to 100 Hours	10	12	1
	100-500 Hrs.	20	4	0
	Over 500 Hrs.	12	10	4
	Unknown	10	7	0
51 - 60	None	1	1	0
	Under 10 Hours	3	0	0
	10 to 100 Hours	5	1	1
	100-500 Hrs.	20	6	0
	Over 500 Hrs.	14	6	0
	Unknown	12	2	4
Over 60	Under 10 Hours	2	3	0
	10 to 100 Hours	6	3	0
	100-500 Hrs.	16	6	1
	Over 500 Hrs.	14	4	0
	Unknown	7	3	0
Unknown	10 to 100 Hours	1	1	0
	Over 500 Hrs.	2	2	0
	Unknown	67	1	1

# Injuries



## Type of Injury, Type of Vessel

Vessel	Injury Type	Injuries	Vessel	Injury Type	Injuries
Auxillary Sail	Back Injury	1	Open Motorboat	Internal Injuries	1
	Neck Injury	1		Laceration	6
	Other	1		Neck Injury	1
Cabin Motorboat	Back Injury	2		Shock	2
	Broken Bone(s)	4		Sprain/Strain	2
	Burns	1		Unknown	2
	Contusion	2		Personal Watercraft	Amputation
	Head Injury	3	Back Injury		2
	Laceration	6	Broken Bone(s)		4
	Shock	4	Contusion		2
Sprain/Strain	2	Dislocation	1		
Canoe	Broken Bone(s)	1	Head Injury		4
	Hypothermia	2	Internal Injuries		3
	Shock	2	Laceration		6
Kayak	Hypothermia	2	Teeth or Jaw		1
			Unknown		1
Open Motorboat	Amputation	1	Pontoon Boat	Contusion	1
	Back Injury	5		Laceration	1
	Broken Bone(s)	5	Raft	Hypothermia	1
	Burns	3	Sail (only)	Complaint	1
	Complaint	5		Head Injury	2
	Contusion	8		Laceration	2
	Dislocation	1		Shock	1
	Head Injury	4	Unknown	Contusion	1
Hypothermia	11				

## 2012 Summary of Fatal Accidents

Date	County	Waterway	Cause	Vessel	Accident Type	Fatalities
4/21/2012	Richmond	Raritan Bay	Wake	Open Motorboat	Flooding/Swamping	1
<p>Vessel was anchored in Raritan Bay N/W of Ward Pt. Bend at day marker #52 with people on board. Operator states while attempting to lift the anchor, waves came over his stern and swamped his boat. A passanger was trapped under the boat. Another passanger swam under the boat and recovered the trapped victim. A passing boat pulled all victims from the water and brought them to Perth Amboy Marina. The trapped victim was pronounced dead on arrival. None of the victims were wearing lifejackets. Alcohol and drugs are not believed to have been a factor.</p>						
4/21/2012	Jefferson	Lake Ontario	Weather	Open Motorboat	Capsizing	1
<p>Patrols responded to a report of a capsized vessel in the area of Stony Point on Lake Ontario in the town of Henderson with two people on board. The operator reported that while trolling, a wave broke over the stern. He attempted to bail it with a cooler but a second wave swamped the boat and engines. The operator stayed with the boat and made it ashore. The passanger was unable to stay with the boat and went missing. A subsequent search located the body in the vicinity where the boat capsized. None of the victims were wearing PFDs. Alcohol and drugs are not believed to have been a factor.</p>						
5/12/2012	Westchester	Long Island Sound	Unknown	Open Motorboat	Falls Overboard	1
<p>The owner of the vessel asked a friend to help him move his vessel from one slip to another. At approximately 8:27 am the friend fell off the back of the boat and into the water. He said he was not feeling well went home. At 10:55 am he was still not feeling well and asked his wife to call 911. he was transported to the hospital and died at 12:05 pm due to "secondary drowning". He was not wearing a PFD. Alcohol and drugs were not believed to have been a factor.</p>						
5/20/2012	Suffolk	Great Peconic Bay	Operator Inexperience	Personal Watercraft	Collision With Recreational Boat	1
<p>Operator of a personal watercraft did not see anchor line of another vessel and drove into it. The operator hit along his chest and shoulder area. Operator was thrown. People aboard anchored vessel brought victim aboard and brought him to the marina where emergency personnel were waiting. He was transferred to the hospital and pronounced dead upon arrival. The victim was wearing a PFD. Alcohol and drugs are not believed to have been a factor.</p>						
5/20/2012	Cattaraugus	Kinzua Reservoir	Operator Inexperience	Kayak	Capsizing	1
<p>Operator flipped his kayak and the vessel sank. Operator couldn't swim and drowned. No life jacket was used. Alcohol or drugs were not believed to have been a factor.</p>						
6/23/2012	Suffolk	Great South Bay	Alcohol Use	Cabin Motorboat	Collision With Recreational Boat	1
<p>Operator of a cabin motorboat was traveling east bound under Robert Moses double span bridge. Operator of a cattarman speed boat was traveling south west under bridge at a high rate of speed and hit the cabin motorboat. A passenger onboard the cabin motorboat was thrown overboard and drowned. Lifejackets were not used. Alcohol was a contributing factor in this accident.</p>						
6/30/2012	Clinton	Lake Champlain	Alcohol Use	Sailboat	Person Leaves Or Is Ejected From Vessel	1
<p>The victim left his boat to check on the anchor line which he believed had become fouled. While snorkeling and inspecting the anchor line the victim became entangled and drowned. Alcohol was a factor. The victim did not have a life jacket on.</p>						
7/4/2012	Nassau	Long Island Sound	Overloading	Cabin Motorboat	Capsizing	3

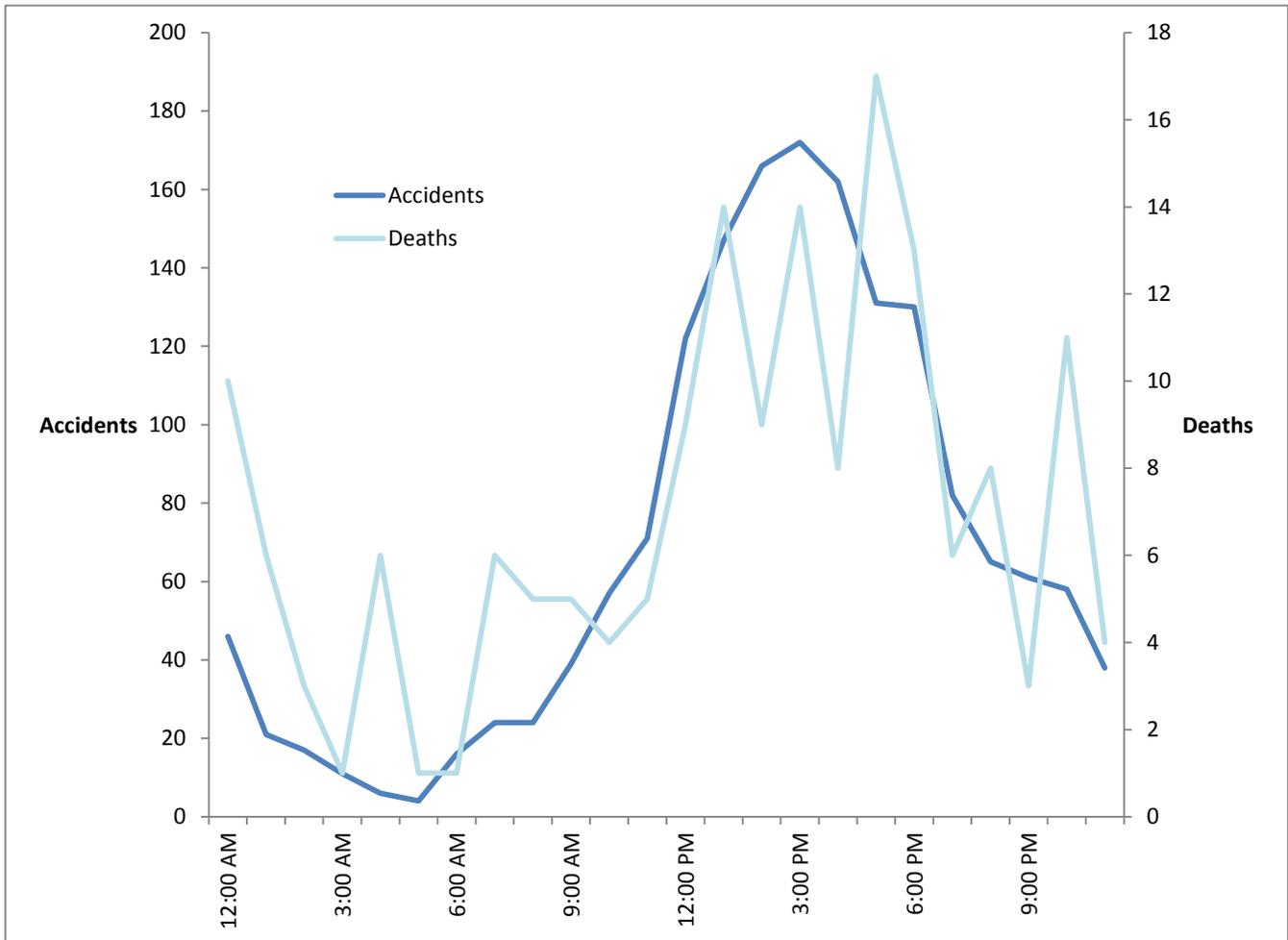
Date	County	Waterway	Cause	Vessel	Accident Type	Fatalities
Operator of the vessel reported heading north out of Cold Spring Harbor into Long Island Sound, stating "the vessel started turning right and leaning to the right". Operator steered left and slowed engines, but vessel continued to lean further until it rolled onto its side and then capsized. The vessel remained capsized with 3 passengers trapped underneath. The vessel remained afloat for a period of time before sinking. The vessel had 27 people onboard prior to capsizing. Overloading and having a large number of passengers on the flying bridge and bow is believed to have lead to a state of greatly reduced stability for the vessel. Only one passenger was wearing a lifejacket. Alcohol and drugs were not a factor.						
7/5/2012	Oneida	Oneida Lake	Excessive Speed	Cabin Motorboat	Collision w/ Fixed Object	3
Vessel was traveling in an easterly direction on Oneida Lake. Operator did not see buoy marker 113 and struck the concrete support. Vessel became airborne, rolled over, and hit the water. Vessel sank with engine resting down. All passengers were ejected, three drowned and one was rescued. Vessel was traveling too fast for conditions. Alcohol was also a factor. Life jackets were not worn.						
7/24/2012	Oswego	Sandy Pond	Other - Medical Condition	Kayak	Sudden Medical Condition	1
State police were called to the northern Oswego County town of Sandy Creek following the report of a missing kayaker. The local volunteer fire department launched its rescue boat and spotted people on shore who had located an empty kayak along the lakeshore 40 miles north of Syracuse. Soon afterward, firefighters found a man floating in the water nearby. He was taken by ambulance to Oswego Hospital where he was pronounced dead on arrival. It is believed that the victim suffered a sudden medical condition resulting in his capsizing from the kayak and his resultant drowning. A lifejacket was not used. It is unknown whether alcohol or drugs was a factor.						
8/3/2012	Onondaga	Seneca River	Alcohol Use	Cabin Motorboat	Person Leaves Or Is Ejected From Vessel	1
The operator and two passengers had gone out on the vessel. The operator had just picked up the boat a day or two prior from a marina which had been working on repairing the motor. The motor died as they passed through a lock but the operator was able to get it started again. The operator decided to head to the marina that had done the repair work on the motor. While on the way to the marina the motor died again. While disabled and drifting a dog on board decided to jump out of the boat. The dog was having trouble swimming getting caught in the weeds. A passenger jumped into the water to try and assist the dog. She was not wearing a lifejacket and began to struggle in the weeds also. The operator jumped into the water with a lifejacket in his hands to try and assist her back to the boat. The operator gave the passenger the lifejacket and she was able to swim to a channel marker with the dog. The operator got tangled in the weeds and drowned. A significant number of empty beer cans were found in the vessel. Autopsy report showed the operator had a significant amount of alcohol and cocaine in his system.						
8/5/2012	Suffolk	Mecox Bay	Sharp Turn	Personal Watercraft	Falls Overboard	1
Operator made a sharp turn on the personal watercraft throwing himself and his passenger off the machine. The passenger was able to swim back to PWC and climb on. The operator drowned. Lifejackets were not worn and it is unclear whether alcohol was a factor.						
8/8/2012	Ontario	Canandaigua Lake	Passenger or Skier Behavior	Personal Watercraft	Collision w/ Fixed Object	1
The operator began turning towards shore to visit with friends. As operator began turning, her 3 year old son/passenger, seated in front of her, reached up and hit the throttle. The vessel accelerated abruptly until striking a concrete break wall and ejecting both riders. Both victims suffered serious injuries. The three year old passenger died. Lifejackets were worn. Alcohol and drugs are not believed to have been a factor.						
8/9/2012	Nassau	East Rockaway Inlet	Alcohol Use	Cabin Motorboat	Falls Overboard	1
The operator, a homeless man, stated that while out fishing with his friend, the owner of the vessel, a wave hit the vessel sending the owner over the side. The operator then lost sight of him. The operator proceeded to return to the marina and was arrested for BUI. Lifejackets were not worn.						
8/19/2012	Suffolk	Fishers Island Sound	Operator Inattention	Cabin Motorboat	Struck Submerged Object	1

Date	County	Waterway	Cause	Vessel	Accident Type	Fatalities
<p>The Vessel was traveling south east on Fishers Island Sound and failed to navigate properly through navigational aid subsequently striking a submerged rock. Vessel continued south east taking on water from the stern. Subsequently sinking and coming to a final rest in approximately 40 ft of water. The vessel was constructed from concrete. Nine people on board were recovered by other vessels in the area and one person was reported missing. The body of the missing passenger was found with the wreckage and cause of death was determined to be drowning. The deceased did not use a life jacket. Alcohol and drugs are not believed to have been a factor.</p>						

8/20/2012	St Lawrence	St Lawrence River	Operator Inexperience	Open Motorboat	Struck by Propeller or Propulsion Unit	1
<p>The water skier ended his session and waited for the vessel to swing around to pick him out of the water. While reboarding the operator failed to place the engine into neutral. The Skier's left leg contacted the vessel's propeller, causing serious lacerations to his upper left leg and minor lacerations to his upper right leg. The skier went underwater and was brought to the surface by the operator and another passenger. The boat was brought to shore and the skier was transported to the Hospital where he was pronounced dead. The skier was wearing a lifejacket. Alcohol and drugs were not a factor.</p>						
8/26/2012	Cayuga	Cayuga Lake	Other - CO Poisoning	Open Motorboat	Carbon Monoxide Poisoning	1
<p>Operator of the vessel fell into the water while returning from fishing. His son, a passenger, jumped into the water with an extra lifejacket but was unable to get it to victim. Elevated levels of carbon monoxide were found. The victim was not wearing a lifejacket. Alcohol and drugs were not a factor.</p>						
8/28/2012	Monroe	Irondequoit Bay	Drug Use	Cabin Motorboat	Skier Mishap	2
<p>The vessel was being operated in a southbound direction with three passengers tubing behind. The operator changed direction and started to head north. After making the turn, the tube hit a large wave, or wake, which caused the tube to go airborne. Two of the passengers on the tube were thrown into the water. One, who did not have a lifejacket on, immediately began to struggle and appeared to have difficulty staying above the water. The operator jumped into the water, not wearing a lifejacket, to assist the struggling tuber. Both went under the water and did not resurface. Both victims were found to have Cannabinoids in their system.</p>						
9/6/2012	Suffolk	Bellport Bay	Unknown	Open Motorboat	Unknown	1
<p>Operator was found floating near his adrift boat. Cause and manner of accident are not known.</p>						
12/21/2012	Dutchess	Hudson River	Alcohol Use	Canoe	Capsizing	2
<p>The vessel occupied by three people was traveling south on the Hudson River east of the channel when a passenger in the vessel moved improperly causing the canoe to capsize. The operator was able to swim to shore. The two passengers were last seen holding onto the canoe drifting south with the current. They are still missing. Alcohol is believed to have been a contributing factor. No one onboard was wearing a lifejacket.</p>						

# 2005-2012

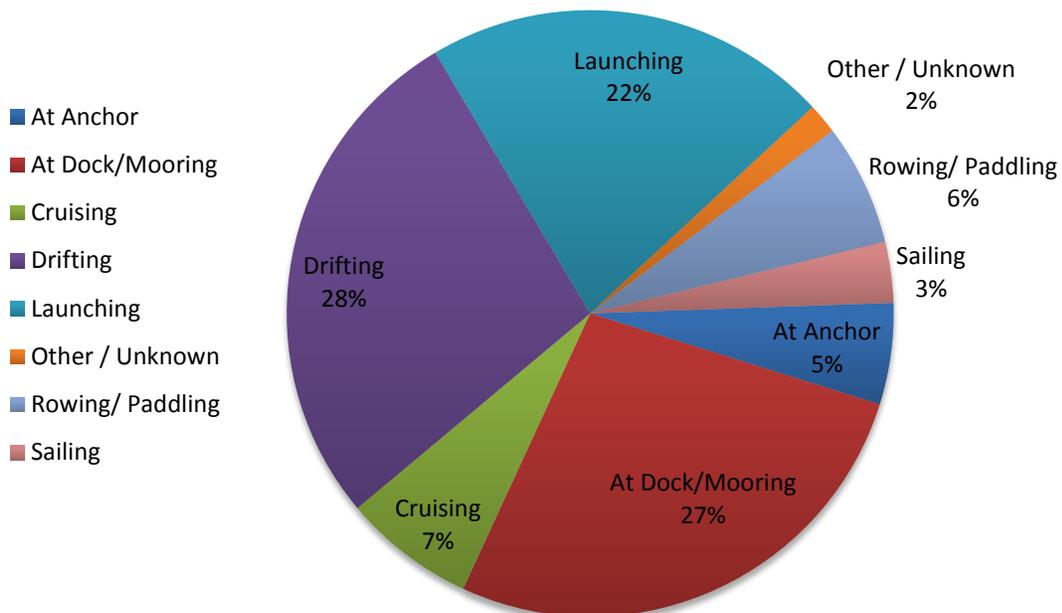
AM			PM		
Time	Accidents	Fatalities	Time	Accidents	Fatalities
12 to 1	46	10	12 to 1	122	9
1 to 2	21	8	1 to 2	147	14
2 to 3	17	3	2 to 3	166	9
3 to 4	11	1	3 to 4	172	14
4 to 5	6	6	4 to 5	162	8
5 to 6	4	1	5 to 6	131	17
6 to 7	16	1	6 to 7	130	13
7 to 8	24	6	7 to 8	82	6
8 to 9	24	5	8 to 9	65	8
9 to 10	39	5	9 to 10	61	3
10 to 11	57	4	10 to 11	58	11
11 to 12	71	5	11 to 12	38	4



# Vessel Operation in Fatal Boating Accidents 2005-2012

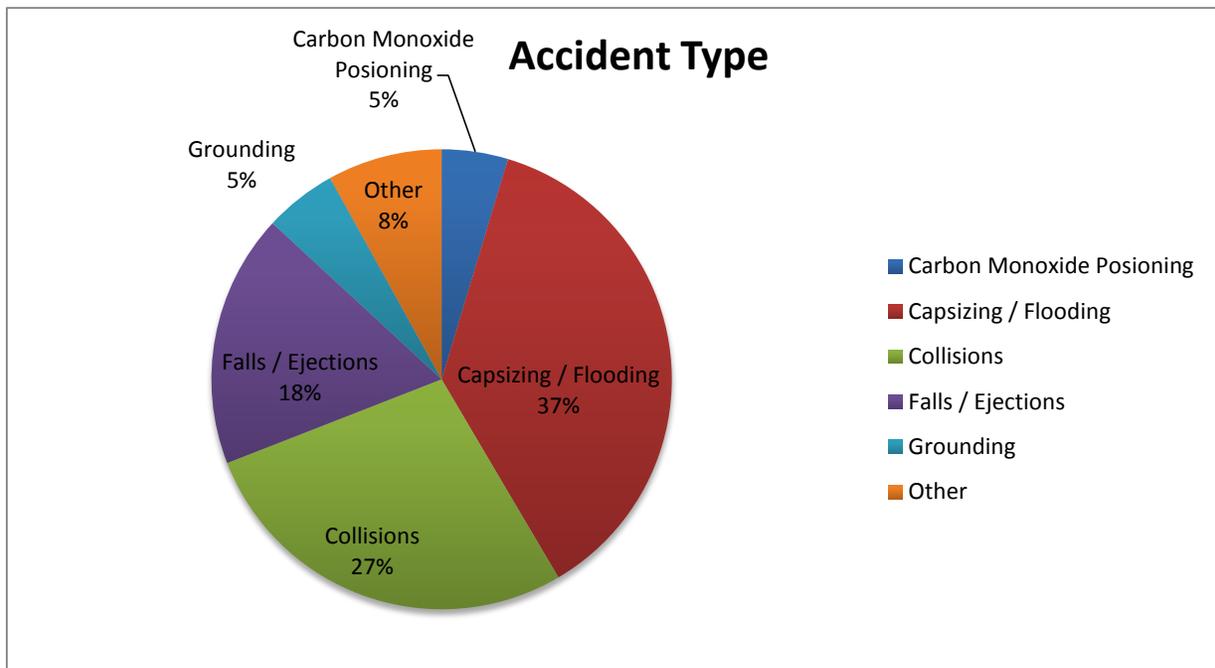
Operation	Fatalities
At Anchor	10
Changing Direction	2
Changing Speed	3
Cruising	96
Cruising, Changing Direction	11
Docking/Undocking	2
Drifting	50
Drifting, Launching	1
Launching	2
Rowing or Paddling	36
Sailing	3
Tied to Dock/Mooring	12
Unknown	6

## Vessel Operation in Fatal Accidents



## Fatal Accident Type 2005-2012

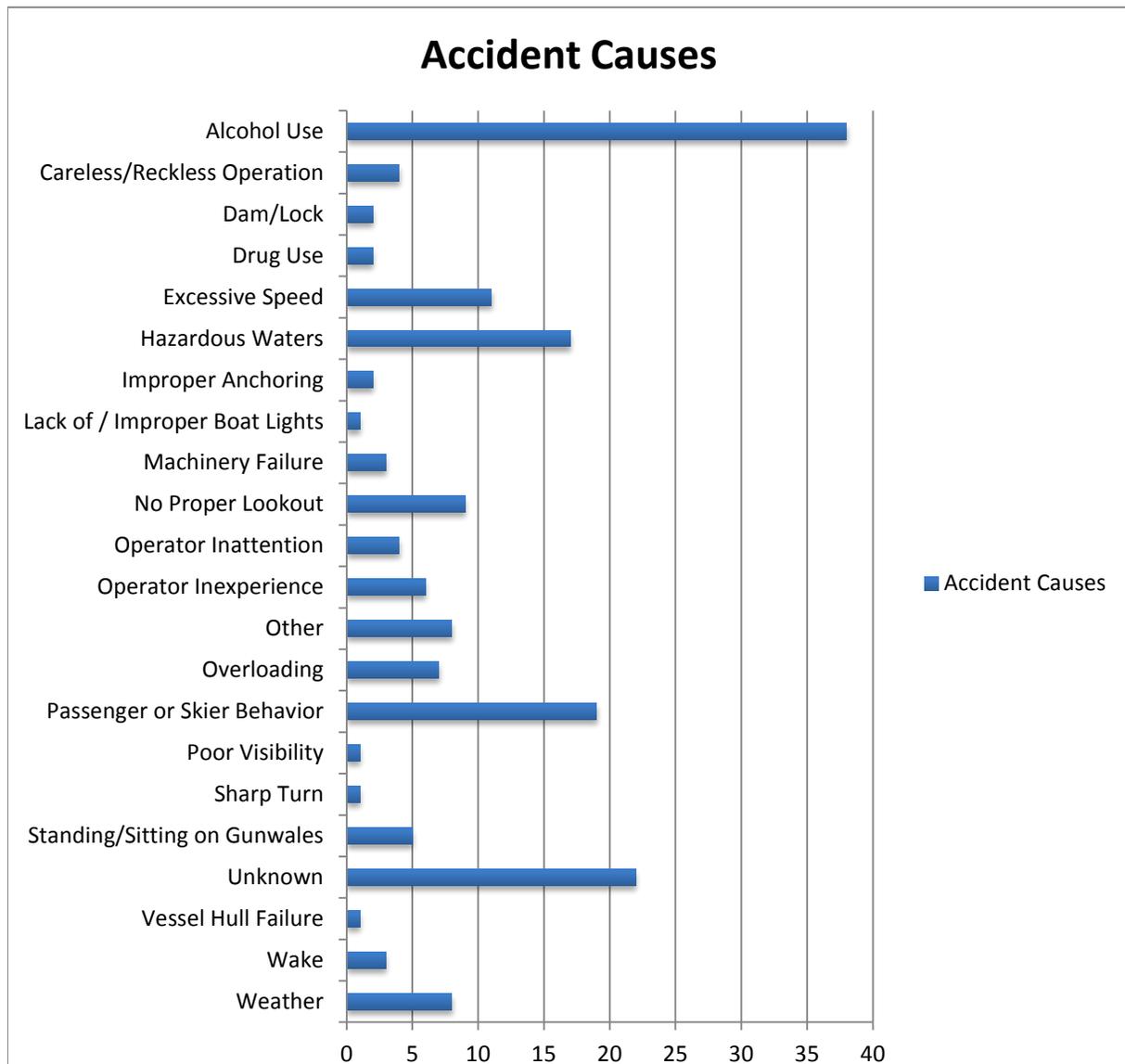
Accident Type	Fatalities
Capsizing	78
Carbon Monoxide Poisoning	11
Collision w/ Fixed Object	46
Collision w/ Floating Object	1
Collision w/ Vessel	12
Collision w/Tow Line	4
Collision With Recreational Boat	2
Falls in Boat	2
Falls Overboard	30
Flooding/Swamping	5
Grounding	12
Person Leaves Or Is Ejected From Vessel	10
Sinking	4
Skier Mishap	7
Struck by Boat	3
Struck by Propeller or Propulsion Unit	1
Struck Submerged Object	2
Sudden Medical Condition	2
Unknown	4





## Fatal Causes of Accidents 2005-2012

Accident Causes	Fatalities	Accident Causes	Fatalities
Alcohol Use	38	Operator Inexperience	6
Careless/Reckless Operation	4	Other	8
Dam/Lock	2	Overloading	7
Drug Use	2	Passenger or Skier Behavior	19
Excessive Speed	11	Poor Visibility	1
Hazardous Waters	17	Sharp Turn	1
Improper Anchoring	2	Standing/Sitting on Gunwales	5
Lack of / Improper Boat Lights	1	Unknown	22
Machinery Failure	3	Vessel Hull Failure	1
No Proper Lookout	9	Wake	3
Operator Inattention	4	Weather	8





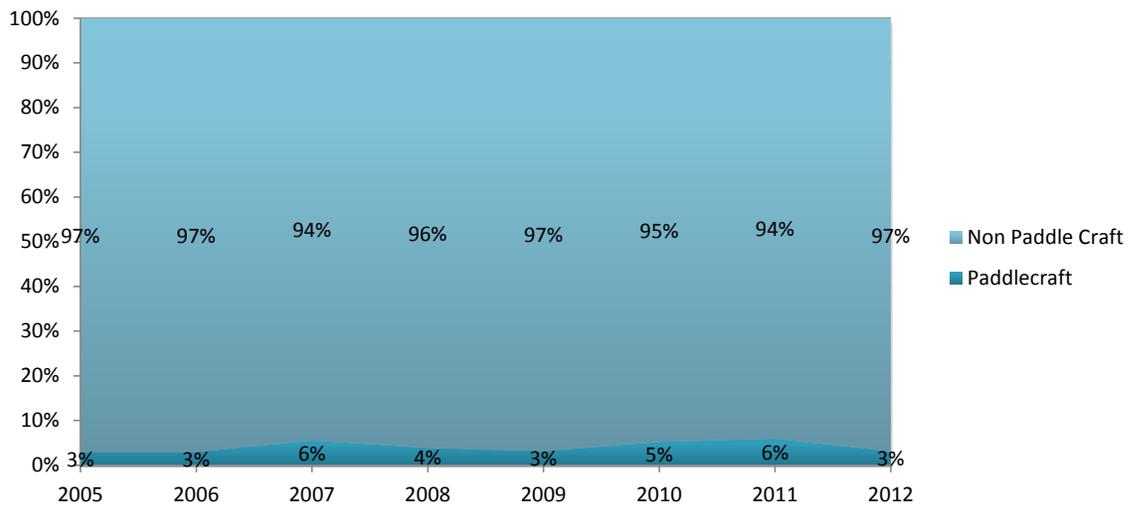
# Paddlecraft Accidents 2005-2012

Multi-Year Summary of Paddlecraft Accidents

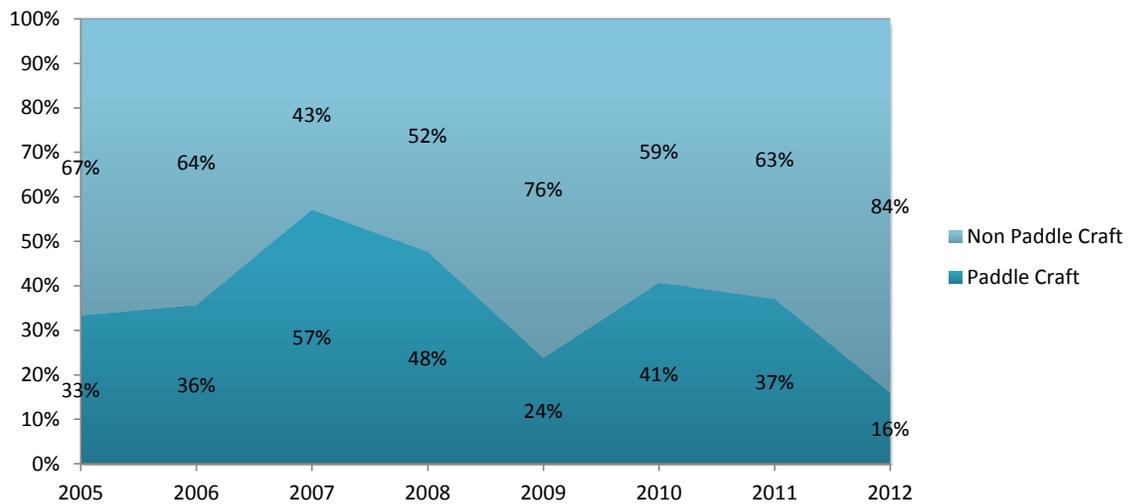


Year	# of Paddlecraft	Injuries	Fatals
2005	8	4	5
2006	6	0	5
2007	16	4	12
2008	11	10	10
2009	8	3	5
2010	17	8	11
2011	15	10	10
2012	10	8	4

## Vessels Involved in Accidents



## Fatals



Paddlecraft represent about 4% of the total accidents. They however contribute to about 36% of the total fatalities.

# PWC Accidents

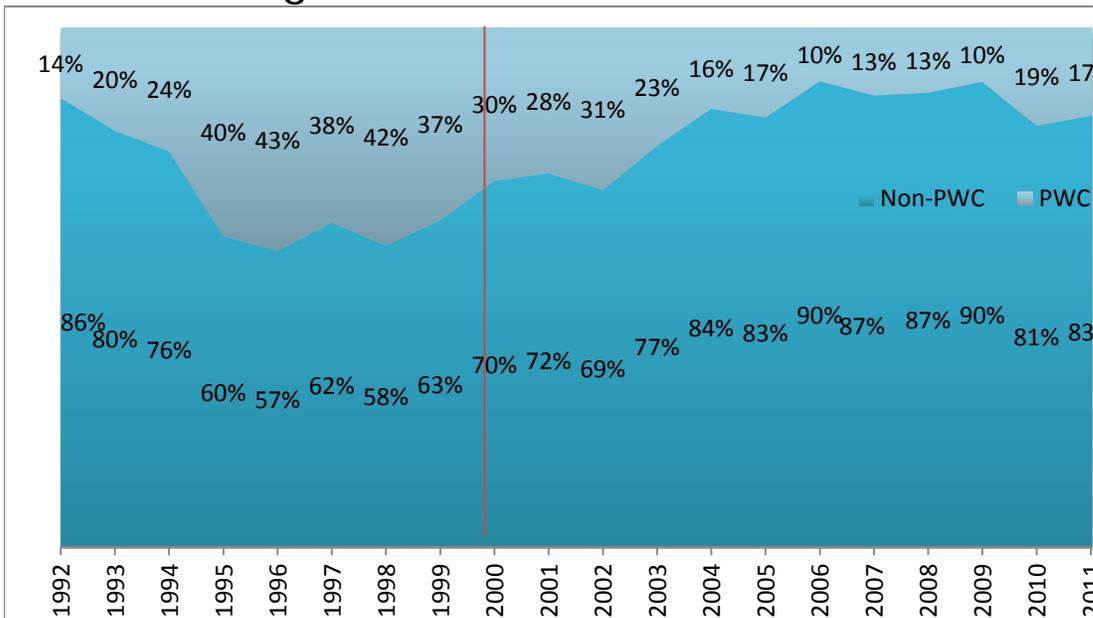
Multi-Year Summary of PWC Accidents

Year	# of PWC	Injuries	Fatalities
1992	31	21	1
1993	45	32	1
1994	53	33	3
1995	117	48	3
1996	140	62	2
1997	121	65	6
1998	137	66	3
1999	117	70	4
2000*	85	35	1
2001	81	43	0
2002	89	47	2
2003	69	37	1
2004	32	17	1
2005	38	29	3
2006	19	16	1
2007	31	18	1
2008	27	21	0
2009	20	14	3
2010	46	25	1
2011	43	25	0
2012	51	25	3



\* Mandatory education for PWC operators begins

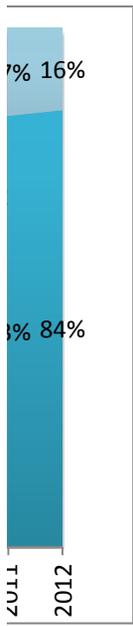
Percentage of PWC Vessels Involved in Acciden



PWC accidents have declined significantly since implementation of mandatory edu



its



Education.