



NEW YORK
STATE OF
OPPORTUNITY™

Parks, Recreation and Historic Preservation



2016 Recreational Boating Report

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Executive Summary

This recreational boating report has been prepared in order to help us better understand why accidents happen while affording possible insights as to how to prevent them.

Recreational boating in New York State is a \$2 billion industry enjoyed by millions of residents and visitors alike. With nearly 450,000 registered powerboats New York ranks ninth in the nation for registered boats. Of the eight states ahead of New York, seven of them have expanded requirements for registration, including registrations for sailboats and paddle craft. Clearly, recreational boating is a large piece of the economy in the Empire State.

In 2016, New York had 22 reported boating fatalities resulting in many lives lost prematurely. This unfortunately represents an increase of six fatalities from 2015. When fatalities in 2015 were considered against the number of registered boats, New York's fatality rate was 3.58 deaths per each 100,000 registered watercraft. This placed New York 16th in the nation. In 2016 that number rose to 4.93, slightly above the long

term average of 4.51 as calculated since the year 2000.



If you compare 2016 to 1973, New York's worst year on record, recreational boating deaths in New York State have declined 83.3% while registered watercrafts have increased 20%. This significant decrease can largely be contributed to a few key factors. The federal government created many important

safety standards for boat manufacturers, most notable the Federal Boat Safety Act of 1971. Improvements in technology, such as the cell phone, have allowed for faster response and increased availability of communication with boaters in need. Improvements in PFDs have made them far more comfortable to wear. Specific PFDs

have been developed to maximize safety for specific on water activities such as wake boarding and personal watercraft operation. New legislation has strengthened BWI laws and changed the perception of drinking alcohol on the water. Changes to boater education laws have expanded the mandatory requirements first from youths, then to personal watercraft operators and now to include all boat operators born after May 1, 1996. Online education has further made boating education accessible to all.

What causes recreational boating accidents fatalities on the water in New York? Clearly the leading type of boating deaths is drowning. During the period 2005 - 2015, 87% of all victims were not wearing a PFD. Of those victims, 12% of them were required by law to wear a PFD at the time of the accident, but chose not to. It is impossible to tell how many people have been saved by wearing a PFD but the potential consequences of not wearing one are clearly evident.

We also know how deadly an impact unexpected cold water immersion can be in both the early and late boating seasons. There are far fewer reported accidents during the cold weather months, but a much higher percentage of them result in a fatality. 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 fastened PFD, along with proper cold weather clothing, is the surest way to ensure survival in cold water longer. This, coupled with the fact that the vast majority of boating deaths involve boats less than 21



feet in length, led to legislation requiring everyone on watercraft of that length and smaller to wear a PFD between November 1st and May 1st.

Alcohol and drug use are another significant cause of fatal boating accidents in New York. Between 2005 and 2016 alcohol and drug use was found to be a primary contributing factor in 61 fatalities (24%) of all boating deaths. In 2016 alcohol or drugs are known to have been present in eleven of the twenty two fatalities (50%). These substances can impair both judgment and reaction time.

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 PFD when conditions require. Never mix alcohol, drugs and boating. Add in the environmental stressors from being on the water and it greatly impairs one's ability to stay alert and react. Of course it's essential to understand as much as possible about boating before heading out so consider taking a boating safety course. Always equip your boat with the required safety equipment, file a float plan and don't forget to bring a cellphone or marine radio, in the event you need to summon assistance.

The New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) is charged with the responsibility of providing the public with a safe and enjoyable boating environment. It is the state's goal to develop safe boating habits through education combined with enforcement of the Navigation Law.



Law Enforcement Activity

Law Enforcement Agency	Total Vessel Hours	Total MLE Hours	Searches and Assists	Total Vessel Inspections	BWI Arrests	Total Arrests
County						
ALBANY	56	300	3	20	0	5
ALLEGANY	213	548	6	29	0	0
CATTARAUGUS	348	717	10	43	0	0
CAYUGA	1371	3087	49	69	0	81
CHAUTAUQUA	2287	5839	265	2702	2	65
CHENANGO	8	16	0	0	0	0
CLINTON	381	2657	26	170	0	15
COLUMBIA	200	676	13	35	0	15
CORTLAND	20	89	2	21	0	0
DUTCHESS	440	987	25	21	0	0
ERIE	1362	3338	102	298	10	166
ESSEX	87	312	2	15	0	1
FULTON	157	529	8	9	1	2
GREENE	100	355	8	1	0	0
HAMILTON	1535	1932	37	189	0	24
HERKIMER	707	1518	50	15	0	9
JEFFERSON	96	242	10	12	2	9
LEWIS	63	263	0	30	0	9
LIVINGSTON	1750	2200	75	30	0	7
MADISON	69	398	1	25	0	1
MONROE	893	5212	399	238	2	77
NASSAU	13904	35000	96	345	0	209
NIAGARA	642	2276	32	181	0	47
ONEIDA	746	1957	23	142	0	68
ONONDAGA	846	2641	29	242	9	59
ONTARIO	1509	3142	34	280	1	20
ORANGE	248	844	10	36	0	5
ORLEANS	289	4335	25	75	0	4
OSWEGO	354	2148	11	36	1	10
OTSEGO	91	225	4	40	0	3
PUTNAM	851	1109	40	125	1	7
ROCKLAND	2100	5788	213	128	0	30
ST. LAWRENCE	120	105	1	140	0	0
SARATOGA	396	650	28	97	0	19
SCHENECTADY	331	385	12	21	2	34
SCHUYLER	65	133	6	7	0	3
SENECA	368	824	5	51	1	3
STEUBEN	130	1054	6	184	1	3
SUFFOLK (POLICE DEPT.)	7020	170000	486	166	1	1545
SULLIVAN	16	16	3	5	0	6
TOMPKINS	50	124	4	3	0	0
ULSTER	605	1210	74	236	0	17
WARREN	1075	1909	67	57	0	3

Law Enforcement Agency	Total Vessel Hours	Total MLE Hours	Searches and Assists	Total Vessel Inspections	BWI Arrests	Total Arrests
County (Continued)						
WAYNE	445	3076	56	15	0	8
WESTCHESTER	2254	7354	136	254	1	86
WYOMING	190	196	6	Unknown	Unknown	Unknown
YATES	891	2544	40	5170	0	25
Municipalities						
ASHAROKEN	185	265	8	15	0	0
BABYLON	1200	1050	17	61	0	183
BUFFALO	362	482	53	64	0	0
CAZENOVIA	110	110	4	3	0	0
DOBBS FERRY	49	280	2	2	1	66
EAST HAMPTON	721	10140	94	213	0	76
GLEN COVE	948	3292	42	63	0	0
HAMBURG	80	170	9	10	0	0
HASTINGS	190	297	7	0	0	104
HEMPSTEAD	2376	18400	108	386	0	20
HUNTINGTON	4200	3500	99	161	0	0
IRVINGTON	59	186	3	5	0	65
MAMARONECK	1005	3430	53	249	0	68
NEW ROCHELLE	1470	4568	97	80	1	408
NEW YORK CITY	123800	324480	258	1114	0	3
NORTH HEMPSTEAD	4610	9050	36	496	0	2
NORTHPORT	681	682	41	48	0	0
OSSINING	230	460	6	4	0	0
PHOENIX	52	206	3	6	0	0
PORT CHESTER	342	556	20	3	2	20
QUOGUE	253	423	8	39	1	16
RIVERHEAD	775	2600	29	106	0	63
RYE	536	4785	53	365	0	24
SAG HARBOR	300	1200	13	60	0	0
SHELTER ISLAND	768	1239	24	103	0	46
SMITHTOWN	6535	8613	113	187	0	226
SOUTHAMPTON	2375	13800	166	398	1	528
SOUTHOLD	697	750	26	555	0	54
YONKERS	56	720	11	4	0	0
State Agencies						
DEPARTMENT OF ENVIRONMENTAL CONSERVATION	7302	24516	217	13560	8	698
LAKE GEORGE PARK COMMISSION	5307	6805	224	536	2	157
PARK POLICE	1267	4507	69	201	10	159
STATE POLICE	1097	2127	15	263	4	51
Totals	217617	733949	4466	31368	65	5737

2016 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	8879	23	3457	4776	574	35	14
ALLEGANY	1882	5	765	1087	22	1	2
BRONX	2292	5	856	936	434	44	17
BROOME	6711	17	3069	3308	297	14	6
CATTARAUGUS	2843	5	1082	1663	89	3	1
CAYUGA	5330	19	1950	3097	252	12	0
CHAUTAUQUA	6313	26	2156	3773	340	15	3
CHEMUNG	3920	2	1537	2184	183	13	1
CHENANGO	2242	0	1236	955	47	4	0
CLINTON	5908	13	2788	2818	276	10	3
COLUMBIA	2780	3	1169	1486	107	15	0
CORTLAND	2124	7	953	1111	48	4	1
DELAWARE	1188	0	609	537	42	0	0
DUTCHESS	6260	10	2807	2864	541	34	4
ERIE	24263	66	8330	13380	2282	181	24
ESSEX	4437	9	1889	2393	134	9	3
FRANKLIN	4265	4	2129	2072	55	1	4
FULTON	4457	9	1939	2303	201	5	0
GENESEE	2194	4	876	1244	62	5	3
GREENE	2260	5	868	1199	176	8	4
HAMILTON	1893	7	918	948	18	2	0
HERKIMER	3483	11	1525	1874	69	3	1
JEFFERSON	11127	55	4465	5853	718	35	1
KINGS	4280	1	1614	1587	937	110	31
LEWIS	2216	0	1145	1039	31	1	0
LIVINGSTON	3823	10	1624	2111	70	6	2
MADISON	4304	7	1691	2425	171	8	2
MONROE	26746	59	10648	14168	1744	118	9
MONTGOMERY	1941	8	863	996	71	1	2
NASSAU	27891	61	8790	13050	5242	689	59
NEW YORK	4509	2	1298	1916	1080	187	26
NIAGARA	8096	34	2765	4579	672	39	7

County	Total	Uncoded	Class A <16'	Class 1 16-25'	Class 2 26-39'	Class 3 40-64'	Class 4 ≥ 65'
ONEIDA	10971	34	4547	5991	381	16	2
ONONDAGA	20632	44	7959	11316	1205	100	8
ONTARIO	7418	24	2427	4670	279	17	1
ORANGE	8133	22	3927	3603	524	46	11
ORLEANS	1989	1	830	1039	114	5	0
OSWEGO	8942	14	3904	4514	491	17	2
OTSEGO	2448	4	1051	1343	45	3	2
PUTNAM	2904	7	1122	1529	224	20	2
QUEENS	6028	9	2243	2708	958	78	32
RENSELAER	5709	3	2447	2953	282	23	1
RICHMOND	3575	7	1379	1516	601	61	11
ROCKLAND	3904	10	1882	1384	556	55	17
ST LAWRENCE	10404	18	4665	5407	294	15	5
SARATOGA	13603	17	5080	7767	708	26	5
SCHENECTADY	5593	15	2330	2946	284	15	3
SCHOHARIE	1068	0	493	534	37	2	2
SCHUYLER	1581	4	586	915	73	2	1
SENECA	2750	3	985	1593	150	16	3
STEUBEN	4944	3	1866	2937	134	3	1
SUFFOLK	63143	225	18576	31810	11227	1246	59
SULLIVAN	3018	0	1560	1369	75	9	5
TIOGA	2215	1	989	1139	83	2	1
TOMPKINS	3412	4	1122	2027	237	21	1
ULSTER	5103	7	2243	2411	407	32	3
WARREN	7132	34	2243	4317	521	8	9
WASHINGTON	3350	8	1405	1828	106	3	0
WAYNE	6520	18	2525	3541	408	26	2
WESTCHESTER	11060	16	3525	4964	2153	350	52
WYOMING	1642	1	565	1046	24	4	2
YATES	2518	4	825	1622	64	1	2
Out of State	13611	0	4756	7545	1150	143	17
TOTAL	446177	1044	167868	232016	40780	3977	492

Registered Vessels: By Length and Hull Material

< 16 FT	O/B	I/B	I/O	SAIL	OTHER	TOTAL
WOOD	1681	78	8	29	35	1831
METAL	29134	37	44	1	501	29717
PLASTIC	7170	2631	156	30	1075	11062
FIBERGLASS	18456	49443	3443	412	4802	76556
INFLATABLE	9286	55	84	6	347	9778
STEEL	660	16	7	0	44	727
ALUMINUM	33460	152	178	13	1973	35776
OTHER	1690	485	38	4	204	2421
TOTAL	101537	52897	3958	495	8981	167868
16-25 FT	O/B	I/B	I/O	SAIL	OTHER	TOTAL
WOOD	1222	1895	116	49	25	3307
METAL	16605	131	894	0	40	17670
PLASTIC	3012	517	829	102	82	4542
FIBERGLASS	64783	12972	76980	2783	849	158367
INFLATABLE	212	9	7	2	0	230
STEEL	576	31	27	1	7	642
ALUMINUM	44648	217	1183	4	209	46261
OTHER	887	29	43	10	28	997
TOTAL	131945	15801	80079	2951	1240	232016
26-39 ft	O/B	I/B	I/O	SAIL	OTHER	TOTAL
WOOD	62	722	19	28	5	836
METAL	198	98	28	3	4	331
PLASTIC	81	362	152	63	4	662
FIBERGLASS	5353	14577	15480	2277	134	37821
INFLATABLE	6	2	1	0	0	9
STEEL	21	45	15	1	5	87
ALUMINUM	734	105	129	5	6	979
OTHER	16	20	7	7	5	55
TOTAL	6471	15931	15831	2384	163	40780
40-64 FT	O/B	I/B	I/O	SAIL	OTHER	TOTAL
WOOD	1	101	1	8	1	112
METAL	3	19	7	1	1	31
PLASTIC	1	50	3	9	0	63
FIBERGLASS	77	3081	259	242	13	3672
INFLATABLE	1	1	0	0	0	2
STEEL	6	28	4	4	3	45
ALUMINUM	15	18	5	2	2	42
OTHER	1	6	0	0	3	10
TOTAL	105	3304	279	266	23	3977
>65 FT	O/B	I/B	I/O	SAIL	OTHER	TOTAL
WOOD	2	7	1	0	0	10
METAL	9	4	2	0	2	17
PLASTIC	21	3	1	0	1	26
FIBERGLASS	83	169	65	2	24	343
INFLATABLE	24	0	0	0	2	26
STEEL	1	8	0	0	1	10
ALUMINUM	50	4	1	0	1	56
OTHER	1	1	0	0	2	4
TOTAL	191	196	70	2	33	492
Uncoded	O/B	I/B	I/O	SAIL	OTHER	TOTAL
TOTAL	3	3	2	0	1036	1044

ACCIDENTS

The chart below illustrates registration and accident figures for the years 1970 through 2016. During that time period, while vessel registrations have generally risen, accidents and fatalities have 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 or drugs increases the level of danger when boating. 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.

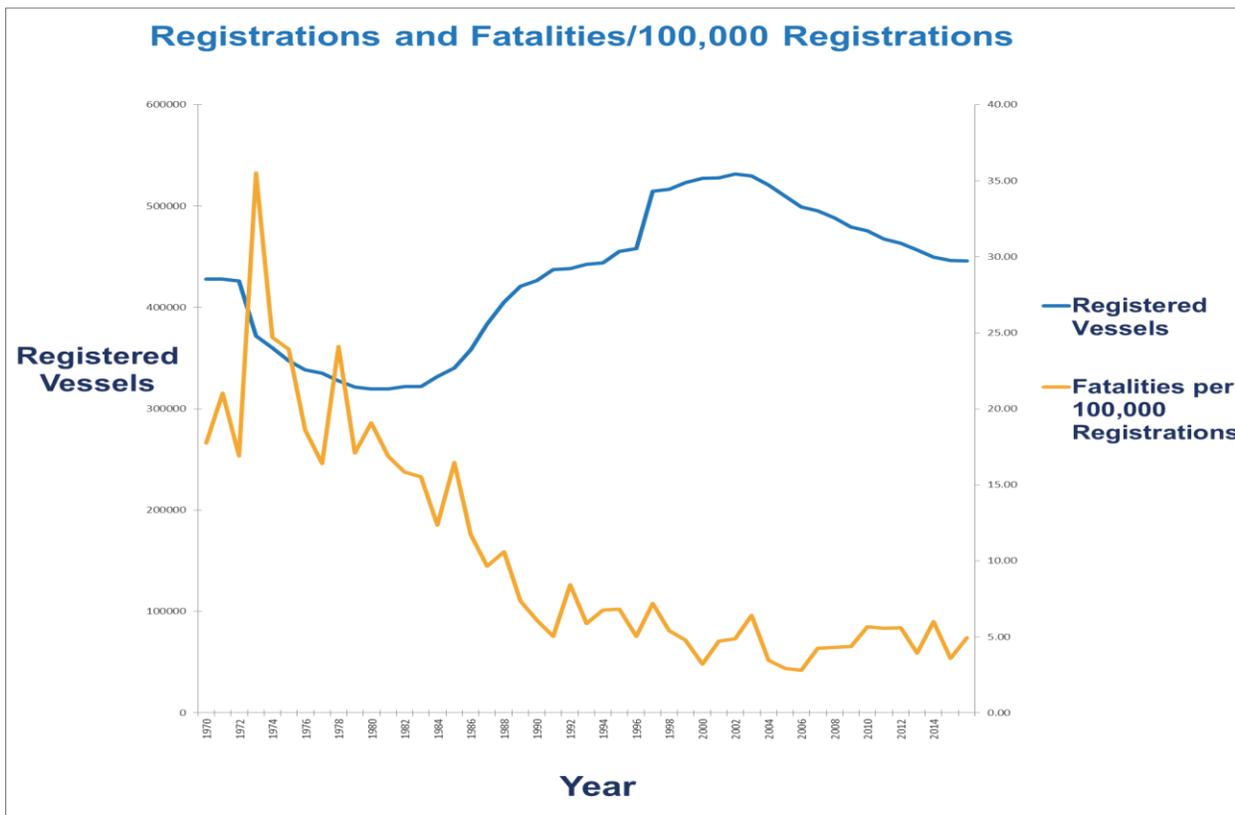
A reduction of collisions and fatalities can also be achieved by showing courtesy to other boaters. Boating education classes are also important, but boaters must be willing to apply what they have learned. Tougher laws are making it possible to remove dangerous boaters from our waterways. Education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

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

It is also vitally important to increase the 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 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!



Accident Data: 1970 - 2016

Year	Fatalities per 100,000 Registrations	Registered Vessels	Accidents	Injuries	Fatalities
1970	17.76	427956	293	88	76
1971	21.02	428114	318	87	90
1972	16.90	426030	301	63	72
1973	35.51	371764	349	139	132
1974	24.70	360311	318	68	89
1975	23.90	347211	368	129	83
1976	18.61	338464	420	136	63
1977	16.40	335288	500	132	55
1978	24.10	327782	400	Unknown	79
1979	17.11	321470	293	Unknown	55
1980	19.09	319492	322	196	61
1981	16.89	319641	308	197	54
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

Year	Fatalities per 100,000 Registrations	Registered Vessels	Accidents	Injuries	Fatalities
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
2013	3.94	456909	195	112	18
2014	6.01	449489	194	103	27
2015	3.58	446582	187	98	16
2016	4.93	446117	208	141	22



Accidents by County and Waterway

County / Waterway	Accidents	Injures	Fatalities
ALBANY	1	0	2
LAWSON LAKE	1	0	2
BRONX	1	0	0
EAST RIVER	1	0	0
CAYUGA	1	2	0
SENECA RIVER	1	2	0
CHAUTAUQUA	5	2	2
CHAUTAUQUA LAKE	3	2	1
LAKE ERIE	2	0	1
CLINTON	1	1	0
LAKE CHAMPLAIN	1	1	0
COLUMBIA	1	0	0
HUDSON RIVER	1	0	0
DUTCHESS	1	5	0
HUDSON RIVER	1	5	0
ERIE	7	7	0
BUFFALO RIVER	2	0	0
LAKE ERIE	3	0	0
NIAGARA RIVER	1	1	0
OUTER HARBOR	1	6	0
FRANKLIN	2	0	0
OTSEETAH LAKE	1	0	0
SARANAC RIVER	1	0	0
FULTON	1	0	0
SACANDAGA RESEVOIR	1	0	0
GREENE	1	0	0
HUDSON RIVER	1	0	0
HAMILTON	2	1	1
FOURTH LAKE	1	1	0
PLEASANT LAKE	1	0	1
HERKIMER	1	1	1
BIG MOOSE LAKE	1	1	1
JEFFERSON	2	3	0
ST. LAWRENCE RIVER	2	3	0
KINGS	3	3	0
GERRITSON CREEK	1	1	0
GERRITSON INLET	2	2	0
LEWIS	1	1	0
MOOSE RIVER	1	1	0
LIVINGSTON	1	1	0
CONESUS LAKE	1	1	0
MONROE	11	6	0
GENESEE RIVER	1	0	0
IRONDEQUOIT BAY	4	1	0
LAKE ONTARIO	6	5	0

County / Waterway	Accidents	Injures	Fatalities
NASSAU	24	20	2
AMITYVILLE CHANNEL	1	3	0
BELLMORE CHANNEL	1	2	0
BROAD CREEK	1	0	1
BROSEWERE BAY	1	2	0
CROW ISLAND LEAD	1	1	0
EAST ROCKAWAY CHANNEL	1	0	0
FLAT CREEK	1	1	0
HEMPSTEAD HARBOR	2	0	0
JONES INLET	1	0	1
LONG CREEK	1	0	0
LONG ISLAND SOUND	1	0	0
MOSQUITO CREEK	1	0	0
OYSTER BAY	1	1	0
REYNOLDS CHANNEL	3	7	0
SLOOP CHANNEL	3	1	0
SOUTH OYSTER BAY	1	2	0
SWIFT CREEK	1	0	0
ZACHS BAY	2	0	0
NEW YORK	5	7	0
EAST RIVER	1	1	0
HUDSON RIVER	4	6	0
NIAGARA	4	2	1
LAKE ONTARIO	2	1	0
NIAGARA RIVER	1	0	1
UPPER NIAGARA RIVER	1	1	0
ONONDAGA	5	4	1
ONONDAGA LAKE	1	0	0
OTISCO LAKE	1	1	0
SKANEATELES LAKE	3	3	1
ONTARIO	3	2	0
CANANDAIGUA LAKE	2	2	0
HONEOYE LAKE	1	0	0
ORANGE	1	1	0
GREENWOOD LAKE	1	1	0
OSWEGO	3	2	0
LAKE ONTARIO	1	0	0
ONEIDA LAKE	1	1	0
OTSEGO LAKE	1	1	0
PUTNAM	3	0	0
LAKE MAHOPAC	3	0	0
QUEENS	4	5	0
ATLANTIC OCEAN	1	1	0
JAMAICA BAY	3	4	0
RENSSELAER	2	1	0
HUDSON RIVER	2	1	0

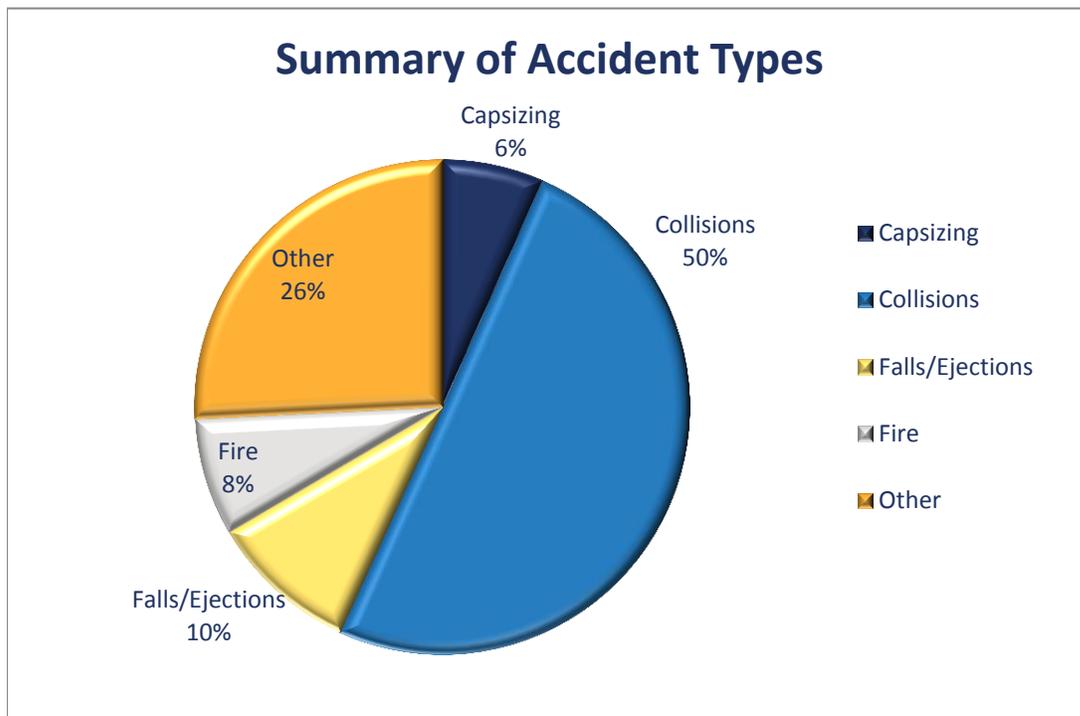
County / Waterway	Accidents	Injures	Fatalities
RICHMOND	6	4	0
LOWER BAY	1	1	0
PRINCES BAY	1	2	0
HUDSON RIVER	4	1	0
SARATOGA	4	0	1
HUDSON RIVER	1	0	0
SACANDAGA RESEVOIR	1	0	1
SARATOGA LAKE	2	0	0
SENECA	3	2	1
CAYUGA LAKE	1	1	0
SENECA LAKE	2	1	1
ST. LAWRENCE	5	9	1
ALLENS FALL RESVOIR	1	1	0
BLACK LAKE	1	2	1
LAKE OZONIA	1	0	0
ST. LAWRENCE RIVER	2	6	0
STEUBEN	2	0	0
KEUKA LAKE	2	0	0
SUFFOLK	51	37	6
ATLANTIC OCEAN	2	9	0
BELLPORT BAY	2	1	0
CONNETQUOT RIVER	1	0	0
FIRE ISLAND INLET	2	1	1
FORT POND BAY	1	1	0
GARDINER'S BAY	2	4	0
GREAT SOUTH BAY	14	5	1
GREENPORT HARBOR	1	1	0
HUNTINGTON BAY	1	1	0
HUNTINGTON HARBOR	1	0	0
LONG ISLAND SOUND	5	3	4
MORICHES BAY	1	0	0
NISSEQUOGUE RIVER	2	2	0
NORTH CHANNEL	1	0	0
ORWOCK CREEK	1	1	0
PATCHOGUE RIVER	1	0	0
PECONIC BAY	4	3	0
SEA DOG CREEK	1	1	0
SHELTER ISLAND SOUND	1	0	0
SOUTH OYSTER BAY	1	1	0
SOUTHOLD BAY	3	3	0
STONY BROOK HARBOR	1	0	0
WEST BERGAN CREEK	1	0	0
WOODS CREEK	1	0	0
TOMPKINS	2	2	0
CAYUGA LAKE	2	2	0

County / Waterway	Accidents	Injures	Fatalities
WARREN	21	7	3
HUDSON RIVER	1	0	0
LAKE GEORGE	19	6	3
LOON LAKE	1	1	0
WAYNE	5	2	0
LAKE ONTARIO	2	0	0
SODUS BAY	3	2	0
WESTCHESTER	11	1	0
HUDSON RIVER	4	0	0
LONG ISLAND SOUND	7	1	0
YATES	1	0	0
KEUKA LAKE	1	0	0



Accident Types

Accident Type	Vessels	Injuries	Fatalities
Capsizing	19	15	6
Collision With Fixed Object	27	14	0
Collision With Floating Object	3	4	0
Collision With Commercial Boat	4	5	0
Collision With Recreational Boat	110	25	2
Falls Onboard Boat	7	6	0
Falls Overboard	7	2	3
Fire/Explosion (Fuel)	13	6	0
Fire/Explosion (Other)	9	2	0
Flooding/Swamping	17	2	2
Grounding	31	39	2
Other	2	1	0
Person Ejected From Vessel	14	9	5
Skier Mishap	6	6	1
Struck by Boat	6	4	0
Struck by Propeller	1	1	0
Struck Submerged Object	6	0	0
Unknown	5	0	1

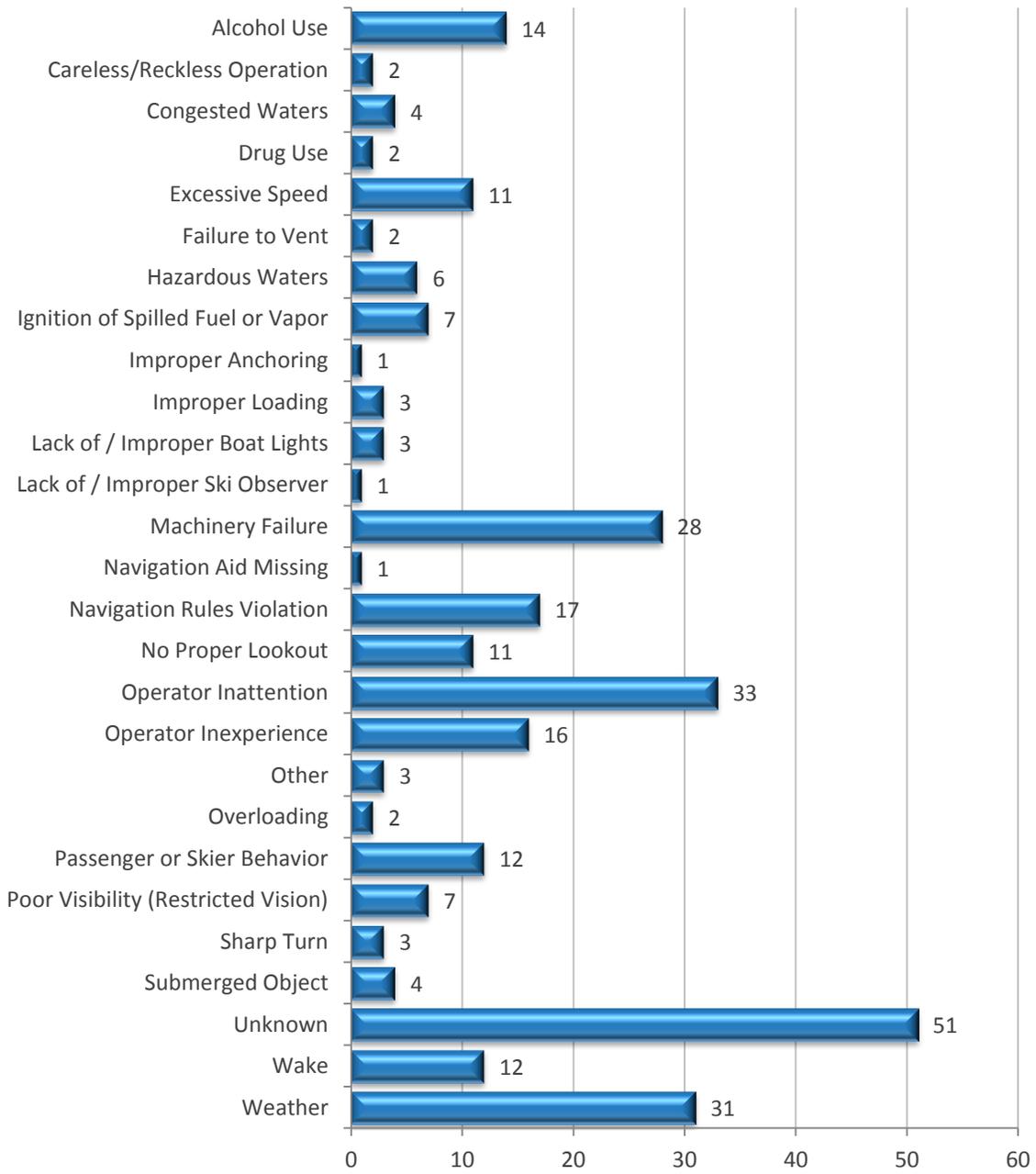


Accident Type and Vessel Operation

Accident Type	Operation	Vessels	Injuries	Fatalities
Capsizing	Changing Direction	1	0	0
	Cruising	6	5	0
	Cruising, Changing Direction	1	0	0
	Docking/Undocking	1	1	0
	Drifting	2	0	4
	Rowing or Paddling	6	8	2
	Sailing	2	1	0
Collision With Fixed Object	Changing Speed, Docking/Undocking	1	0	0
	Cruising	8	10	0
	Docking/Undocking	5	2	0
	Tied to Dock/Mooring	12	0	0
	Unknown	1	2	0
Collision With Floating Object	Cruising	3	4	0
Collision With Commercial Boat	Docking/Undocking, Changing	1	0	0
	Rowing or Paddling	1	5	0
	Tied to Dock/Mooring	1	0	0
	Unknown	1	0	0
Collision With Recreational Boat	At Anchor	6	2	0
	Changing Direction	4	1	0
	Changing Speed	5	1	0
	Changing Speed, Changing Direction	3	2	0
	Cruising	36	17	1
	Docking/Undocking	14	0	0
	Docking/Undocking, Changing Direction	1	0	0
	Drifting	8	1	1
	Launching	2	0	0
	Other	4	0	0
	Sailing	3	1	0
	Tied to Dock/Mooring	21	0	0
	Unknown	3	0	0
Fall Onboard Boat	Cruising	5	4	0
	Drifting	1	1	0
	Unknown	1	1	0
Falls Overboard	Cruising	4	1	1
	Drifting	2	0	2
	Unknown	1	1	0

Accident Type	Operation	Vessels	Injuries	Fatalities
Fire/Explosion (Fuel)	At Anchor	1	0	0
	Cruising	6	2	0
	Drifting	1	2	0
	Tied to Dock/Mooring	4	2	0
	Towing another vessel	1	0	0
Fire/Explosion (Other)	Cruising	5	0	0
	Tied to Dock/Mooring	3	2	0
	Unknown	1	0	0
Flooding/Swamping	At Anchor	3	0	0
	Cruising	9	1	0
	Drifting	2	0	1
	Launching	1	0	0
	Rowing or Paddling	1	0	1
	Sailing	1	1	0
Grounding	Changing Direction	3	4	0
	Cruising	24	25	2
	Cruising, Changing Direction	1	1	0
	Drifting	3	9	0
Other	Tied to Dock/Mooring	1	0	0
	Cruising	1	1	0
Person Ejected From Vessel	Changing Direction	1	1	0
	Cruising	8	6	1
	Drifting	2	0	2
	Rowing or Paddling	3	2	2
Skier Mishap	Changing Direction	1	2	0
	Cruising	3	2	1
	Other	1	1	0
	Unknown	1	1	0
Struck by Boat	Cruising	1	0	0
	Docking/Undocking	1	1	0
	Sailing	3	2	0
	Unknown	1	1	0
Struck by Propeller	Launching	1	1	0
Struck Submerged Object	Changing Speed	1	0	0
	Cruising	5	0	0
Unknown	Cruising	4	0	0
	Unknown	1	0	1

Cause of Accident by Vessel



Accident Type and Cause

Accident Type	Cause	Vessels	Injures	Fatalities
Capsizing	Alcohol Use	1	0	1
	Excessive Speed	1	1	0
	Hazardous Waters	2	2	0
	Improper Loading	2	1	2
	Passenger or Skier Behavior	1	1	0
	Sharp Turn	2	2	0
	Unknown	2	0	3
	Wake	2	1	0
	Weather	6	7	0
Collision With Fixed Object	Alcohol Use	3	8	0
	Excessive Speed	2	0	0
	Machinery Failure	3	0	0
	Operator Inattention	2	2	0
	Other	1	0	0
	Passenger or Skier Behavior	2	2	0
	Unknown	12	2	0
	Wake	1	0	0
	Weather	1	0	0
Collision With Floating Object	Alcohol Use	1	1	0
	Operator Inattention	2	3	0
Collision With Commercial Boat	Congested Waters	1	0	0
	Navigation Rules Violation	1	5	0
	No Proper Lookout	1	0	0
	Operator Inattention	1	0	0
Collision With Recreational Boat	Alcohol Use	2	1	0
	Careless/Reckless Operation	1	0	0
	Congested Waters	2	0	0
	Drug Use	1	0	0
	Excessive Speed	4	1	0
	Improper Anchoring	1	0	0
	Lack of / Improper Boat Lights	3	1	1
	Lack of / Improper Ski Observer	1	0	0
	Machinery Failure	7	0	0
	Navigation Rules Violation	16	9	0
	No Proper Lookout	8	3	1
	Operator Inattention	16	7	0
	Operator Inexperience	6	1	0
	Poor Visibility (Restricted Vision)	2	0	0
	Submerged Object	1	0	0
	Unknown	32	1	0
Wake	1	1	0	
Weather	6	0	0	

Accident Type	Cause	Vessels	Injures	Fatalities
Fall Onboard Boat	Alcohol Use	1	1	0
	Excessive Speed	1	1	0
	Passenger or Skier Behavior	2	1	0
	Wake	1	1	0
	Weather	2	2	0
Falls Overboard	Alcohol Use	1	0	1
	Improper Loading	1	0	1
	Machinery Failure	1	0	1
	Operator Inexperience	1	1	0
	Passenger or Skier Behavior	1	1	0
	Weather	2	0	0
Fire/Explosion (Fuel)	Failure to Vent	2	1	0
	Ignition of Spilled Fuel or Vapor	7	3	0
	Machinery Failure	3	2	0
	Other	1	0	0
Fire/Explosion (Other)	Machinery Failure	7	1	0
	Other	1	1	0
	Unknown	1	0	0
Flooding/Swamping	Machinery Failure	4	1	0
	Overloading	2	0	0
	Sharp Turn	1	1	0
	Wake	3	0	0
	Weather	7	0	2
Grounding	Alcohol Use	2	8	0
	Congested Waters	1	4	0
	Hazardous Waters	3	1	1
	Machinery Failure	2	1	0
	No Proper Lookout	2	1	0
	Operator Inattention	9	5	0
	Operator Inexperience	6	10	0
	Passenger or Skier Behavior	1	2	1
	Poor Visibility (Restricted Vision)	5	7	0
Other	Unknown	1	0	0
	Machinery Failure	1	1	0
Person Ejected From Vessel	Alcohol Use	2	1	1
	Drug Use	1	0	1
	Excessive Speed	1	1	0
	Operator Inexperience	2	2	0
	Passenger or Skier Behavior	1	0	1
	Unknown	1	1	0
	Wake	1	1	0
	Weather	5	3	2

Accident Type	Cause	Vessels	Injures	Fatalities
Skier Mishap	Alcohol Use	1	2	0
	Passenger or Skier Behavior	4	3	1
	Wake	1	1	0
Struck by Boat	Careless/Reckless Operation	1	0	0
	Operator Inattention	2	1	0
	Unknown	1	1	0
	Weather	2	2	0
Struck by Propeller	Operator Inattention	1	1	0
Struck Submerged Object	Hazardous Waters	1	0	0
	Navigation Aid Missing	1	0	0
	Operator Inexperience	1	0	0
	Submerged Object	3	0	0
Unknown	Excessive Speed	2	0	0
	Unknown	1	0	1
	Wake	2	0	0



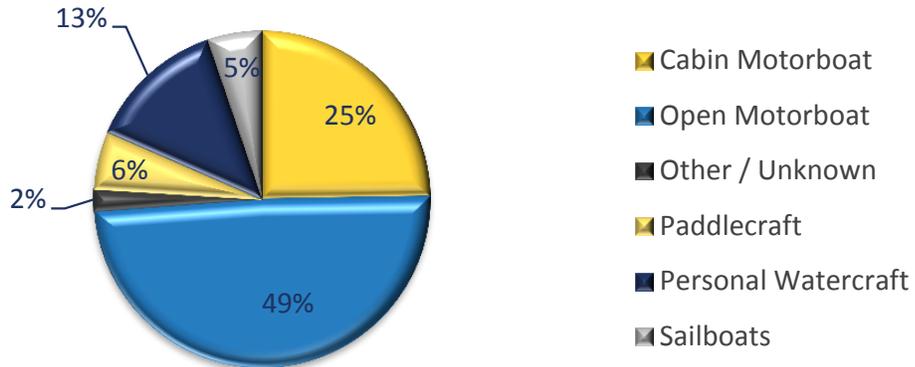
Vessel Type and Accident Type

Vessel Type	Accident Type	Vessels	Injuries	Fatalities
Auxillary Sail	Collision With Fixed Object	1	0	0
	Collision With Recreational Boat	6	1	0
	Fire/Explosion (Other)	1	1	0
	Grounding	1	0	0
	Struck by Boat	1	1	0
Cabin Motorboat	Capsizing	1	0	0
	Collision With Fixed Object	6	3	0
	Collision With Commercial Boat	1	0	0
	Collision With Recreational Boat	31	1	0
	Fall Onboard Boat	2	2	0
	Falls Overboard	1	0	0
	Fire/Explosion (Fuel)	6	4	0
	Fire/Explosion (Other)	4	0	0
	Flooding/Swamping	2	0	0
	Grounding	11	14	0
	Struck Submerged Object	3	0	0
	Unknown	3	0	0
Canoe	Capsizing	1	1	0
	Falls Overboard	1	0	1
	Flooding/Swamping	1	0	0
Crew Shell	Capsizing	1	5	0
Houseboat	Collision With Commercial Boat	1	0	0
Jet Boat	Skier Mishap	1	1	0
Kayak	Capsizing	4	2	2
	Collision With Commercial Boat	1	5	0
	Flooding/Swamping	1	0	1
	Person Ejected From Vessel	1	2	1
Open Motorboat	Capsizing	6	4	4
	Collision With Fixed Object	17	7	0
	Collision With Floating Object	2	3	0
	Collision With Commercial Boat	1	0	0
	Collision With Recreational Boat	43	14	1
	Fall Onboard Boat	4	3	0
	Falls Overboard	4	1	2
	Fire/Explosion (Fuel)	6	2	0
	Fire/Explosion (Other)	4	1	0
	Flooding/Swamping	10	1	1
	Grounding	18	21	2
	Other	2	1	0
	Person Ejected From Vessel	4	1	2
	Skier Mishap	4	4	1
Struck by Boat	1	1	0	

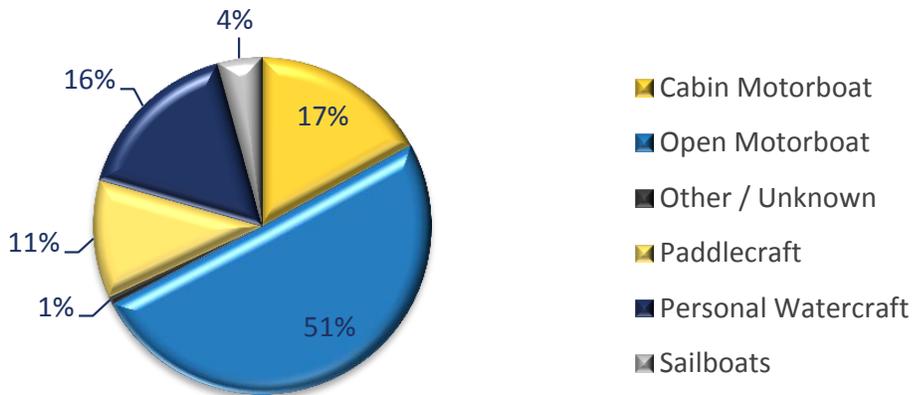
Vessel Type	Accident Type	Vessels	Injuries	Fatalities
Open Motorboat (Cont.)	Struck by Propeller	1	1	0
	Struck Submerged Object	2	0	0
	Unknown	2	0	1
Paddle Board	Person Ejected From Vessel	2	0	1
Personal Watercraft	Capsizing	3	1	0
	Collision With Fixed Object	3	4	0
	Collision With Floating Object	1	1	0
	Collision With Recreational Boat	18	8	0
	Fall Onboard Boat	1	1	0
	Falls Overboard	1	1	0
	Fire/Explosion (Fuel)	1	0	0
	Flooding/Swamping	1	0	0
	Person Ejected From Vessel	6	6	0
	Struck by Boat	2	1	0
	Struck Submerged Object	1	0	0
Pontoon Boat	Collision With Recreational Boat	7	1	0
	Grounding	1	4	0
	Person Ejected From Vessel	1	0	1
	Skier Mishap	1	1	0
Rowboat	Capsizing	1	1	0
	Collision With Recreational Boat	1	0	1
	Flooding/Swamping	1	0	0
Sail (only)	Capsizing	2	1	0
	Flooding/Swamping	1	1	0
	Struck by Boat	2	1	0
Tug Boat	Collision With Recreational Boat	1	0	0
Unknown	Collision With Recreational Boat	3	0	0



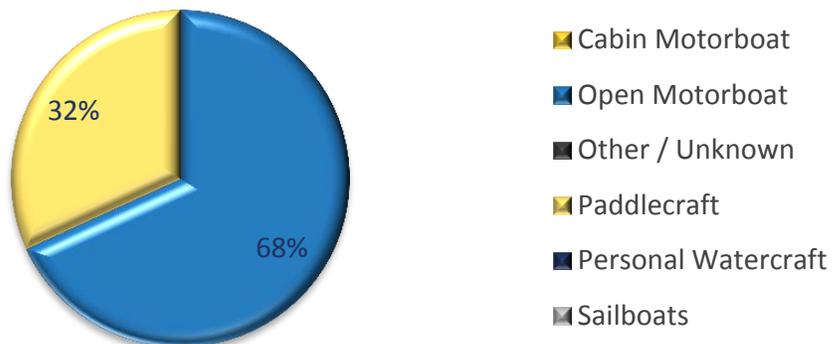
Accidents



Injuries



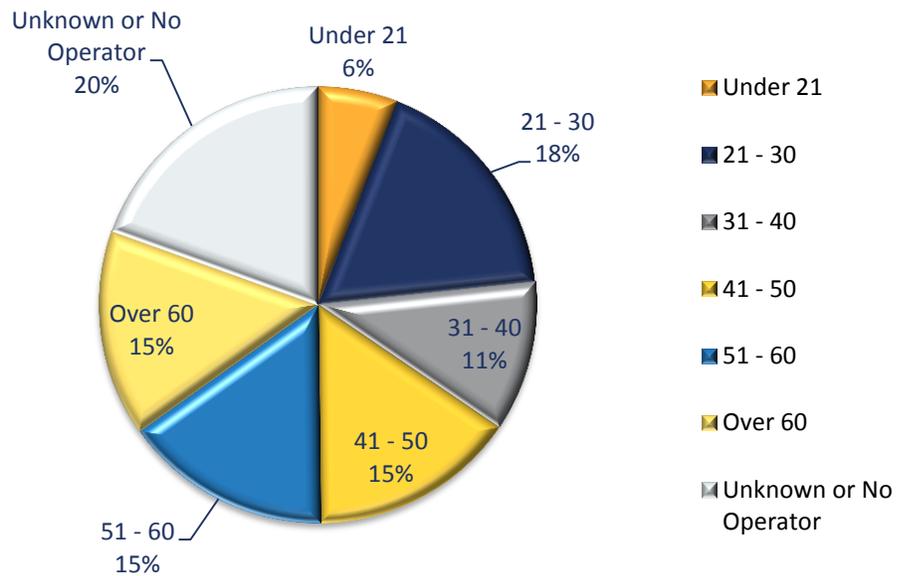
Fatalities



Operator Age

Age Group	Vessels	Injures	Fatalities
Under 21	17	7	2
21 - 30	50	36	2
31 - 40	32	22	1
41 - 50	44	24	6
51 - 60	44	16	4
Over 60	44	23	7
Unknown or No Operator	56	13	0

Vessels by Operator Age



Age of Operator and Boating Education

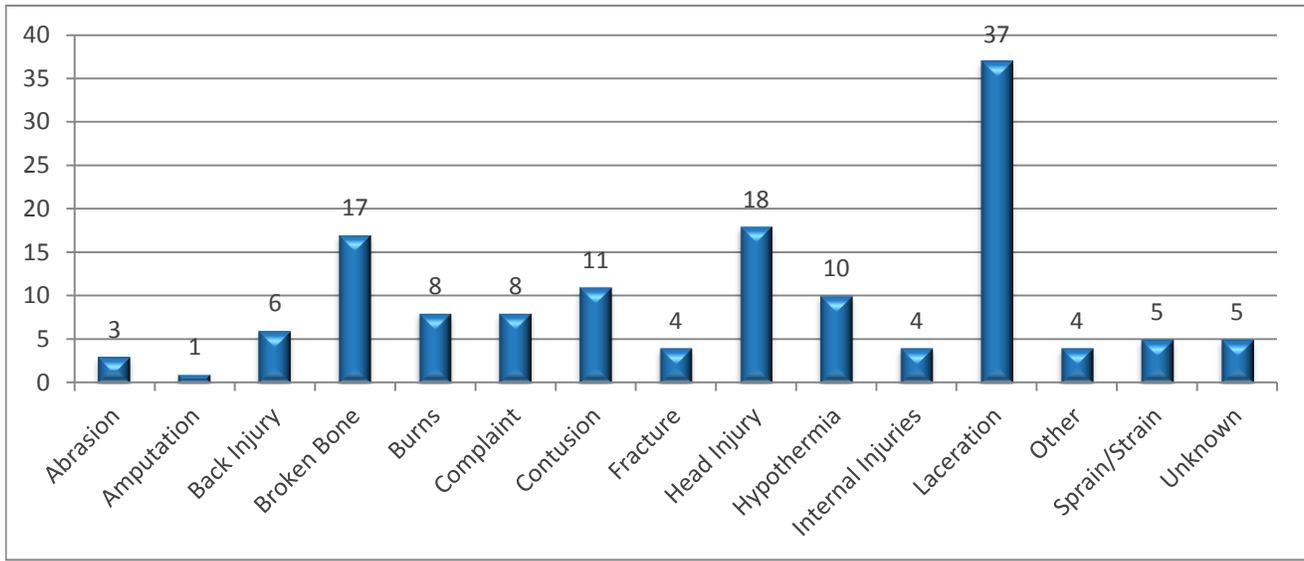
Age Group	Education	Vessels	Injuries	Fatalities
Under 21	None	6	3	0
	State Course	5	2	0
	Unknown	6	2	2
21 - 30	None	23	13	0
	State Course	15	15	0
	Unknown	12	8	2
31 - 40	None	14	5	1
	State Course	8	3	0
	Unknown	8	14	0
	USCG Auxiliary	2	0	0
41 - 50	Internet Course	1	0	0
	None	15	8	0
	State Course	4	3	0
	Unknown	20	11	6
	US Power Squadron	2	1	0
	USCG Auxiliary	2	1	0
51 - 60	None	14	8	3
	State Course	7	1	0
	Unknown	17	3	1
	US Power Squadron	2	0	0
	USCG Auxiliary	4	4	0
Over 60	None	11	10	2
	State Course	7	2	0
	Unknown	22	8	5
	USCG Auxiliary	4	3	0
Unknown	Unknown	56	13	0



Age of Operator and Boating Experience

Operator Age	Experience	Vessels	Injuries	Fatalities
Under 21	Under 10 Hours	5	2	0
	10 to 100 Hours	6	3	0
	Over 500 Hrs.	2	0	0
	Unknown	4	2	2
21 - 30	Under 10 Hours	12	5	0
	10 to 100 Hours	21	20	0
	100-500 Hrs.	4	3	0
	Over 500 Hrs.	4	2	0
	Unknown	9	6	2
31 - 40	Under 10 Hours	8	4	1
	10 to 100 Hours	10	6	0
	100-500 Hrs.	4	3	0
	Over 500 Hrs.	5	2	0
	Unknown	5	7	0
41 - 50	Under 10 Hours	2	1	0
	10 to 100 Hours	7	8	0
	100-500 Hrs.	12	9	1
	Over 500 Hrs.	9	2	0
	Unknown	14	4	5
51 - 60	Under 10 Hours	2	0	0
	10 to 100 Hours	10	8	3
	100-500 Hrs.	9	1	0
	Over 500 Hrs.	14	5	0
	Unknown	9	2	1
Over 60	Under 10 Hours	1	0	0
	10 to 100 Hours	3	8	0
	100-500 Hrs.	12	3	2
	Over 500 Hrs.	18	6	1
	Unknown	10	6	4
Unknown	Under 10 Hours	1	0	0
	100-500 Hrs.	1	1	0
	Over 500 Hrs.	2	1	0
	Unknown	52	11	0

Injuries



Type of Injury, Type of Vessel

Vessel	Injury Type	Injuries	Vessel	Injury Type	Injuries
Auxillary Sail	Burns	1	Open Motorboat (Cont.)	Head Injury	7
	Laceration	2		Hypothermia	1
Cabin Motorboat	Abrasion	1		Internal Injuries	2
	Broken Bone	6		Laceration	18
	Burns	3		Other	3
	Contusion	1	Sprain/Strain	3	
	Head Injury	3	Personal Watercraft	Back Injury	2
	Internal Injuries	1		Broken Bone	5
	Laceration	8		Contusion	1
	Unknown	1		Fracture	2
Canoe	Laceration	1		Head Injury	6
Crew Shell	Hypothermia	5		Internal Injuries	1
Jet Boat	Laceration	1		Laceration	5
Kayak	Broken Bone	1		Sprain/Strain	1
	Hypothermia	3	Pontoon Boat	Abrasion	1
	Laceration	1		Complaint	1
	Unknown	4		Fracture	1
Open Motorboat	Abrasion	1		Head Injury	1
	Amputation	1		Laceration	1
	Back Injury	4		Sprain/Strain	1
	Broken Bone	5		Rowboat	Hypothermia
	Burns	4	Sail (only)	Contusion	1
	Complaint	7		Head Injury	1
	Contusion	8		Other	1
	Fracture	1			

2016 Summary of Fatal Accidents

Date	County	Waterway	Cause	Vessel	Accident Type	Fatalities
4/21/2016	WARREN	LAKE GEORGE	Improper Loading	Canoe	Falls Overboard	1
<p>While fishing in a small canoe victim fell out of the canoe and subsequently drowned. He was wearing a PFD at the time of the accident but the cold 53° water limited his ability to self-rescue. There is no indication of alcohol or drugs being a factor.</p>						
5/27/2016	Herkimer	BIG MOOSE LAKE	Lack of / Improper Boat Lights	Rowboat	Collision With Recreational Boat	1
<p>At night an open motorboat struck a motorized row boat ejecting the sole occupant of the row boat. The rowboat operator suffered head trauma that contributed to him drowning. The open motor boat failed to utilize their navigation lights. The row boat didn't have navigation lights equipped. Neither vessel had PFDs. Operator of rowboat had been under the influence of alcohol.</p>						
6/13/2016	SUFFOLK	LONG ISLAND SOUND	Weather	Kayak	Person Ejected From Vessel	1
<p>Three persons on a kayak and a fourth on a paddleboard left from Hammonasset Beach State Park in Connecticut. Due to the rough weather they experienced difficulty in returning to shore. The paddle boarder decided to make an attempt to swim to shore in Connecticut. His body was recovered in Long Island Sound off of the town of Southold. Witness accounts indicated that he was wearing a PFD however he was not recovered with one. There is no indication of alcohol or drugs being a factor.</p>						
6/13/2016	SUFFOLK	LONG ISLAND SOUND	Weather	Paddle Board	Person Ejected From Vessel	1
<p>The other three, from the above accident, drifted with both the kayak and paddleboard across the sound toward New York. At some point while drifting the male victim decided he could no longer hang on as he was too tired. He let go and disappeared. The two females onboard, an adult and a child, drifted ashore in New York where they contacted police. Both were hospitalized for exposure. The male was discovered deceased several miles down the beach. All onboard had been wearing PFD. There is no indication of alcohol or drugs being a factor.</p>						
6/25/2016	CHAUTAUQUA	CHAUTAUQUA LAKE	Passenger or Skier Behavior	Open Motorboat	Skier Mishap	1
<p>Tuber fell overboard and subsequently drowned. Operator of Vessel tried to rescue victim but was unsuccessful. Victim was not wearing a PFD. There is no indication of alcohol or drugs being a factor</p>						
7/6/2016	ST. LAWRENCE	BLACK LAKE	Passenger or Skier Behavior	Open Motorboat	Grounding	1
<p>Vessel was travelling on Black Lake with three persons onboard. No one was wearing a PFD. A passenger was sitting in an elevated seat on the bow of the vessel obstructing the view of the operator. The vessel grounded on a shoal causing the passenger in the bow to be ejected. The operator entered the water without a PFD in an attempt to assist the passenger. The passenger from the bow was recovered and transported to the hospital for water inhalation. The operator's body was recovered having drowned. Operator had Cannabis in his system but it is not believed to have been a factor in the accident.</p>						
7/14/2016	ALBANY	LAWSON LAKE	Improper Loading	Open Motorboat	Capsizing	2
<p>Vessel was observed by witness capsizing in Lawson Lake. Witness described the vessel turning over followed by a lot of splashing. Both victims were recovered by dive team deceased. Passenger had 0.03 blood alcohol content (BAC). Operator had drugs in his system. Neither victim was wearing a PFD.</p>						
7/23/2016	ONONDAGA	SKANEATELES LAKE	Unknown	Kayak	Capsizing	1
<p>Operator rented a kayak on Skaneateles Lake. Shortly after leaving the marina the kayak capsized for unknown reason. Rescue efforts to save the victim were unsuccessful. Kayak had been rented with a PFD which was recovered nearby. Kayak had no visible damage or defects. Alcohol or drugs were not a factor.</p>						

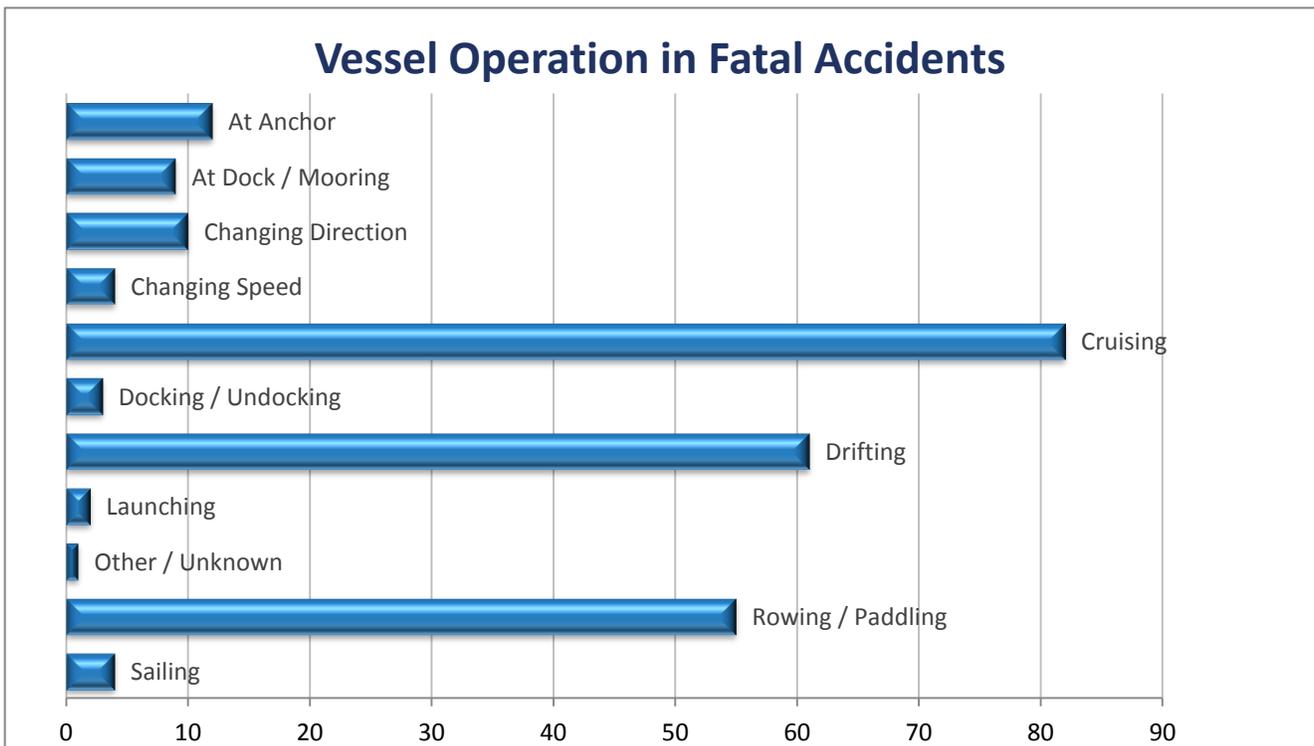
Date	County	Waterway	Cause	Vessel	Accident Type	Fatalities
7/24/2016	NIAGARA	NIAGARA RIVER	Machinery Failure	Open Motorboat	Falls Overboard	1
Vessel's outboard motor stalled with two persons onboard. While vessel drifted the operator attempted to fix the motor. Wakes from nearby boats caused him to fall overboard and the vessel to capsize. The passenger was pulled from the water unconscious and succumbed to his injuries the following day. The operator was rescued by a nearby boater without injury. Neither was wearing a PFD. Alcohol and drugs were not a factor.						
7/25/2016	WARREN	LAKE GEORGE	Drug Use	Open Motorboat	Collision With Recreational Boat	1
Operator of Larson open motorboat had been partying much of the day. He left a restaurant in Bolton Landing heading south toward Lake George Village that evening. The other Vessel a wooden Garwood was cruising at a slow speed when it was hit by the Larson. It passed over the Garwood striking one child passenger in the head with outdrive and causing serious prop cuts to another passenger. The Larson left scene of the accident with five persons onboard. Both vessels had improper navigation light displays but neither contributed directly to accident. Witnesses' statements indicated that the operator of Larson has been consuming alcohol and drugs.						
7/30/2016	SARATOGA	SACANDAGA RESEVOIR	Alcohol Use	Open Motorboat	Falls Overboard	1
Operator, age 18, was seen at bar drinking. He left the bar alone getting on his boat and heading out into the lake. Operator was reported missing s short time later and vessel was discovered unoccupied traveling in circles on lake. The body was recovered several days later. Operator was not wearing a PFD.						
8/11/2016	NASSAU	BROAD CREEK	Drug Use	Open Motorboat	Person Ejected From Vessel	1
Operator of Vessel removed his hand from the tiller causing vessel to take a sharp turn to port ejecting him. Operator was struck by the propeller. Vessel continued on until running aground in the marsh. He drowned as a result of being ejected and the trauma sustained in the accident. Operator had drugs in his system.						
8/13/2016	SUFFOLK	GREAT SOUTH BAY	Drug Use	Open Motorboat	Unknown	1
Vessel left Gilgo Beach at 1721 hours on route to Anchorage Yacht Club in Lindenhurst, NY. Vessel was discovered without operator shortly thereafter at 1800. Operator was reported missing at 2200 hours. He was found two days later. Operator had both alcohol and drugs in his system.						
8/16/2016	CHAUTAUQUA	LAKE ERIE	Weather	Kayak	Flooding/Swamping	1
Kayaker was swamped and capsized in rough conditions of four to six foot waves. He wasn't wearing a lifejacket and drowned. Victim had both alcohol and drugs in his system.						
9/1/2016	SENECA	SENECA LAKE	Alcohol Use	Pontoon Boat	Person Ejected From Vessel	1
Three occupants were out on the vessel adrift. One passenger decided to go swimming but the boat drifted away from her. She was not wearing a PFD. The operator, also not wearing a PFD, jumped in to help but went under himself and drowned. The female swimmer was able to be rescued without injury. The operator was under the influence of alcohol at the time with a 0.16 blood alcohol content (BAC).						
9/6/2016	WARREN	LAKE GEORGE	Passenger or Skier Behavior	Open Motorboat	Person Ejected From Vessel	1
Victim decided to go swimming from a rented vessel that was adrift. While swimming he suffered cramps. A PFD was thrown to him but he was unable to reach it before slipping under the water and drowning. It is not known if alcohol or drugs were a factor.						

Date	County	Waterway	Cause	Vessel	Accident Type	Fatalities
9/16/2016	NASSAU	JONES INLET	Weather	Open Motorboat	Flooding/Swamping	1
While fishing, the vessel took on water and capsized due to rough waters. The operator was knocked unconscious without a PFD when the vessel capsized and drowned as a result. Alcohol or drugs were not a factor.						
10/2/2016	HAMILTON	PLEASANT LAKE	Alcohol Use	Kayak	Capsizing	1
Victim left boat launch in borrowed kayak without a PFD. Approximately 100 feet from shore the vessel capsized and the victim entered the water. He did not know how to swim and was recovered the next day. According to witnesses the victim had consumed three beers that day but did not appear to be intoxicated. Two beer bottles were recovered in vicinity of the kayak.						
10/4/2016	SUFFOLK	LONG ISLAND SOUND	Unknown	Open Motorboat	Capsizing	2
Vessel was found capsized and unoccupied. One victim was found floating nearby. The operator was found on the beach the next morning. Both engines were raised and a line from the starboard cleat had been wrapped around the starboard engine. Alcohol or drugs are not believed to have been a factor.						
10/11/2016	SUFFOLK	FIRE ISLAND INLET	Hazardous Waters	Open Motorboat	Grounding	1
Operator crossed sandbar at inlet but experienced rough seas in the shallow water. The first two waves forced the boat aground and a third wave caused it to capsize. The two surviving passengers reported losing sight of the operator who was recovered days later. It is not known if alcohol or drugs were a factor.						



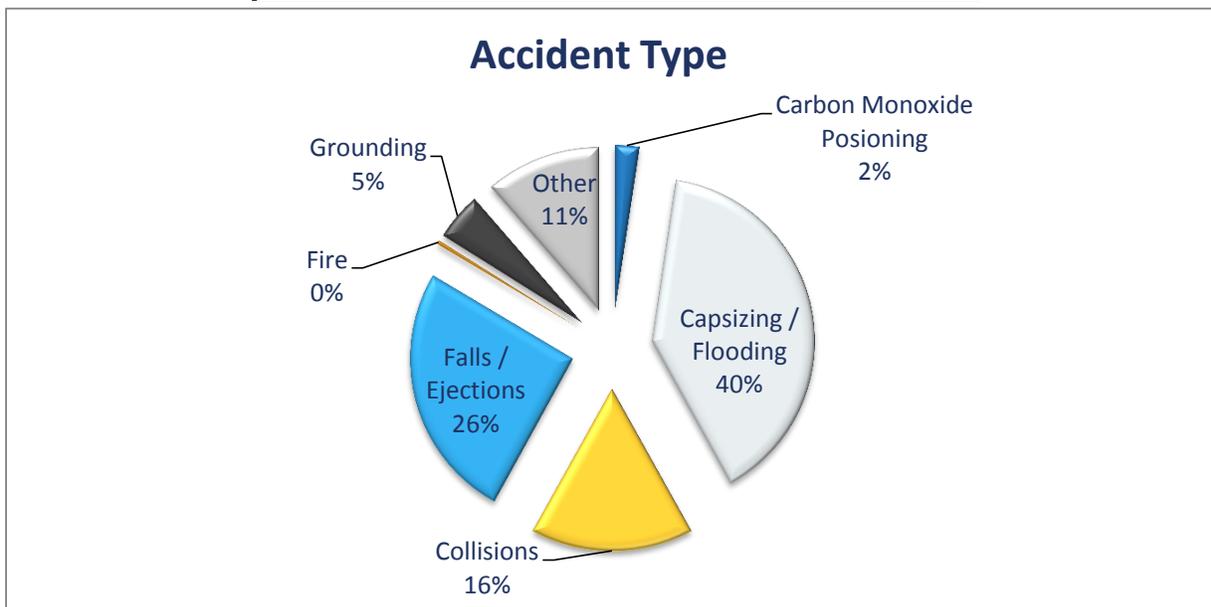
Vessel Operation in Fatal Boating Accidents 2005-2016

Operation	Fatalities
At Anchor	12
Changing Direction	4
Changing Speed	3
Changing Speed, Changing Direction	1
Cruising	77
Cruising, Changing Direction	5
Docking/Undocking	3
Drifting	60
Drifting, Launching	1
Launching	2
Other	1
Rowing or Paddling	55
Sailing	4
Tied to Dock/Mooring	9
Unknown	18



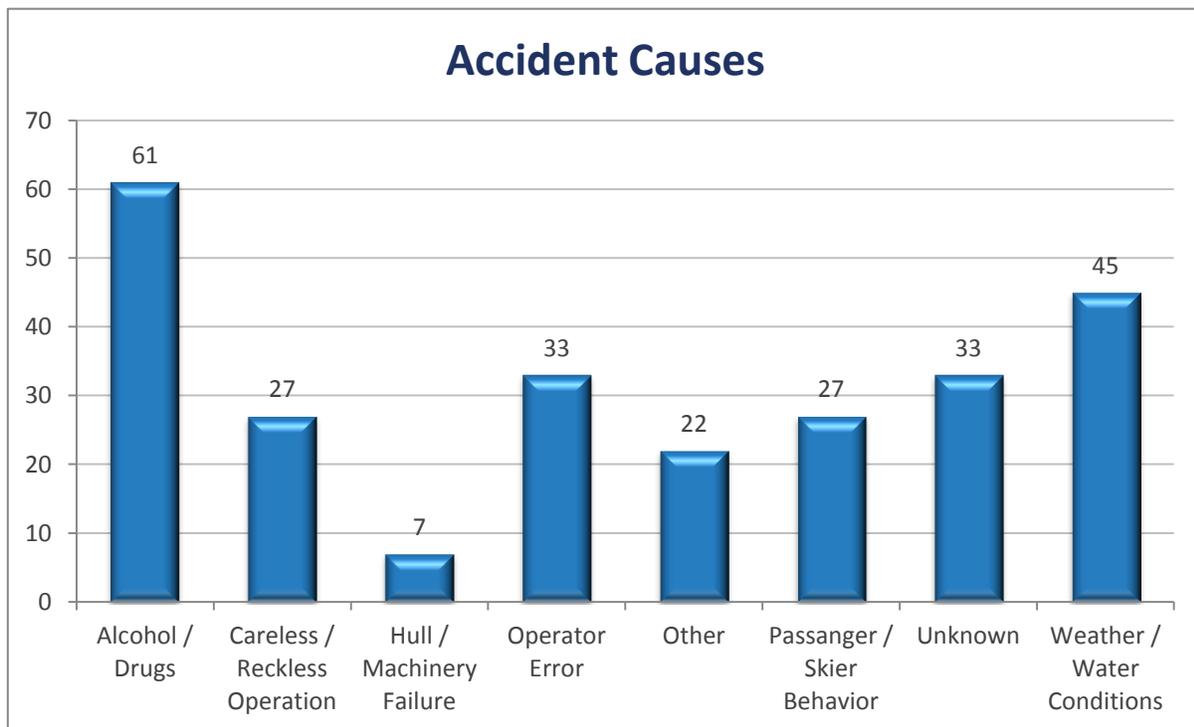
Fatal Accident Type 2005-2016

Accident Type	Fatalities
Capsizing	83
Carbon Monoxide Poisoning	6
Collision With Fixed Object	23
Collision With Floating Object	3
Collision With Vessel	10
Collision With Recreational Boat	5
Falls Onboard Boat	2
Falls Overboard	38
Fire/Explosion (Fuel)	1
Flooding/Swamping	13
Grounding	12
Other	3
Person Ejected From Vessel	25
Sinking	5
Skier Mishap	6
Struck by Boat	3
Struck by Propeller	3
Struck Submerged Object	2
Sudden Medical Condition	2
Unknown	10

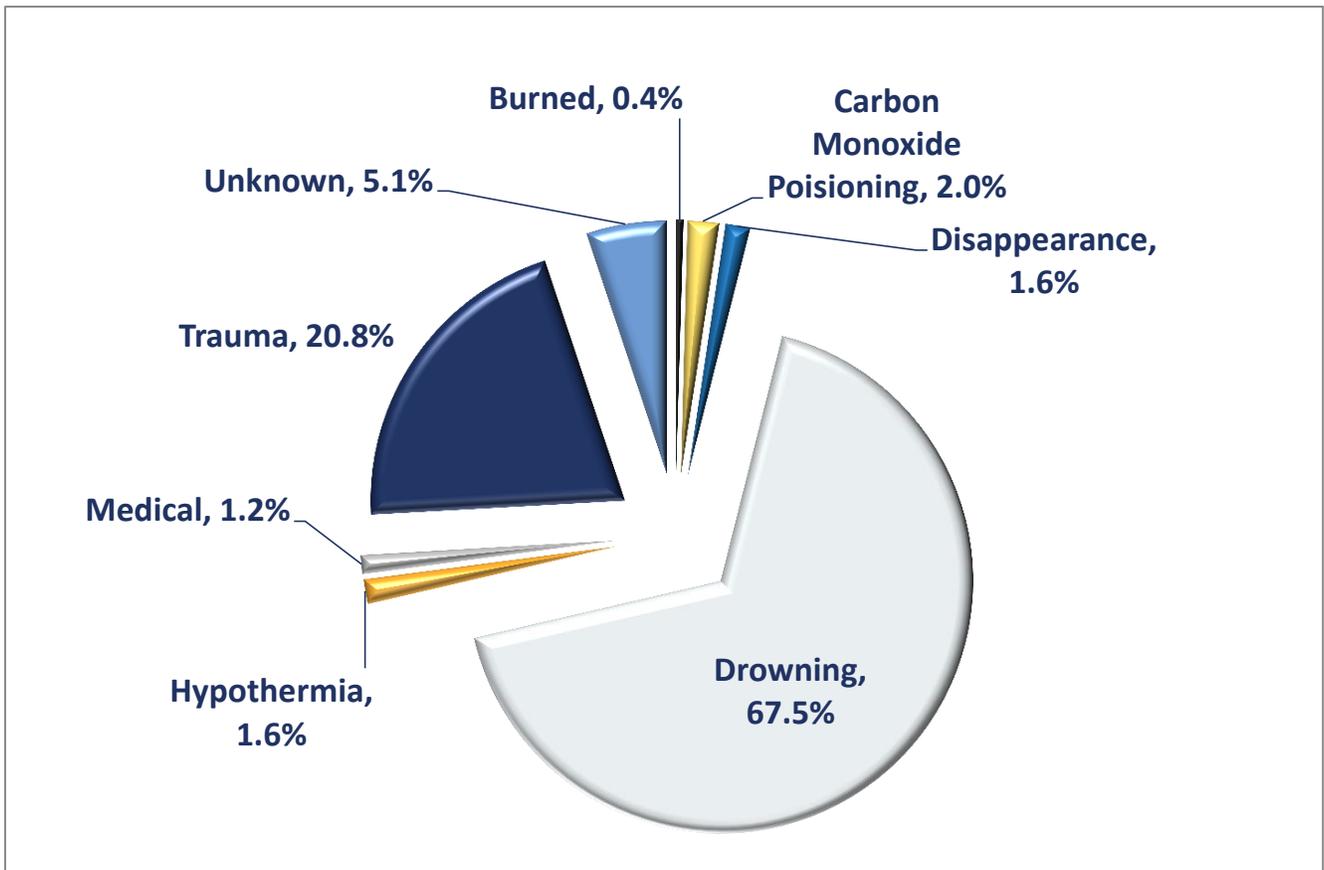


Fatal Accidents Causes 2005-2016

Accident Causes	Fatalities	Accident Causes	Fatalities
Alcohol Use	54	Operator Inattention	8
Careless/Reckless Operation	4	Operator Inexperience	7
Dam/Lock	2	Other	9
Drug Use	7	Overloading	9
Excessive Speed	11	Passenger or Skier Behavior	23
Hazardous Waters	27	Poor Visibility	1
Ignition of Spilled Fuel or Vapor	1	Sharp Turn	3
Improper Anchoring	4	Standing/Sitting on Gunwales	4
Improper Loading	5	Unknown	33
Lack of / Improper Boat Lights	2	Vessel Hull Failure	1
Machinery Failure	6	Wake	3
No Proper Lookout	14	Weather	17



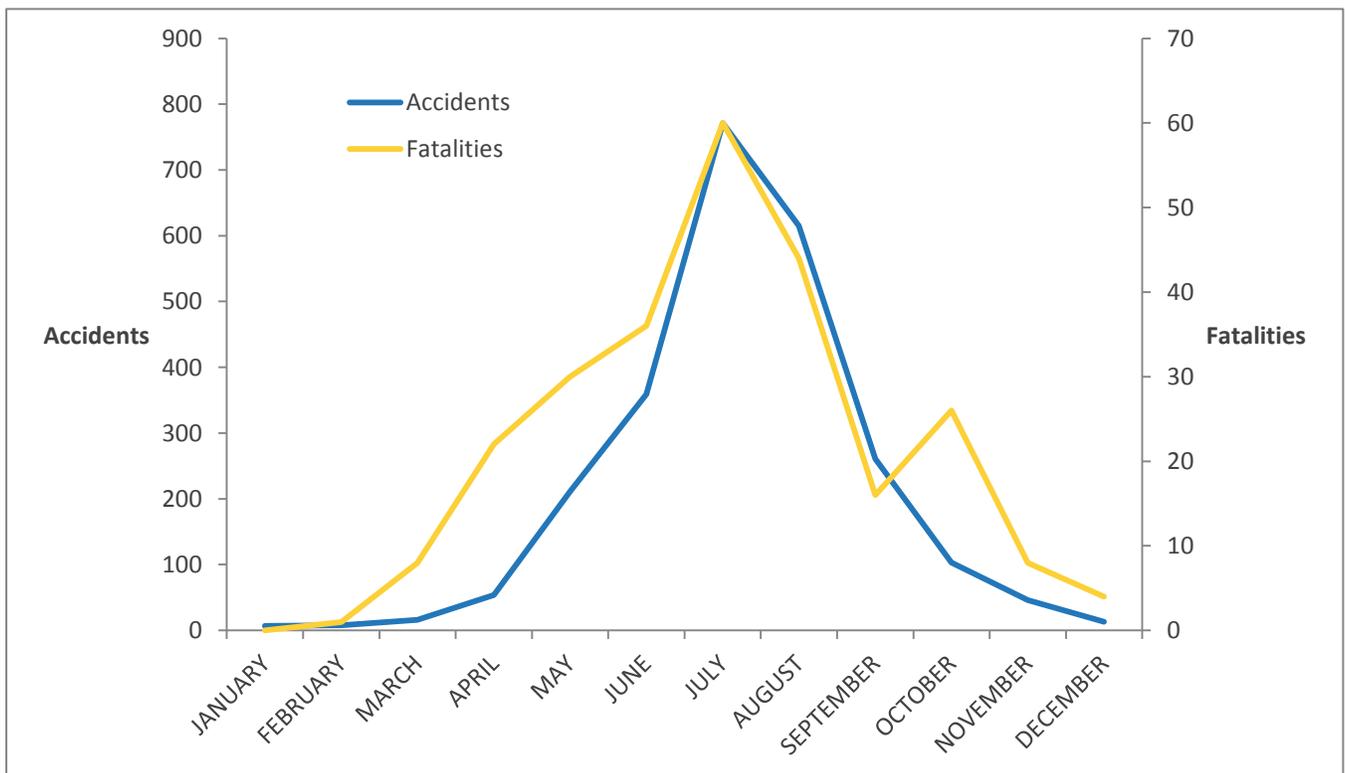
Cause of Fatality 2005-2016



Cause of Fatality	Fatalities
Burned	1
Carbon Monoxide Poisoning	5
Disappearance	4
Drowning	172
Hypothermia	4
Medical	3
Trauma	53
Unknown	13

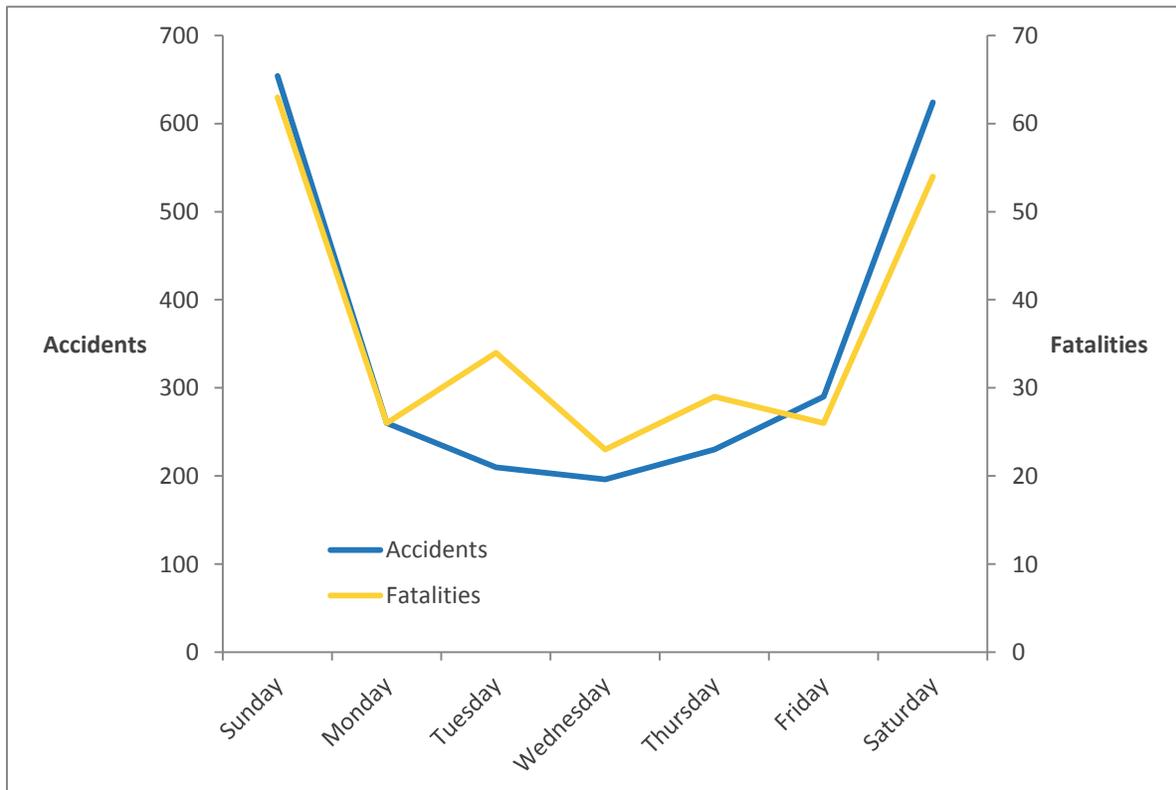
Accident Occurrence by Month 2005-2016

Month	Accidents	Fatalities
JANUARY	7	0
FEBRUARY	8	1
MARCH	16	8
APRIL	54	22
MAY	211	30
JUNE	359	36
JULY	771	60
AUGUST	615	44
SEPTEMBER	261	16
OCTOBER	103	26
NOVEMBER	46	8
DECEMBER	13	4



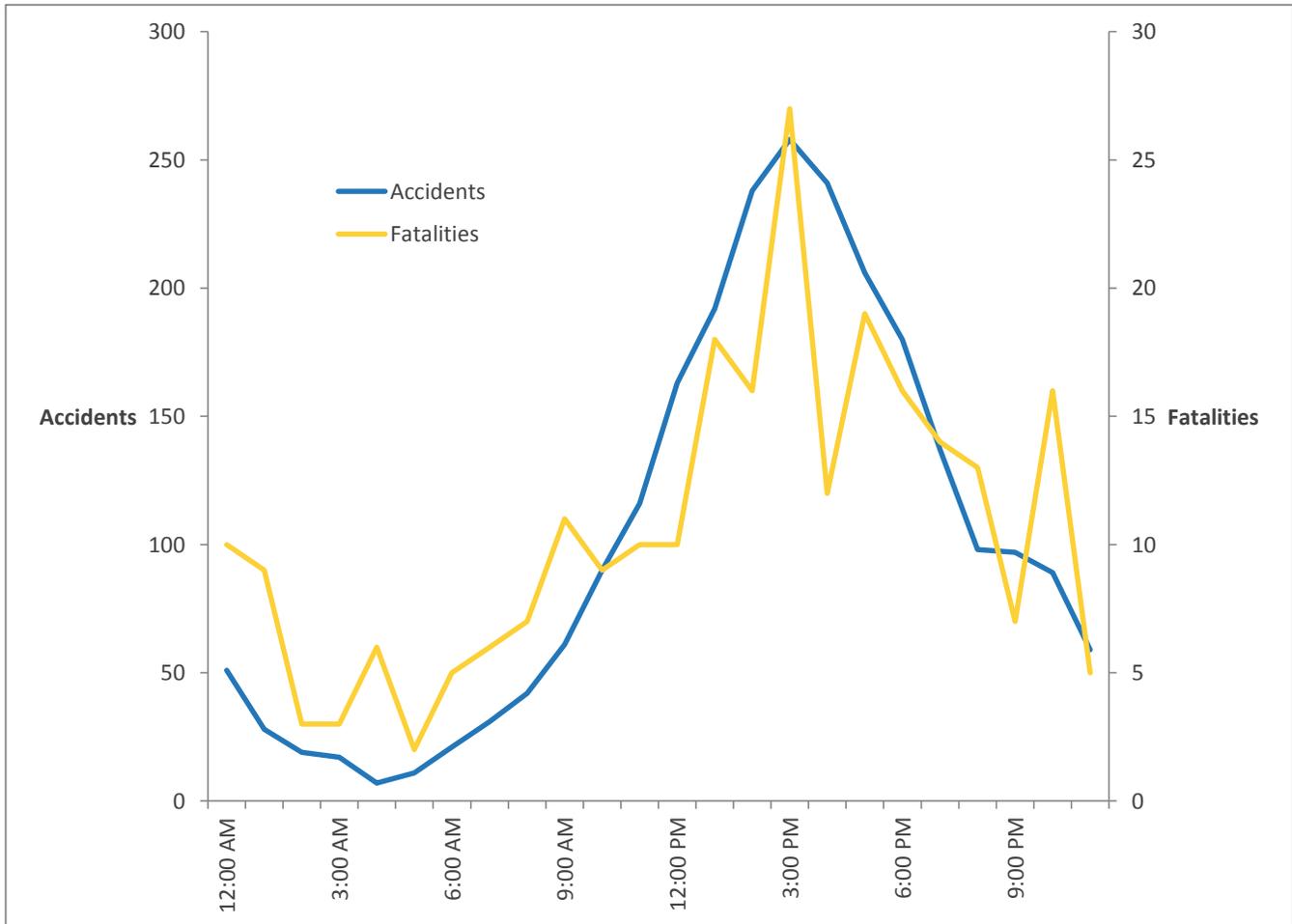
Accident Occurrence by Day 2005-2016

DAY	Accidents	Fatalities
Sunday	654	63
Monday	260	26
Tuesday	210	34
Wednesday	196	23
Thursday	230	29
Friday	290	26
Saturday	624	54



Accident Occurrence by Time 2005-2016

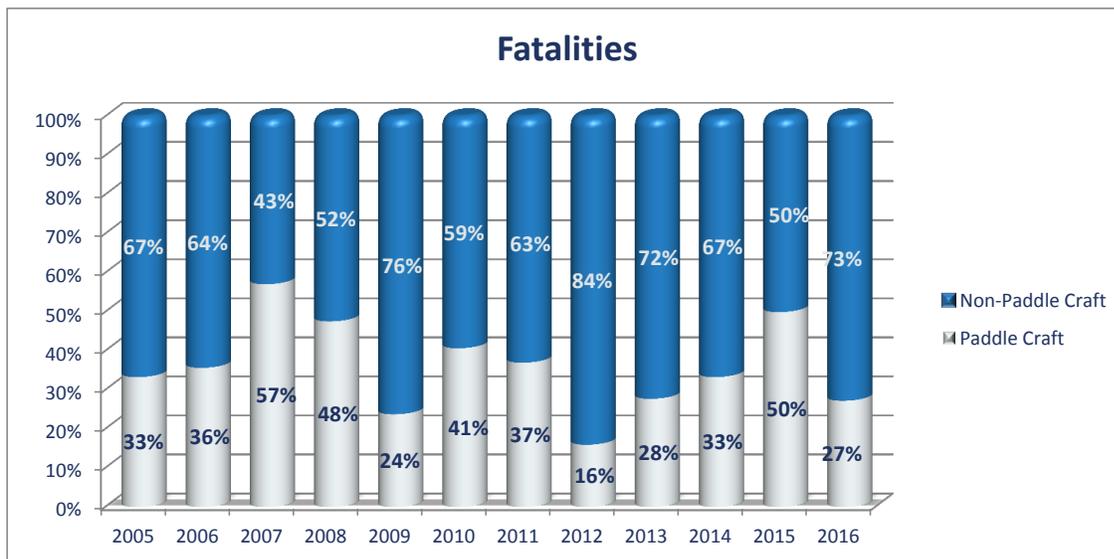
AM			PM		
Time	Accidents	Fatalities	Time	Accidents	Fatalities
12 to 1	51	10	12 to 1	163	10
1 to 2	28	9	1 to 2	192	18
2 to 3	19	3	2 to 3	238	16
3 to 4	17	3	3 to 4	258	27
4 to 5	7	6	4 to 5	241	12
5 to 6	11	2	5 to 6	206	19
6 to 7	21	5	6 to 7	180	16
7 to 8	31	6	7 to 8	137	14
8 to 9	42	7	8 to 9	98	13
9 to 10	61	11	9 to 10	97	7
10 to 11	90	9	10 to 11	89	16
11 to 12	116	10	11 to 12	59	5



Paddle Craft Accidents 2005-2016

Year	Paddle Craft	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
2013	13	9	5
2014	15	8	9
2015	19	8	8
2016	16	16	6

Paddlecraft: Rowboats, Canoes, Kayaks, Paddleboards and Crew Shells



Paddle Craft represent **4.8%** of the total vessels involved in accidents. They however contribute to **35.4%** of all fatalities.

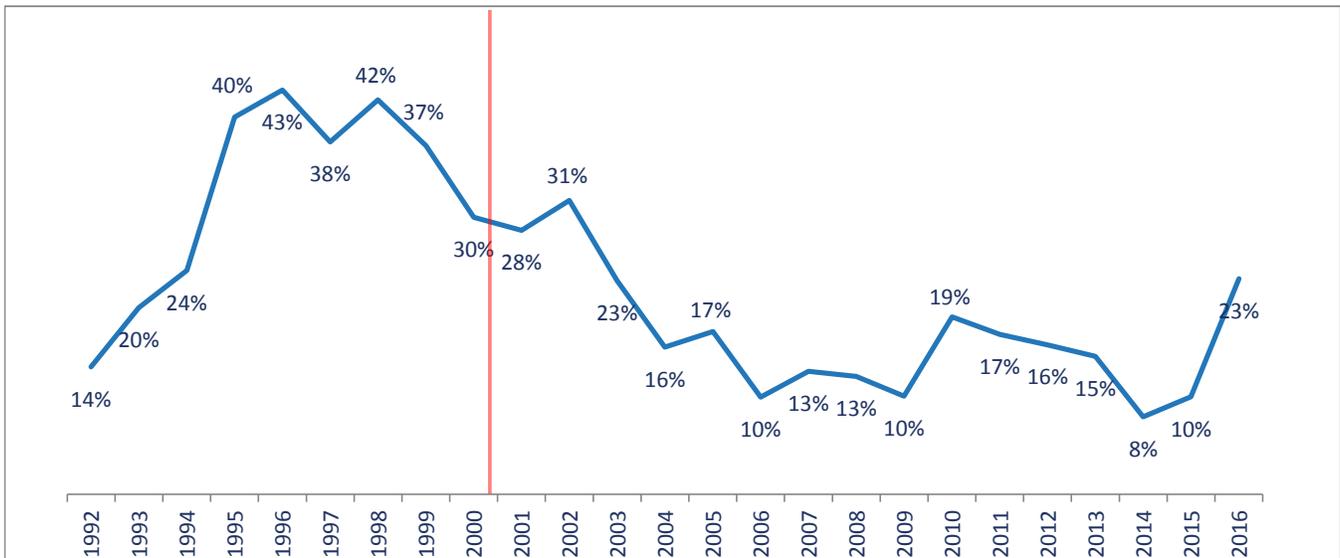
PWC Accidents

Year	# of PWC	Injuries	Fatalities
1992	31	1	21
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
2013	40	26	3
2014	23	16	1
2015	28	20	0
2016	66	43	0



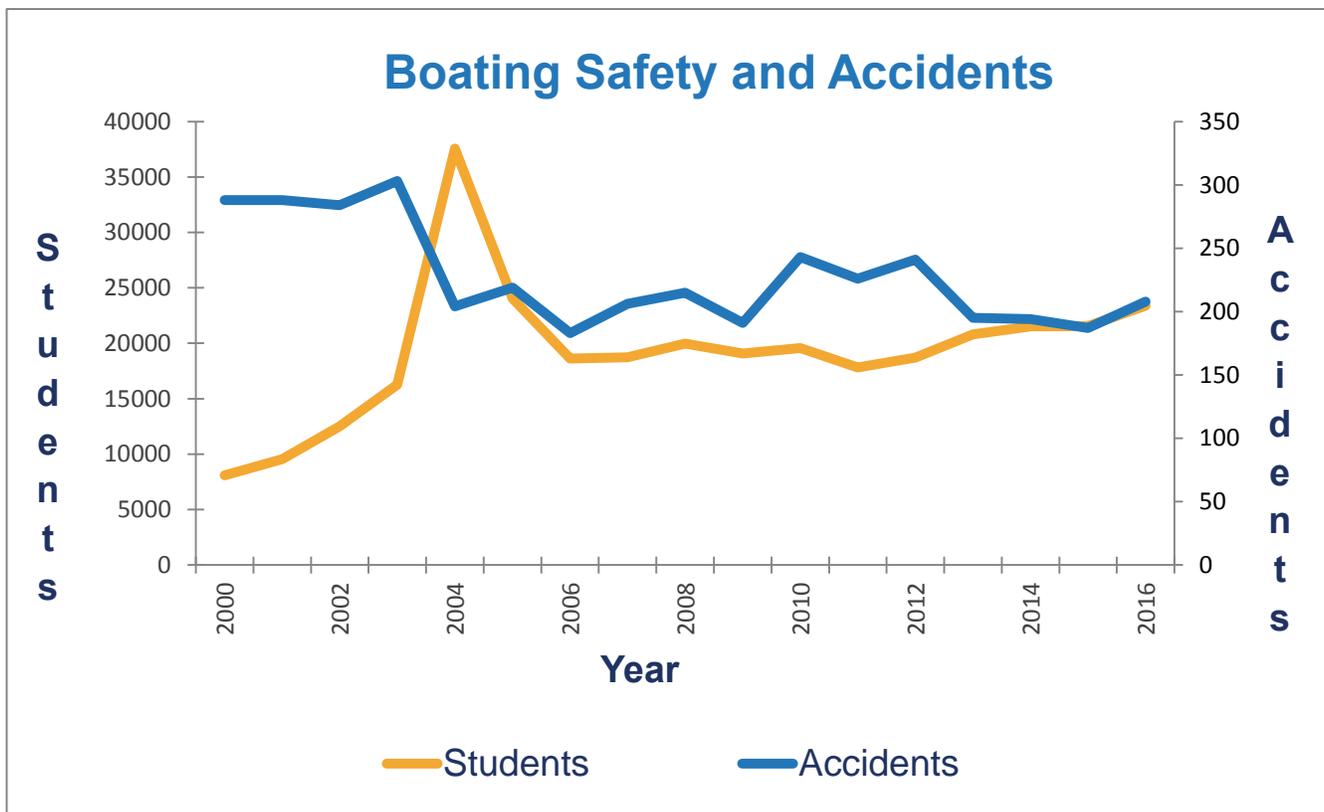
* Mandatory education for PWC operators begins

Percentage of PWC Vessels Involved in Accidents



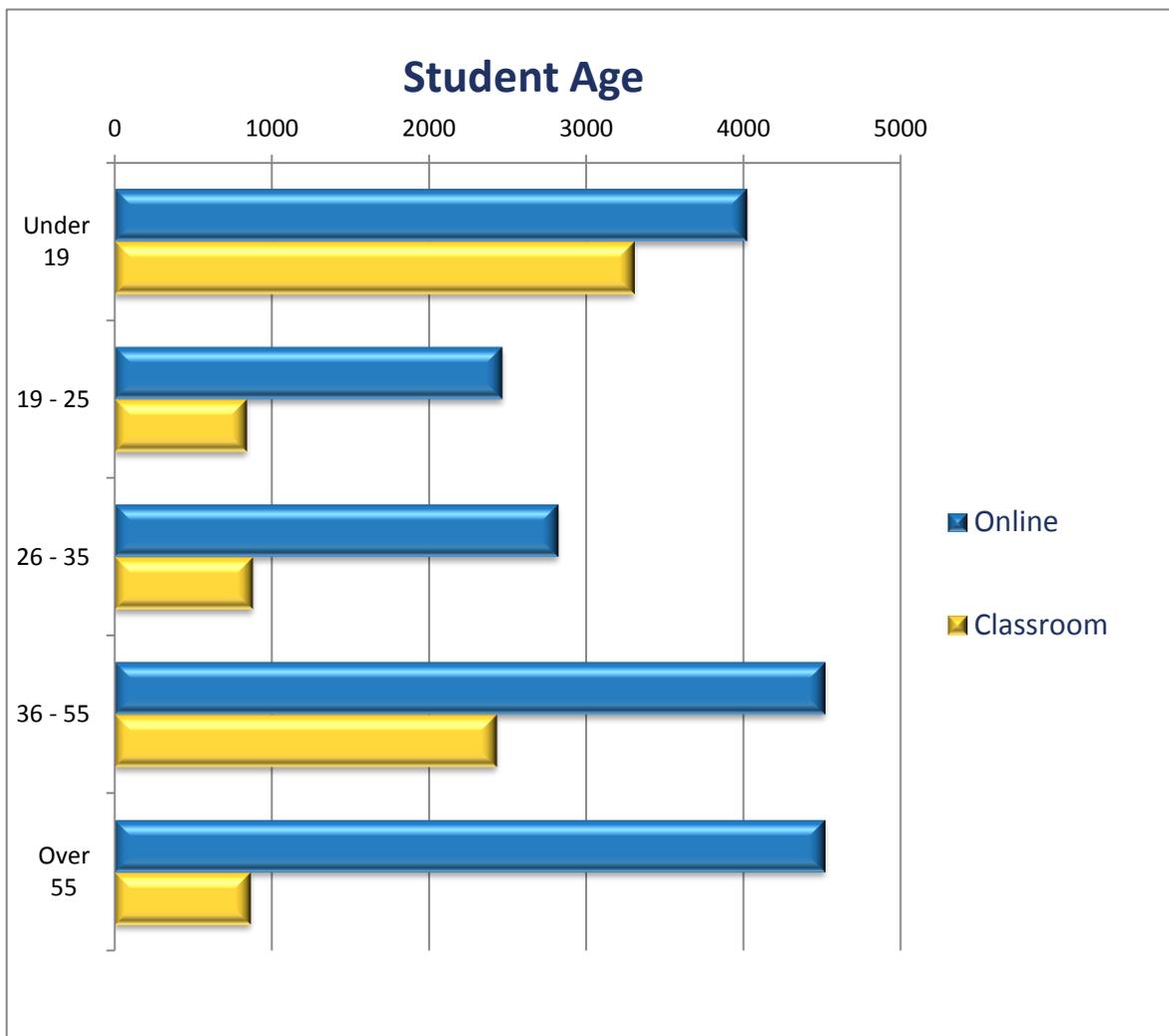
Boating Safety Education History

Year	Students	Classroom Students	Online Students	Accidents
2000	8076	8076	XXX	288
2001	9558	9558	XXX	288
2002	12512	12512	XXX	284
2003	16260	16260	XXX	303
2004	37560	37560	XXX	204
2005	24044	24044	XXX	219
2006	18624	18624	XXX	183
2007	18738	18738	XXX	206
2008	19967	19967	XXX	215
2009	19093	19093	XXX	191
2010	19567	19567	XXX	243
2011	17826	17826	XXX	226
2012	18705	18705	XXX	241
2013	20806	20806	XXX	195
2014	21507	21507	XXX	194
2015	21559	12655	8904	187
2016	23373	8332	15041	208



Student Age

Age Group	Online	Classroom
Under 19	4018	3301
19 - 25	2466	840
26 - 35	2820	877
36 - 55	4517	2426
Over 55	4517	864



Get Ready for Boating



Wear your life jacket
Take a boating safety course
File a float plan
Boat sober



Boat Safe!



Find a boating safety course



Parks, Recreation
and Historic Preservation

nysparks.com

WearItNewYork.com