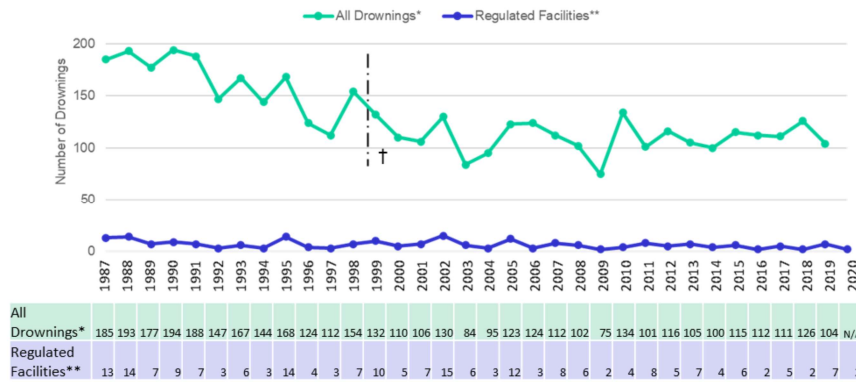


Historical Drowning Data

New York State Bathing Facility
Drowning Statistics

1987 – 2020

NEW YORK STATE DROWNINGS 1987 to 2020



Intentional drownings and those related to motor vehicle incidents are not included in counts.

* All drownings of NYS residents occurring in and out of NYS. 2020 data not available at time of posting; N/A = Not Available.

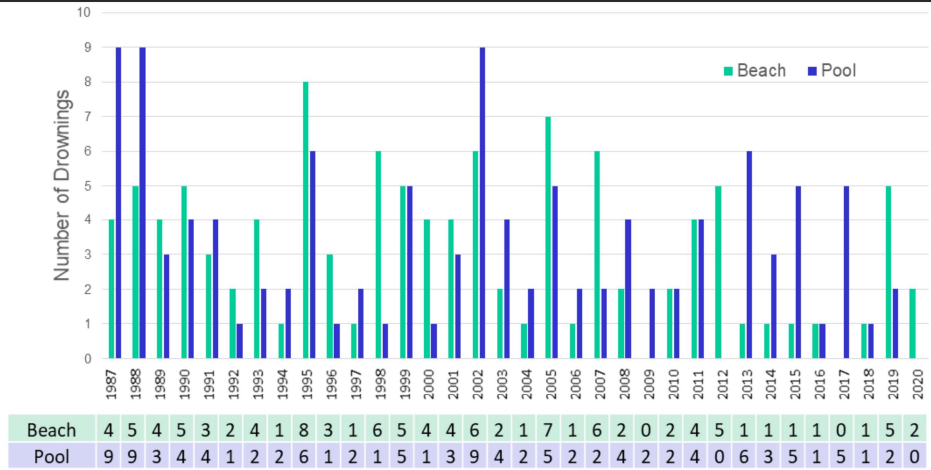
** Includes drownings for anyone occurring at a regulated NYS Bathing Facility.

† ICD 9 Codes used 1987-1998 and include E 830, E 832, and E 910. ICD 10 Codes used 1999-Present and include W 65 - W 74.

Source: NYSDOH Bureau of Biometrics and Health Statistics, Community Environmental Health and Food Protection, and Environmental and Occupational Epidemiology.

Drownings at regulated pools and beaches compared to all drownings of New York State residents.

DROWNINGS at REGULATED FACILITIES 1987 - 2020



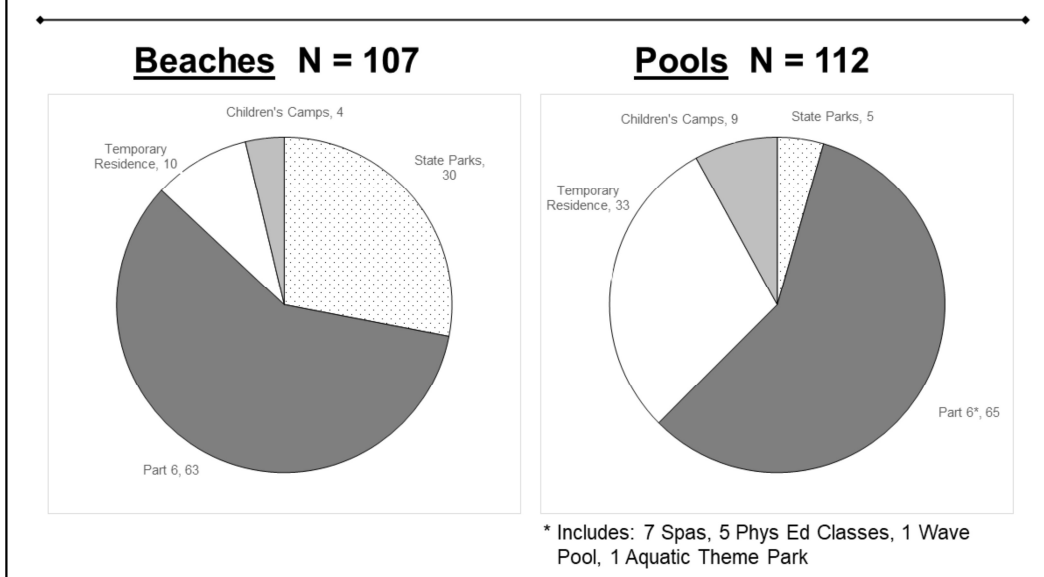
Pool = 112
Beach = 107
N = 219

Annual Average: 6.44 Drownings/Year

The number of drowning incidents may vary greatly from year to year, which may in part be due to weather conditions. Nice weather increases number of exposure days for patrons.

Source: New York State Department of Health Bathing Facility Incident Databases

DROWNINGS at REGULATED BATHING FACILITIES 1987 - 2020



Part 6 of the New York State Sanitary Code (SSC): Aquatic Amusement Parks, Municipal, Apartment Complex, Health Clubs, YMCA, School, Spa, Mobile Home Park, and Homeowner Association Pools.

State: Operated by NYS Office of Parks, Recreation and Historic Preservation and Department of Environmental Conservation.

Children's Camp: Day and Overnight regulated under Subpart 7-2 of the SSC.

Temporary Residence: Hotel, Motel, Campground, Bungalow Colony regulated under Subpart 7-1 or Subpart 7-3 of the SSC.

Source: New York State Department of Health Bathing Facility Incident Databases

AVERAGE ANNUAL RATES* of DROWNING at REGULATED FACILITIES

Time Period	Swimming Pools			Bathing Beaches		
	Number of Facilities	Drowning Incidents	Average Annual Rate*	Number of Facilities	Drowning Incidents	Average Annual Rate*
1987-1990	6,357	25	0.98	1,595	18	2.82
1991-2000	6,435	25	0.39	1,622	37	2.28
2001-2010	6,435	35	0.54	1,622	31	1.91
2011-2020	7,376	27	0.37	1,267	21	1.66
Cumulative**	6,703	112	0.49	1,514	107	2.08

* Rates per 1000 Facilities

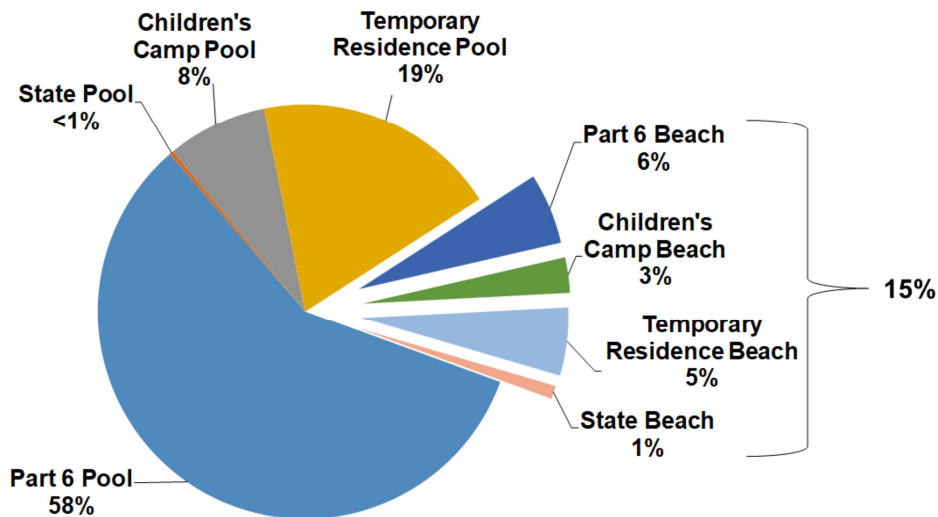
** Based on Average # of Facilities

Beaches have a much higher average drowning rate than pools. Possible factors include: greater number of bathers, water clarity, currents, depths and bottom conditions.

The time periods above correspond to significant changes to supervision requirements in the State Sanitary Code for bathing facilities.

Source: New York State Department of Health Bathing Facility Incident Databases

NYS BATHING FACILITIES* Facility Type



* Facility numbers are based on 2015 program data.
Due to rounding, percentages do not add up to 100%.

Beaches	N = 1,267
Pools	N = 7,376

Part 6 of the New York State Sanitary Code (SSC): Aquatic Amusement Parks, Municipal, Apartment Complex, Health Clubs, YMCA, School, Spa, Mobile Home Park, and Homeowner Association Pools.

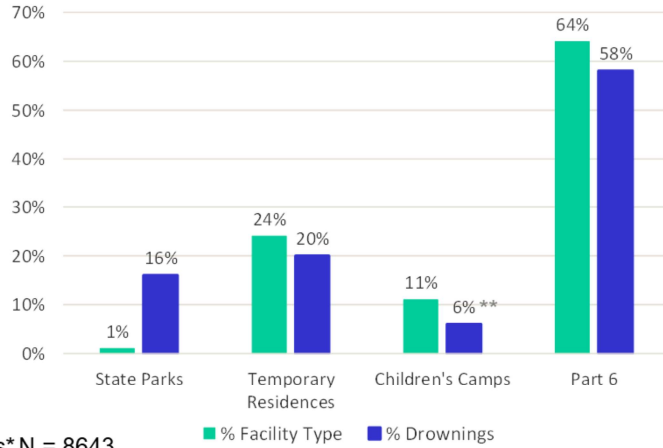
State: Operated by NYS Office of Parks, Recreation and Historic Preservation and Department of Environmental Conservation.

Children's Camp: Day and Overnight regulated under Subpart 7-2 of the SSC.

Temporary Residence: Hotel, Motel, Campground, Bungalow Colony regulated under Subpart 7-1 or Subpart 7-3 of the SSC.

Source: New York State Department of Health Bathing Facility Incident Databases

DROWNINGS by REGULATED FACILITY TYPE 1987 – 2020



Total Facilities* N = 8643
Drownings N = 219

**Facility numbers are based on 2015 program data. State Parks, Temporary Residence, and Children's Camps categories only include operations with bathing facilities.*

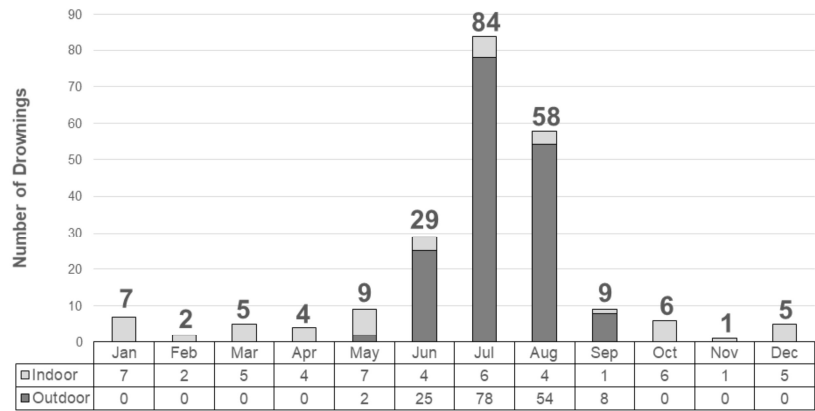
***Two of 13 Children's Camp drownings occurred at off-site bathing facilities.*

Other than State Park Bathing facilities, the number of drownings is proportional to the number of facilities for each facility type.

Based on the number of facilities, the proportion of drownings at State Parks is higher than for other facility types. However, this can be misleading because the proportion does not take into account the actual numbers of bathers, which are generally very high at State Park facilities.

Source: New York State Department of Health Bathing Facility Incident Databases

DROWNINGS at REGULATED FACILITIES by Month 1987 - 2020



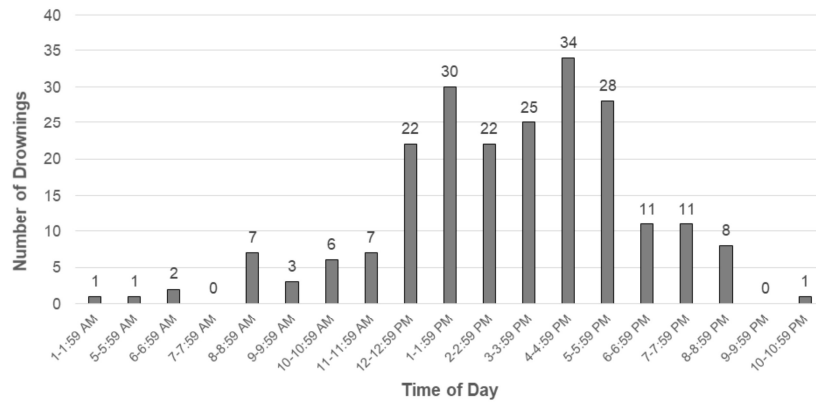
Indoor = 52 Outdoor = 167

N = 219

As expected, more drownings occur during summer months when outdoor swimming facilities are open.

Source: New York State Department of Health Bathing Facility Incident Databases

DROWNINGS at REGULATED FACILITIES Time of Day 1987 - 2020



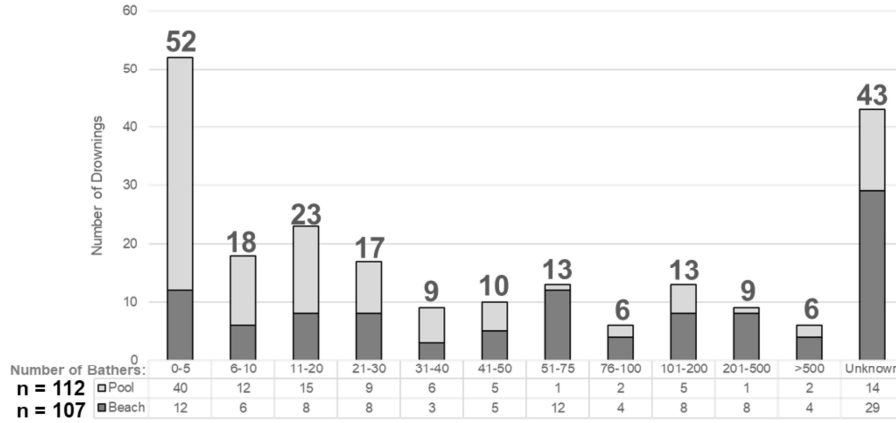
N = 219

Most drowning occurs after noon. The highest incidence of drowning occurs at the end of the day between 4:00 and 6:00 P.M. Some possible factors include: more bathers during this time of day, bather fatigue, lifeguard fatigue.

Source: New York State Department of Health Bathing Facility Incident Databases

DROWNINGS at REGULATED FACILITIES

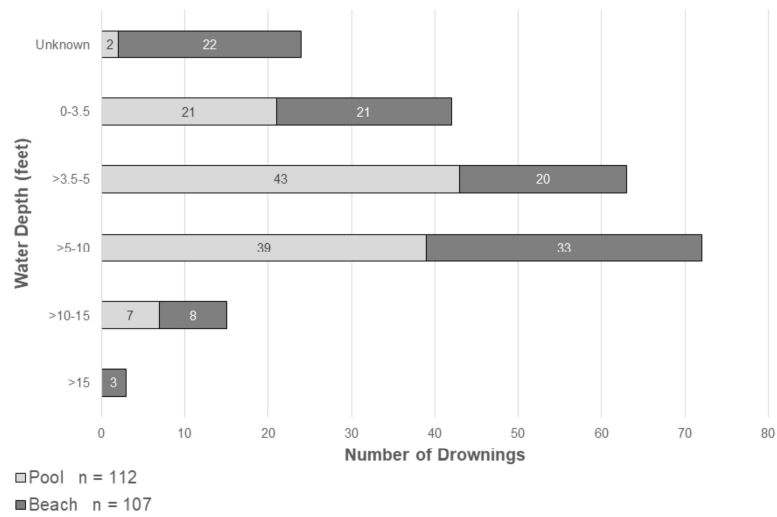
Number of Bathers Present at Time of Drowning 1987 - 2020



There is a high incidence of drownings that occur when low numbers of bathers are present. Diligence in supervising bathers is needed at all times, not just when there are large numbers of bathers.

Source: New York State Department of Health Bathing Facility Incident Databases

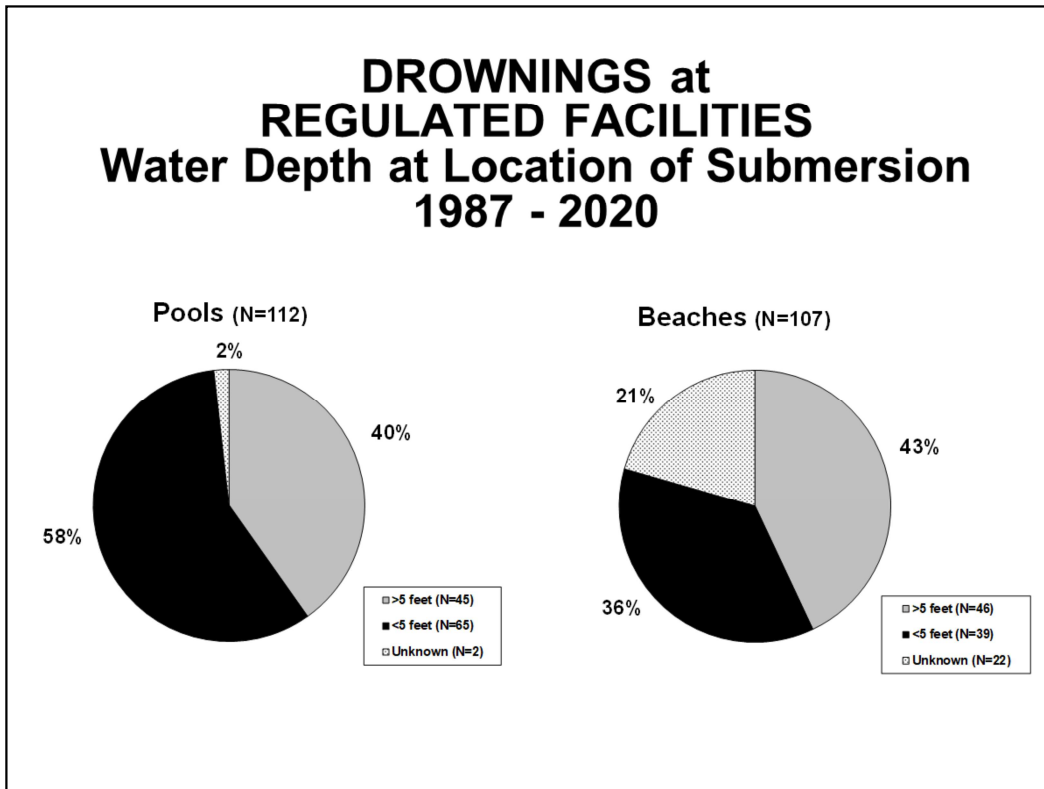
DROWNINGS at REGULATED FACILITIES Water Depth at Location of Submersion 1987 - 2020



A significant number of drownings occur in water less than 5ft. deep. Diligence in supervising bathers is needed for any depth of water, not just for deep water.

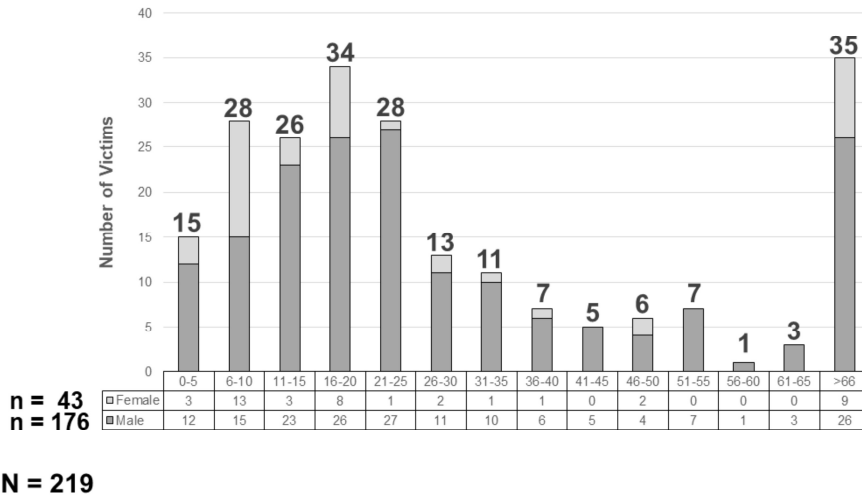
Source: New York State Department of Health Bathing Facility Incident Databases

DROWNINGS at REGULATED FACILITIES Water Depth at Location of Submersion 1987 - 2020



Source: New York State Department of Health Bathing Facility Incident Databases

DROWNINGS at REGULATED FACILITIES Age and Sex of Victim 1987 - 2020



At regulated bathing facilities, males are about 4 times more likely to be drowning victims than females. Many people think that toddlers are the most at risk, which is true for drownings in all settings; however, at regulated bathing facilities most drowning victims are between 6 and 25 years old.

Source: New York State Department of Health Bathing Facility Incident Databases

DROWNING RATES Sex and Ethnicity 1987 - 2020

SEX/ETHNICITY	NYS POPULATION *	DROWNINGS**	RATE PER 1,000,000	AVERAGE ANNUAL RATE
MALES				
White	5,684,782	87	15.30	0.45
Black	1,389,590	47	33.82	0.99
Hispanic	1,409,275	33	23.42	0.69
Other	663,071	4	6.03	0.18
TOTAL	9,146,718	176 [†]	19.24	0.57
FEMALES				
White	6,076,199	23	3.79	0.11
Black	1,507,193	15	9.95	0.29
Hispanic	1,433,792	2	1.39	0.04
Other	812,525	3	3.69	0.11
TOTAL	9,829,709	43	4.37	0.13
MALE/FEMALE				
White	11,760,981	110	9.35	0.28
Black	2,812,623	62	22.04	0.65
Hispanic	2,867,583	35	12.21	0.36
Other	1,535,270	7	4.56	0.13
TOTAL	18,976,457	219	11.54	0.34

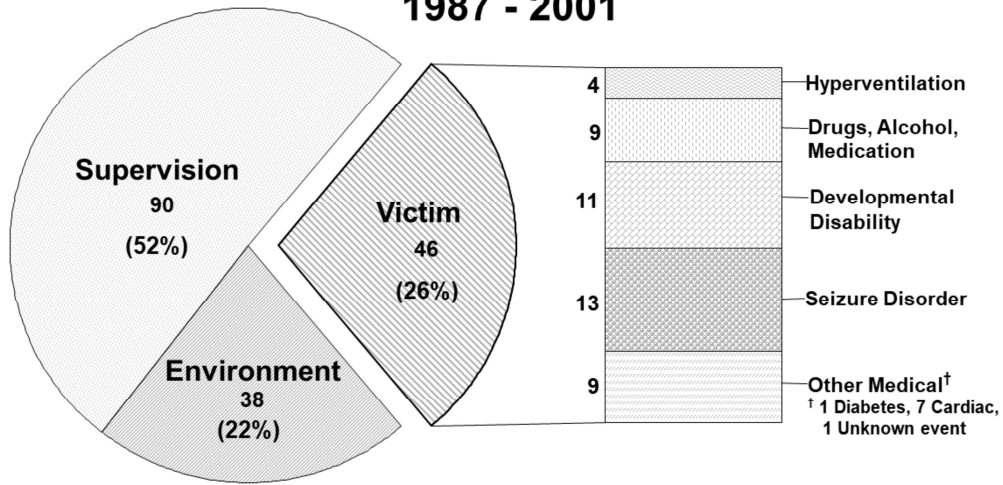
* 2000 U.S. Census Data for New York State compiled by NYSDOH, Bureau of Biometrics and Health Statistics. Totals include all ethnicities.

** Drownings at New York State regulated facilities.

† Includes 5 male victims for which ethnicity was not reported.

Black males and females have a significantly higher drowning rate than White and Hispanic males and females.

DROWNINGS at REGULATED FACILITIES Contributing Factors*: Victim 1987 - 2001**

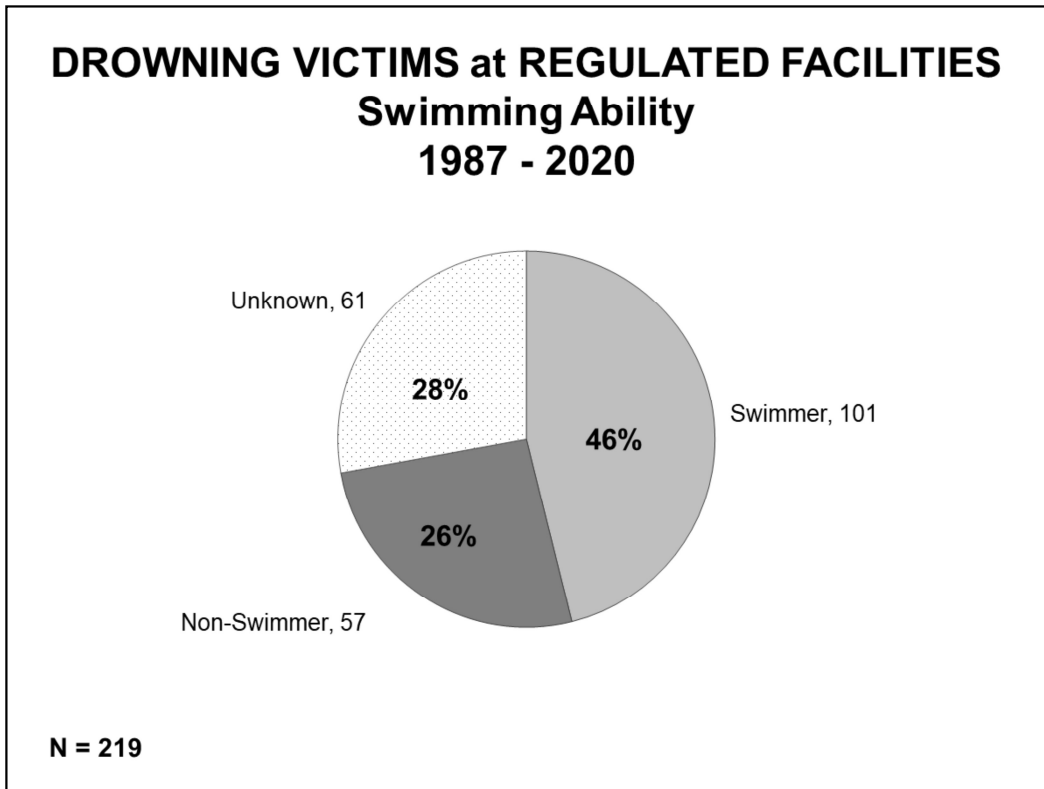


* 174 Contributing Factors Identified in 112 Drownings, 1987-2001.

** Contributing Factors pertaining to the victim are being reassessed and will be updated in the future.

A similar assessment is planned for all drowning data in the future.

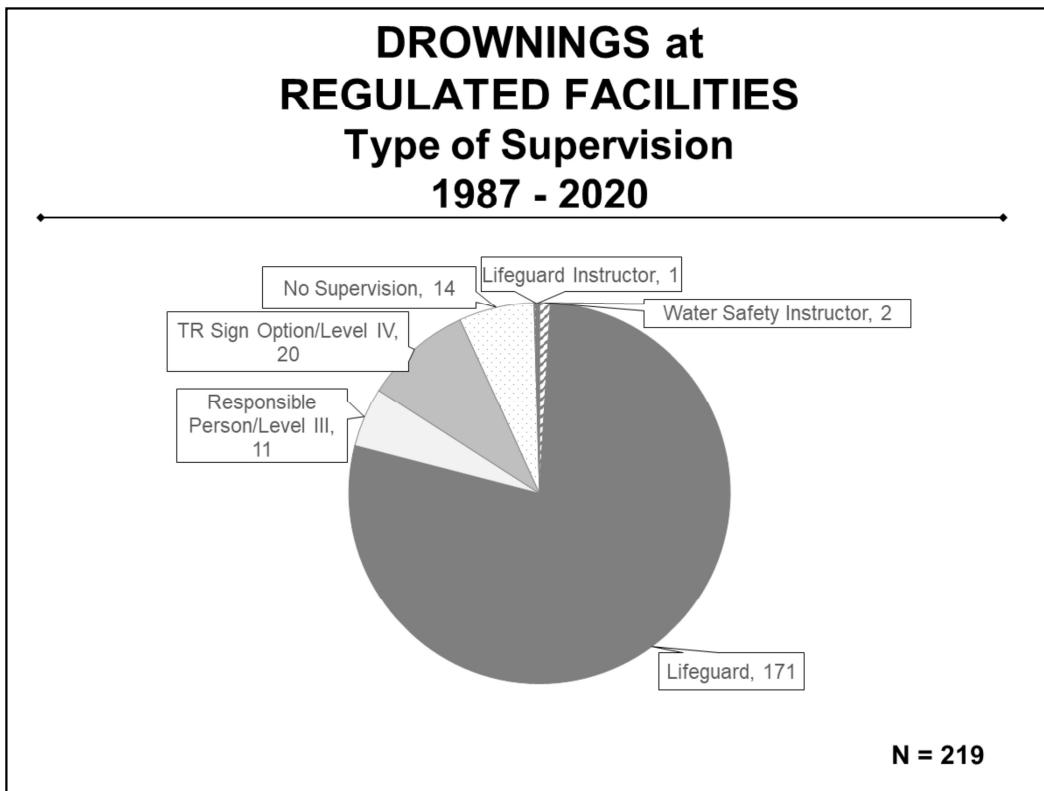
Source: New York State Department of Health Bathing Facility Incident Databases



It is commonly thought that most drowning victims are “non-swimmers”. When swimming abilities were determined, people who were considered to be “swimmers” drowned more frequently than “non-swimmers”.

Risk vs. exposure - Although non-swimmers may be more at risk of drowning because of their inability to swim, their exposure is often less because they spend less time in the water. Swimmers have a lower risk of drowning based on ability; however, their exposure may be greater because they spend more time in the water.

Source: New York State Department of Health Bathing Facility Incident Databases



Many drowning incidents occur at lifeguarded facilities. It is believed that this is because the number of bathers present is much greater at lifeguarded bathing facilities.

Supervision Level III / Responsible person: Non-lifeguard supervisory personnel present at the bathing facility.

Supervision Level IV / Temporary Residence Sign Option: No facility supervisory staff present at the Temporary Residence (hotel, motel, campground, bungalow colony, etc.). Patron use rules are posted on signs at bathing facilities.

Source: New York State Department of Health Bathing Facility Incident Databases