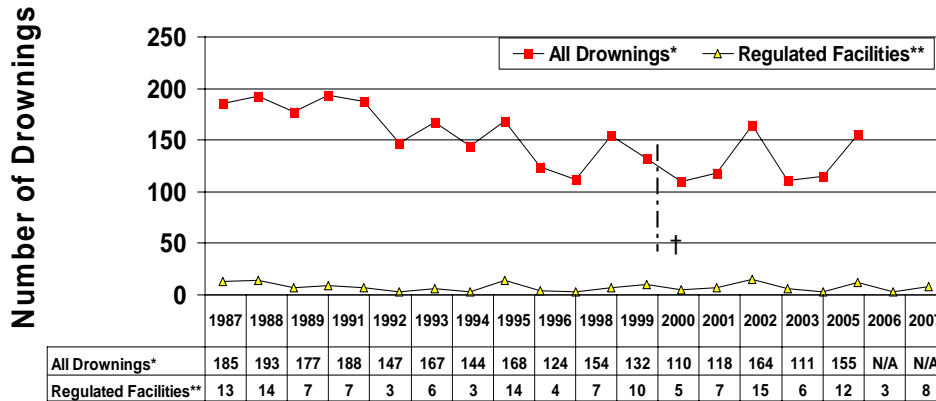


NEW YORK STATE DROWNINGS 1987 to 2007



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.

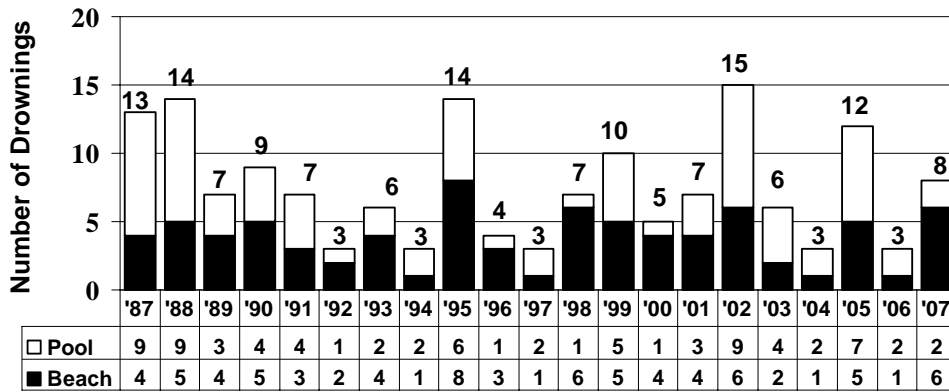
** Includes drownings for anyone occurring at a regulated NYS Bathing Facility.

† 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 Bureaus of Vital Statistics, Community Environmental Health and Food Protection, and Environmental and Occupational Epidemiology.

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

DROWNINGS at REGULATED FACILITIES 1987 - 2007



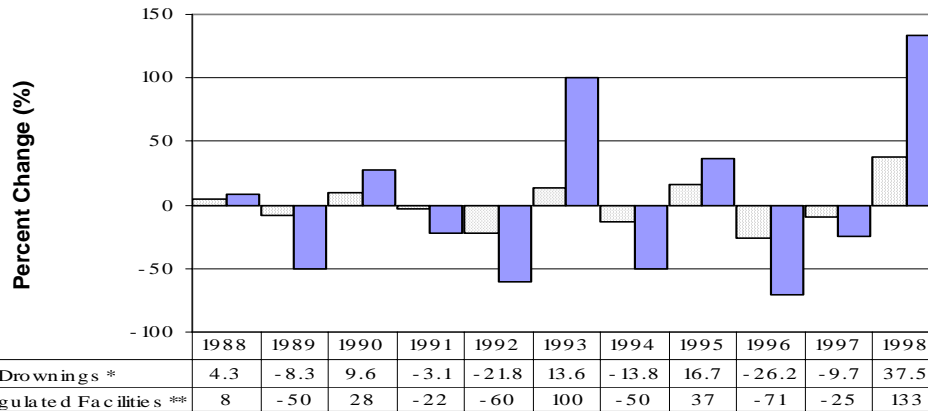
Pool=77

Beach=82

N=159

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.

NEW YORK STATE DROWNINGS at REGULATED FACILITIES Percent Change in Incidence from Prior Year 1988 to 1998



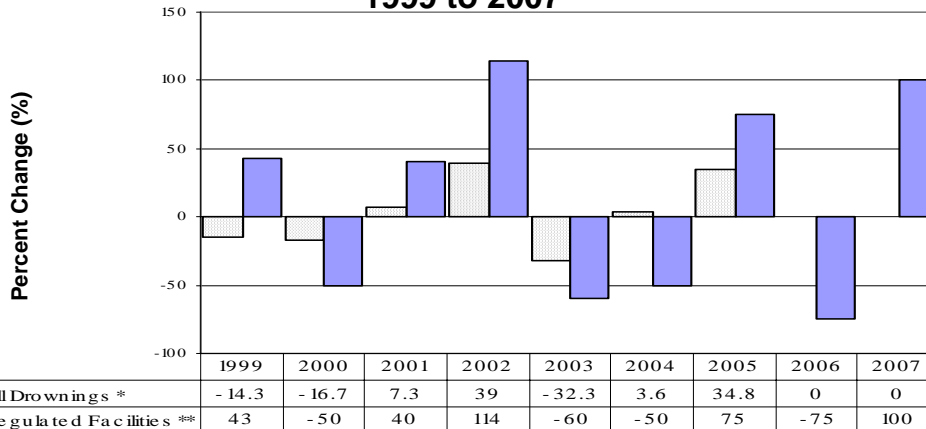
Intentional drownings and those related to motor vehicle incidents are not included in counts.

* All drownings of NYS residents occurring in and out of NYS. ICD 9 Codes used 1987-1998 and include E 830, E 832, and E 910..

** Includes all drownings occurring at a regulated NYS Bathing Facility, regardless of state of residence of victim.

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

NEW YORK STATE DROWNINGS at REGULATED FACILITIES Percent Change in Incidence from Prior Year 1999 to 2007



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

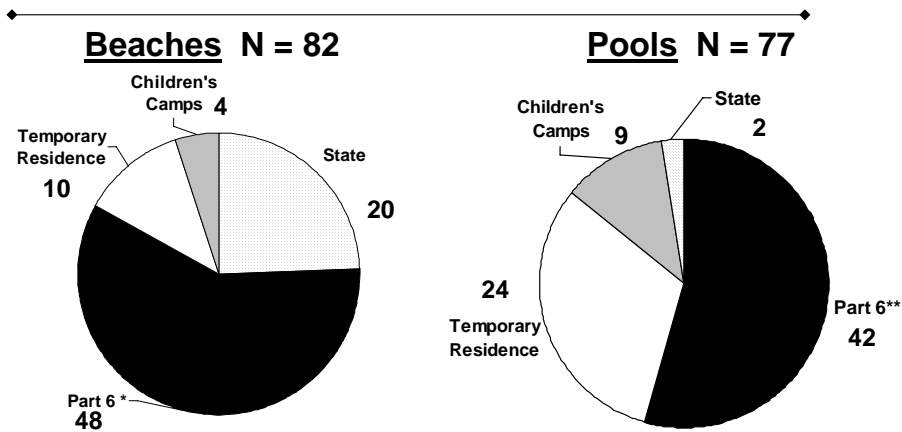
* All drownings of NYS residents occurring in and out of NYS. ICD 10 Codes used 1999-Present and include W 65 - W 74.

Data not yet available for 2006 and 2007.

** Includes all drownings occurring at a regulated NYS Bathing Facility, regardless of state of residence of victim.

Source: NYSDOH Bureaus of Vital Statistics, Community Environmental Health and Food Protection, and Environmental and Occupational Epidemiology.

DROWNINGS at REGULATED BATHING FACILITIES 1987-2007



*Includes: Surf, Tidal, Great Lakes and Inland

**Includes: 5-Spas, 5-Phys Ed Classes, 1-Wave Pool, 1-Aquatic Theme Park

Part 6. Aquatic Amusement Parks, Municipal, Apartment Complex, Health Clubs, YMCA, School, Spa, and Homeowner Association Pools.

State. Operated by NYS Office of Parks, Recreation and Historic Preservation and Departmental Environmental Conservation Facilities.

Children's Camp. Day and Overnight.

Temporary Residence. Hotel, Motel, Campground, Bungalow Colony.

AVERAGE ANNUAL RATES* of DROWNING at REGULATED FACILITIES Time Period

	<u>1987- 1990</u>	<u>1991- 2000</u>	<u>2001-2007</u>	<u>Cumulative**</u>
<u>Swimming Pools</u>				
Number of Facilities	6,357	6435	6435	6417
Drowning Incidents	25	25	27	77
Average Annual Rate*	0.98	0.39	0.52	0.57
<u>Bathing Beaches</u>				
Number of Facilities	1595	1622	1622	1616
Drowning Incidents	18	37	27	82
Average Annual Rate*	2.82	2.28	2.38	2.42

* Rates per 1000 Facilities

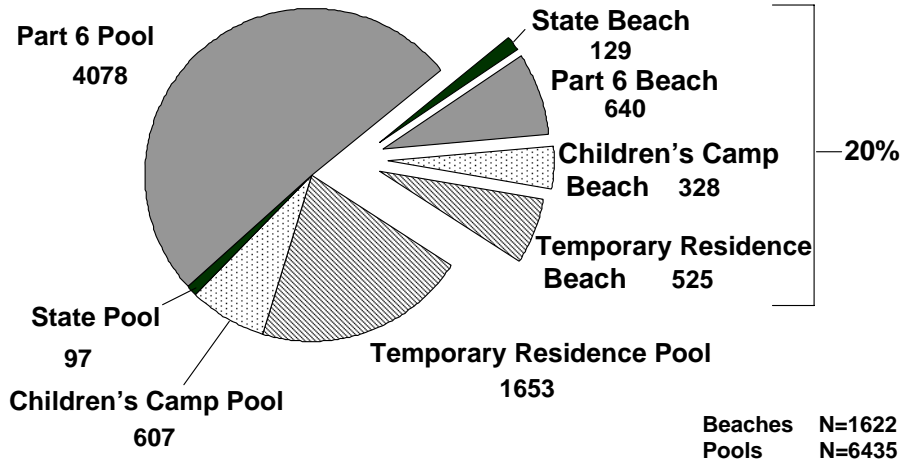
**Based on Average # of Facilities

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 changes to the State Sanitary Code for bathing facilities.

NUMBER of NYS BATHING FACILITIES

Facility Type



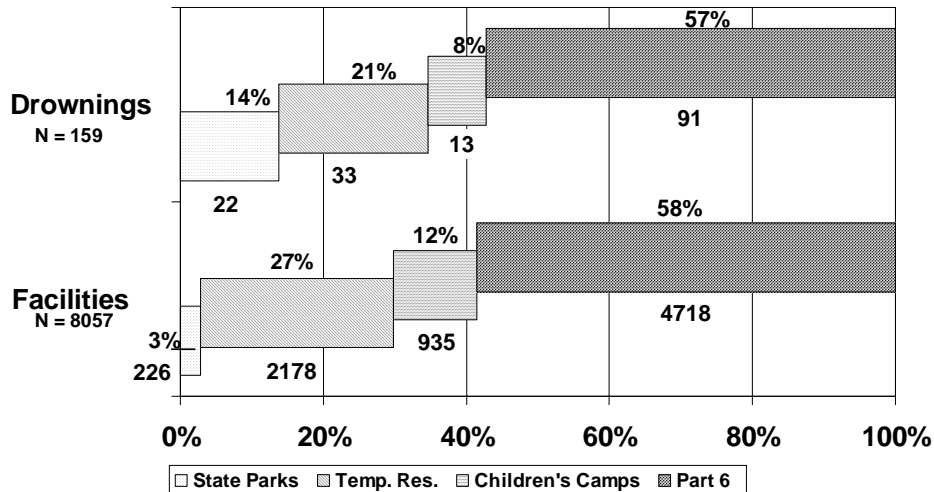
Part 6. Aquatic Amusement Parks, Municipal, Apartment Complex, Health Clubs, YMCA, School, Spa, and Homeowner Association Pools.

State. Operated by NYS Office of Parks, Recreation and Historic Preservation and Departmental Environmental Conservation Facilities.

Children's Camp. Day and Overnight.

Temporary Residence. Hotel, Motel, Campground, Bungalow Colony.

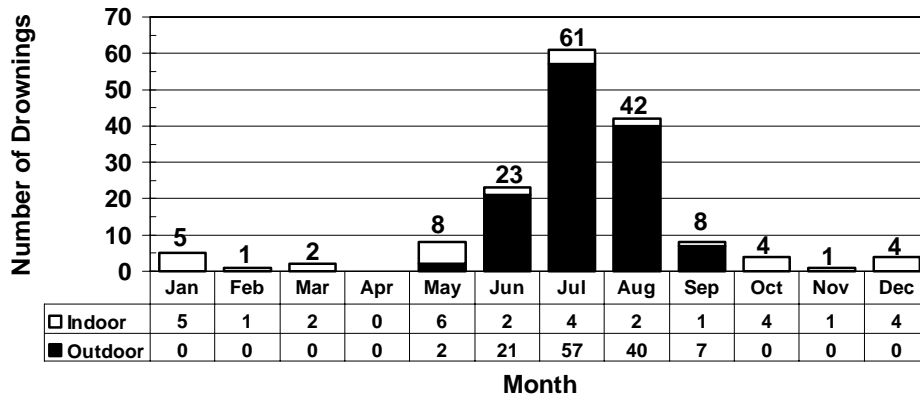
DROWNINGS by REGULATED FACILITY TYPE 1987-2007



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.

DROWNINGS at REGULATED FACILITIES by Month 1987 - 2007

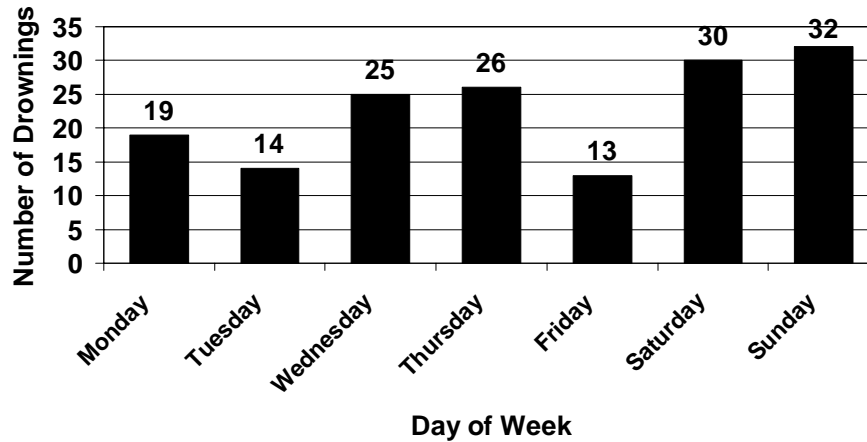


Indoor - 32 Outdoor - 127

N = 159

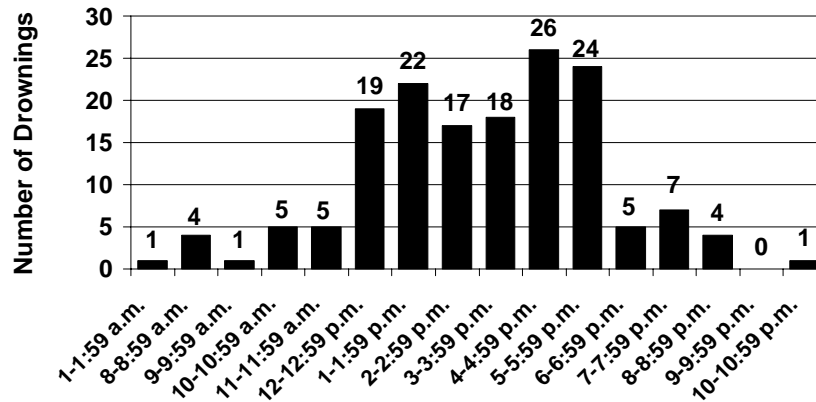
As expected, more drownings occur during summer months when outdoor swimming facilities are open.

DROWNINGS at REGULATED FACILITIES Day of the Week 1987 - 2007



N = 159

DROWNINGS at REGULATED FACILITIES Time of Day 1987 - 2007

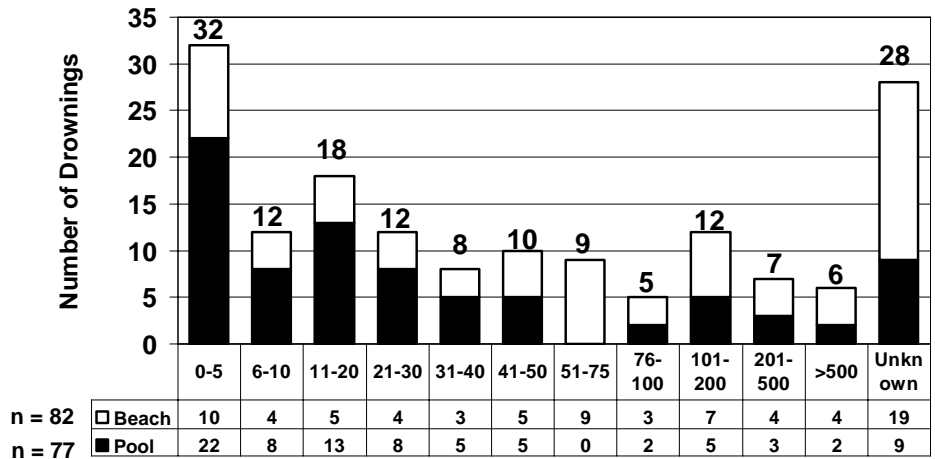


N = 159

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.

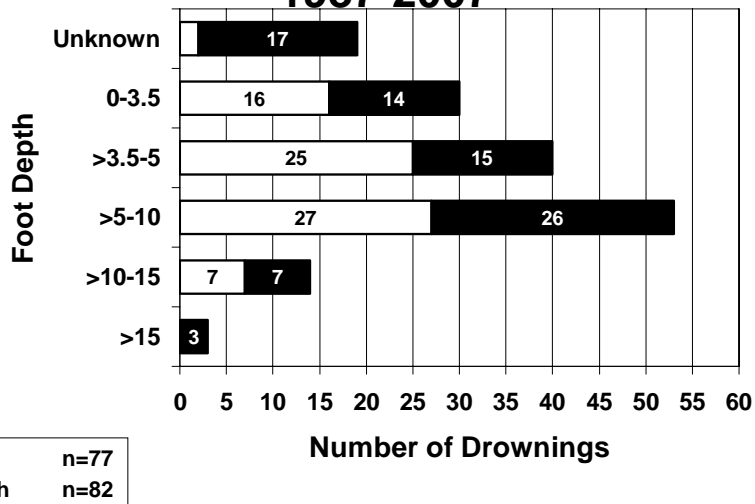
DROWNINGS at REGULATED FACILITIES

Number of Bathers Present at Time of Drowning 1987 - 2007



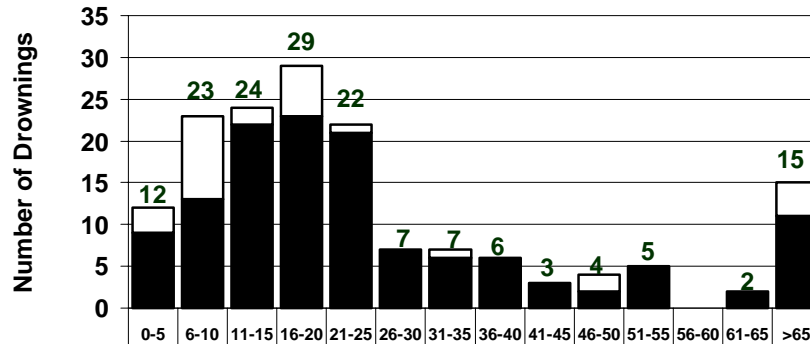
There is a high incidence of drownings that occur when low numbers of bathers are present. Diligence in supervising bathers is needed at all times, not just when there are large numbers of bathers.

DROWNINGS AT REGULATED FACILITIES Water Depth at Location of Submersion 1987-2007



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.

DROWNINGS at REGULATED FACILITIES Age and Sex of Victim 1987 - 2007



n= 29

n= 130

N=159

Males are 4 ½ times more likely to be drowning victims than females. Many people think that toddlers are the most at risk; however, most drowning victims are between 11 and 25 years old.

DROWNING RATES

Sex and Ethnicity

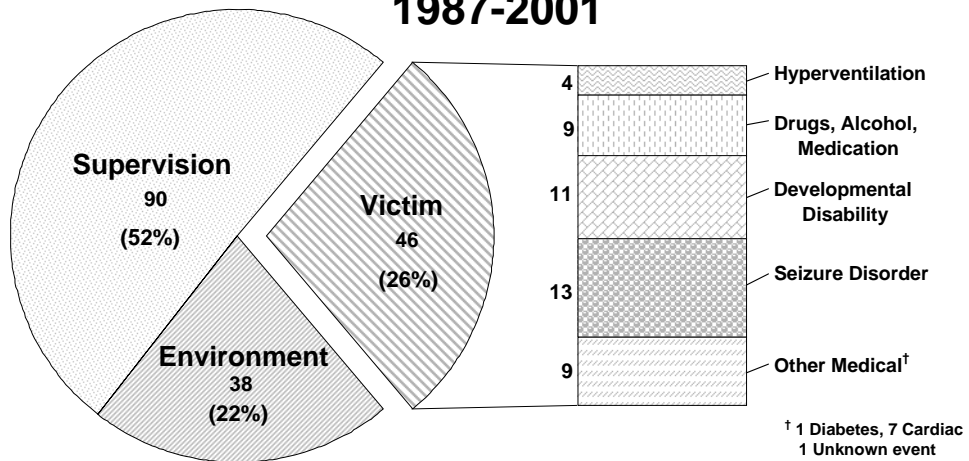
1987-2007

SEX/ETHNICITY	NYS POPULATION	DROWNINGS**	RATE PER 1,000,000	AVERAGE ANNUAL RATE
MALES				
White	5,684,782	59	10.38	0.49
Black	1,389,590	43	30.94	1.47
Hispanic	1,409,275	24	17.03	0.81
Other	663,071	0	0.00	0.00
TOTAL	9,146,718	130 †	14.21	0.68
FEMALES				
White	6,076,199	15	2.47	0.12
Black	1,507,193	10	6.63	0.32
Hispanic	1,433,792	2	1.39	0.07
Other	812,525	2	2.46	0.12
TOTAL	9,829,709	29	2.95	0.14
MALE/FEMALE				
White	11,760,981	74	6.29	0.30
Black	2,812,623	53	18.84	0.90
Hispanic	2,867,583	26	9.07	0.43
Other	1,535,270	2	1.30	0.06
TOTAL	18,976,457	159	8.38	0.40

- 2000 U.S. Census Data for New York State compiled by NYSDOH, Bureau of Biometrics.
Totals include all ethnicities
- ** Drownings at New York State regulated facilities
- † Includes 4 male victims for which ethnicity was not reported.

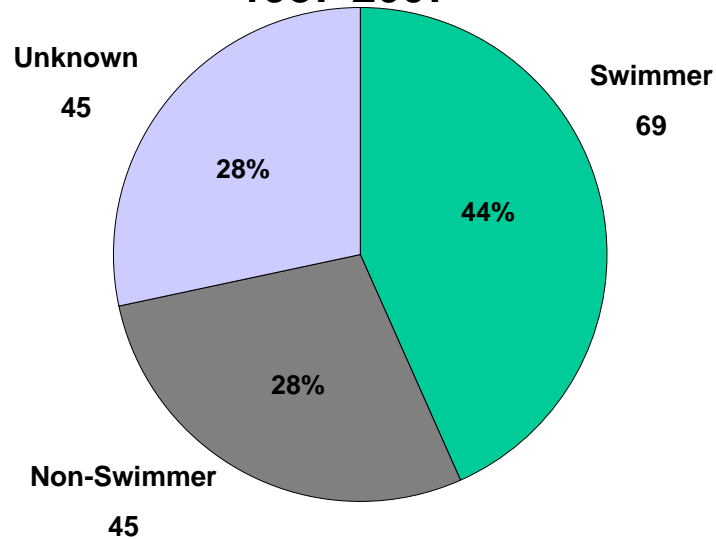
Black males and females have a significantly higher drowning rate than White and Hispanic males and females.

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



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

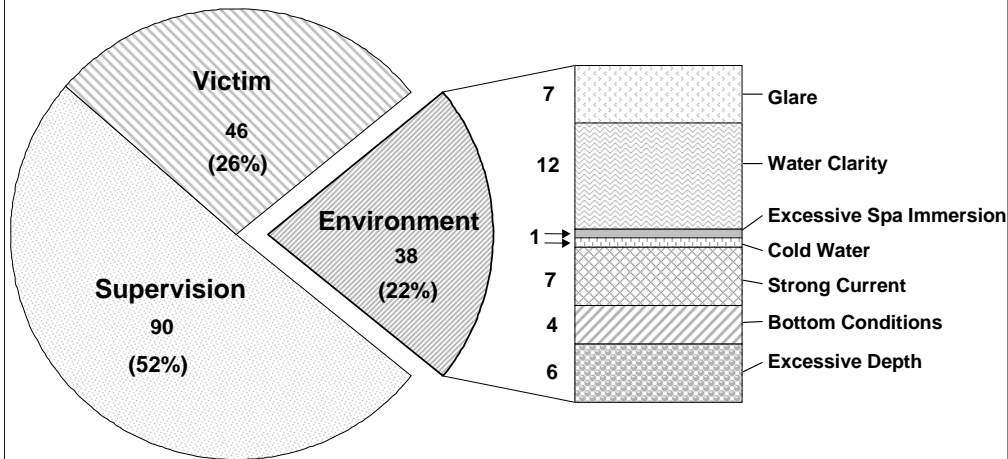
DROWNING VICTIMS at REGULATED FACILITIES Swimming Ability 1987-2007



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.

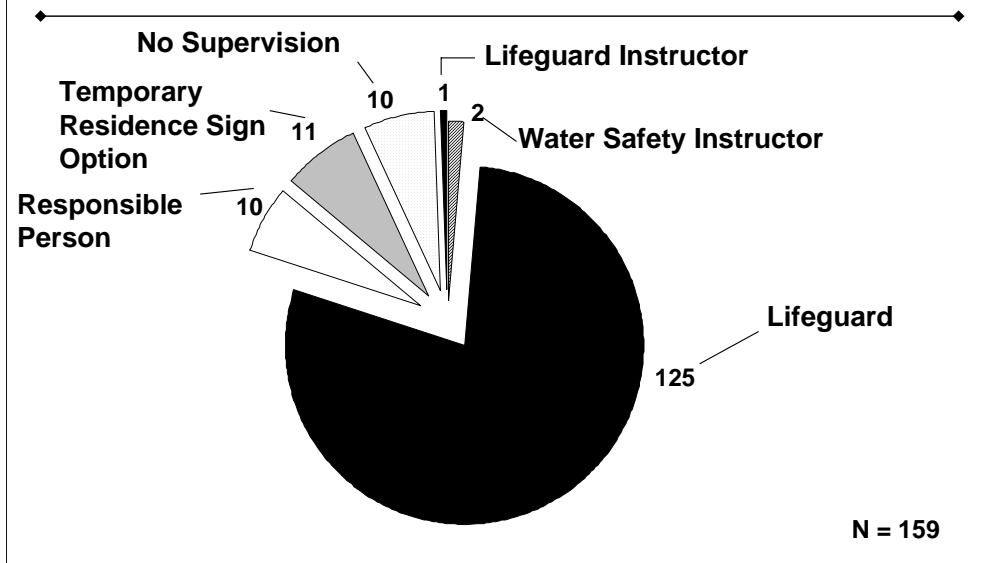
DROWNINGS at REGULATED FACILITIES Contributing Factors*: Environment 1987-2001



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

Water clarity is the most frequently identified environmental contributing factor. The ability to see submerged bathers and to locate them promptly during a rescue is severely compromised when water clarity is poor. Unfortunately, several drownings where poor water clarity affected rescues occurred at swimming pools.

DROWNINGS at REGULATED FACILITIES Type of Supervision 1987 - 2007

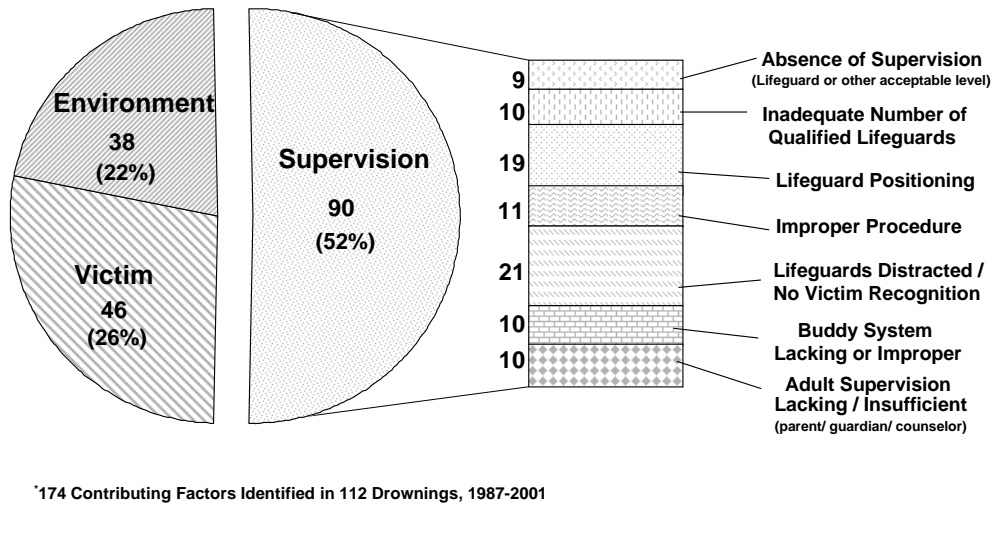


Many drowning incidents occur at lifeguarded facilities. It is believed that this is because the number of bathers present is much greater at lifeguarded bathing facilities.

Responsible person: Non-lifeguard supervisory personnel present at the bathing facility.

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.

DROWNINGS AT REGULATED FACILITIES Contributing Factors*: Supervision 1987-2001



Lifeguard distraction/not recognizing victim and lifeguard positioning are the most frequently identified contributing factors pertaining to supervision.

DROWNINGS at REGULATED FACILITIES Contributing Factors - Supervision 2002 - 2003

- | | |
|---|--|
| <ul style="list-style-type: none"> • Inadequate # of guards 1 • Inadequate surveillance 1 • Unobserved submersion 5 • Improper Procedure <ul style="list-style-type: none"> - No/delayed CPR 2 - Search 1 - Used patrons to respond 1 • Intrusion - other duties 4 • Distracted <ul style="list-style-type: none"> - (chair change, search) 2 | <ul style="list-style-type: none"> • Lifeguard Positioning 2 <ul style="list-style-type: none"> - blind spots • Lifeguard Skills 4 <ul style="list-style-type: none"> - panicked - fatigued - unable to reach pool
 bottom - unable to move victim from
 8' depth |
|---|--|