

Lifeguard Rescue Survey

Data Collected from July 7, 2009 to December 7, 2009

Open Water n=54		Water Park n=65		Pool n=329	
Bay	7.27%	Current	0%	Deep Water	32.32%
Lagoon	1.82%	Flume	0%	Diving Area	12.20%
Lake	61.82%	Lazy River	18.46%	Play Features	3.05%
Ocean	23.64%	Play Feature	7.69%	Shallow Water	46.04%
Quarry	0%	Slide	18.46%	Spa	0.00%
River	5.45%	Wave Pool	38.46%	Therapy	0.61%
Sand Pit	0%	Other	16.92%	Wading Pool	2.74%
Other	0%			Other	3.05%

Time of Day	Before 5:00 AM	5:00 AM to 9:00 AM	9:00 AM to Noon	Noon to 4:00 PM	4:00 PM to 8:00 PM	After 8:00 PM
Open Water	1.89%	1.89%	13.21%	66.04%	16.98%	0.00%
Water Park	0.00%	0.00%	18.46%	60.00%	21.54%	0.00%
Pool	0.00%	1.58%	13.61%	56.65%	25.95%	1.90%

Water Temperature (Fahrenheit)								
	less than 40	40 to 50	51 to 60	61 to 70	71 to 80	81 to 90	91 to 100	> 100
Open Water	0.00%	2.13%	2.13%	27.66%	51.06%	17.02%	0.00%	0.00%
Water Park	0.00%	0.00%	0.00%	0.00%	28.26%	71.74%	0.00%	0.00%
Pool	0.00%	0.00%	0.32%	2.27%	23.62%	70.87%	2.59%	0.00%

Air Temperature (Fahrenheit)								
	less than 40	40 to 50	51 to 60	61 to 70	71 to 80	81 to 90	91 to 100	> 100
Open Water	0.00%	1.96%	0.00%	3.92%	31.37%	47.06%	13.73%	1.96%
Water Park	0.00%	0.00%	0.00%	0.00%	14.89%	51.06%	21.28%	12.77%
Pool	0.00%	0.00%	0.00%	1.32%	18.09%	57.89%	19.08%	3.29%

Water Depth where the victim was located (feet)							
	less than 1	1 to <3	3 to 5	5.1 to 10	10.1 to 16.9	17 to 25	> 25
Open Water	1.89%	7.55%	20.75%	43.40%	9.43%	9.43%	7.55%
Water Park	6.15%	16.92%	66.15%	6.15%	4.62%	0.00%	0.00%
Pool	2.85%	7.28%	48.42%	25.00%	15.82%	0.32%	0.00%

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Day of the Week	Open Water	Water Park	Pool
Saturday	28.30%	23.81%	17.61%
Sunday	18.87%	3.17%	5.32%
Monday	18.87%	12.70%	14.62%
Tuesday	9.43%	22.22%	20.60%
Wednesday	11.32%	11.11%	19.27%
Thursday	9.43%	14.29%	13.95%
Friday	3.77%	12.70%	8.64%

Was this a Holiday?	Open Water	Water Park	Pool
Yes	5.66%	1.56%	2.22%
No	94.34%	98.44%	97.78%

Water Clarity	Open Water	Water Park	Pool
Excellent - clearly see the bottom	9.09%	76.92%	86.34%
Good - see large objects on bottom	18.18%	23.08%	14.29%
Fair - barely see large objects on bottom	29.09%	4.62%	0.00%
Poor - cannot see the bottom	38.18%	0.00%	0.00%
None - cannot see more than one foot below the surface	9.09%	0.00%	0.00%
Other	0.00%	0.00%	0.00%

Above Water Clarity	Open Water	Water Park	Pool
Excellent - No problems seeing victim	81.82%	84.62%	92.81%
Limited by Fog	0.00%	0.00%	0.00%
Limited by Glare	7.27%	7.69%	2.50%
Limited by Haze	3.64%	1.54%	0.00%
Limited by Patrons	5.45%	10.77%	4.38%
Limited by Rain	1.82%	0.00%	0.31%
Other	3.64%	0.00%	0.63%

Attendance Level at the time of the Rescue	Open Water	Water Park	Pool
Light	25.93%	7.69%	22.40%
Normal	48.15%	73.85%	59.62%
Heavy	25.93%	18.46%	17.98%

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How the Victim was Recognized	Open Water	Water Park	Pool
Sight	78.18%	96.92%	92.68%
Sound	36.36%	24.62%	22.87%
Informed by Victim	10.91%	4.62%	4.57%
Informed by another Lifeguard	5.45%	6.15%	4.57%
Informed by a Patron	12.73%	9.23%	7.32%
Profiled High Risk Prior to Distress	12.73%	16.92%	17.68%
Other	3.64%	0.00%	3.05%

Victim's Activity prior to the Rescue	Open Water	Water Park	Pool
Unknown	7.27%	22.22%	5.97%
Wading	16.36%	17.46%	19.18%
Swimming	50.91%	26.98%	42.77%
Floating with Equipment	12.73%	12.70%	10.38%
Feet First Entry/Jumping	10.91%	17.46%	22.01%
Head First Entry/Diving	1.82%	1.59%	4.72%
Receiving Instruction	5.45%	0.00%	6.29%
Body Surfing	9.09%	3.17%	0.31%
Surfing	0.00%	0.00%	0.00%
Scuba Diving	0.00%	0.00%	0.00%
Skin Diving	1.82%	0.00%	0.00%
Beach or Deck Activity (not in the water)	0.00%	1.59%	5.03%
Walking/Running (not in the water)	0.00%	0.00%	5.97%
Other	14.55%	17.46%	8.18%

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Environmental Conditions at the time of the Rescue	Open Water	Water Park	Pool
Clear Skies	74.55%	82.54%	80.07%
Cloudy Skies	10.91%	3.17%	6.64%
Stormy	3.64%	0.00%	0.00%
Other	1.82%	12.70%	17.61%
Calm Water	29.09%	15.87%	
1 to 3 foot Waves	18.18%	11.11%	
4 to 6 foot Waves	7.27%	0.00%	
Greater than 6 foot Waves	0.00%	0.00%	

Type of Rescue Made	Open Water	Water Park	Pool
Reaching with equipment	12.73%	6.15%	10.98%
Reaching without equipment	5.45%	3.08%	9.45%
Wading Assist with equipment	5.45%	26.15%	12.80%
Wading Assist without equipment	3.64%	15.38%	10.98%
Swimming with equipment	43.64%	46.15%	45.12%
Swimming without equipment	12.73%	1.54%	14.02%
Throwing assist	5.45%	0.00%	0.91%
Underwater Search conducted	9.09%	0.00%	0.30%
Aircraft involved in search and/or rescue	0.00%	0.00%	0.00%
Watercraft involved in search and/or rescue	7.27%	1.54%	0.00%
Land Search conducted	1.82%	0.00%	0.30%
Other	5.45%	6.15%	3.66%

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Others Responding	Open Water	Water Park	Pool
None needed	43.64%	67.69%	66.35%
Additional Lifeguards	52.73%	27.69%	33.33%
Bystanders	7.27%	9.23%	8.18%
Paramedics/EMS	20.00%	20.00%	14.15%
Rescue Squad	9.09%	0.00%	1.89%
Police	3.64%	0.00%	5.35%
Fire	1.82%	1.54%	4.09%
Coast Guard	1.82%	0.00%	0.00%
Harbor Patrol/Rescue Boat	5.45%	0.00%	0.00%
Park Ranger	1.82%	0.00%	0.00%
Other	9.09%	1.54%	4.09%

Type of Aid Given	Open Water	Water Park	Pool
None needed	58.18%	73.85%	72.87%
Minor First Aid - Immediate transport to hospital NOT needed	9.09%	7.69%	9.76%
Spinal Injury Management Procedures Used	10.91%	7.69%	3.96%
Breathing Barrier Used	10.91%	6.15%	5.79%
CPR administered	10.91%	4.62%	5.79%
AED used	5.45%	0.00%	2.13%
Oxygen Administered	14.55%	3.08%	5.18%
Suctioned Airway	3.64%	3.08%	1.83%
Major First Aid - Immediate transport to hospital needed	14.55%	7.69%	4.57%
Other	3.64%	7.69%	4.88%

Do you think victim was affected by alcohol or drugs?	Open Water	Water Park	Pool
Yes	5.45%	1.54%	2.46%
No	83.64%	96.92%	95.69%
Unknown	10.91%	1.54%	1.85%

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Injuries to Victim	Open Water	Water Park	Pool
None	72.73%	84.38%	86.12%
Abrasion	3.64%	4.69%	4.73%
Laceration	5.45%	3.13%	3.15%
Burn	0.00%	0.00%	0.00%
Fracture	1.82%	0.00%	1.58%
Paralysis	0.00%	0.00%	0.95%
Death by Drowning	7.27%	0.00%	0.32%
Death due to other causes than drowning	0.00%	0.00%	1.26%
Other	9.09%	12.50%	8.52%

Victim's Attire	Open Water	Water Park	Pool
Bathing Suit	94.44%	98.46%	98.44%
Personal Floatation Device	9.26%	0.00%	5.30%
Street Clothing	3.70%	1.54%	2.80%
Wetsuit	1.85%	0.00%	0.00%
Other	1.85%	1.54%	0.31%

Type of Flotation Device Used by victim	Open Water	Water Park	Pool
None	82.69%	89.06%	86.39%
Coast Guard approved Personal Flotation Device (PFD)	9.62%	1.56%	2.85%
Non-approved life jacket or similar device	0.00%	0.00%	0.63%
Inflatable raft	1.92%	6.25%	1.27%
Non-inflatable raft	0.00%	0.00%	0.32%
Inflatable Life Ring/Ring Buoy or similar device	1.92%	4.69%	0.32%
Non-inflatable Life Ring/Ring Buoy or similar device	0.00%	0.00%	0.95%
Floaties	0.00%	0.00%	3.48%
Watercraft	3.85%	0.00%	0.00%
Other	1.92%	0.00%	4.11%

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Victim's Outcome	Open Water	Water Park	Pool
Released	51.85%	38.46%	33.87%
Released to parent	20.37%	56.92%	56.77%
Ambulance	14.81%	12.31%	13.87%
Advised to see physician	5.56%	9.23%	3.55%
Released to another care provider (Police/Fire etc.)	3.70%	4.62%	5.48%
Non-Fatal	12.96%	21.54%	16.45%
Fatal	11.11%	0.00%	1.94%
Other	5.56%	0.00%	1.94%

Primary Rescuer's Level of Current Training	Open Water	Water Park	Pool
Lifesaving/Lifeguarding	98.18%	100.00%	99.70%
CPR/PR	96.36%	73.85%	97.56%
AED	89.09%	67.69%	93.90%
Oxygen Administration	60.00%	40.00%	46.04%
Blood borne Pathogen training	72.73%	44.62%	58.54%
Emergency Medical Technician	21.82%	3.08%	7.32%
In-Service Training - weekly	58.18%	36.92%	29.88%
In-Service Training - monthly	27.27%	38.46%	48.17%
Site specific training	60.00%	41.54%	46.65%
Other	29.09%	16.92%	17.07%
None	0.00%	0.00%	0.30%

Where was the Rescuer at the time of incident	Open Water	Water Park	Pool
Elevated Chair - 5 feet or more in height	36.36%	43.08%	40.55%
Elevated Chair - less than 5 feet in height	7.27%	7.69%	17.99%
Deck Chair	0.00%	4.62%	11.89%
Standing in one place	27.27%	9.23%	13.11%
Walking	12.73%	27.69%	16.16%
Watercraft station	10.91%	0.00%	0.61%
Already in the water	9.09%	9.23%	4.88%
Other	9.09%	3.08%	1.52%