

National Drowning Trends Report

1991–2000

PROGRESS IN REDUCING DROWNINGS

The long-term trend towards fewer drownings in Canada continues. With 472 drownings and preventable water-related deaths, 2000 marked the fourth consecutive year that a record low was reached. During the past five years (1996–2000), Canadian water-related deaths have decreased by 15% from the previous five years (1991–1995).



Taking population growth into account, the Canadian preventable water-related death rate also continues to decrease. In 2000 (the most recent year for which national data is available), the death rate reached a new low of 1.5 deaths per 100,000 population (see chart #1). The average annual death rate for 1996–2000 (1.8) decreased by 18% from the average for 1991–1995 (2.2).

Fewer drownings are occurring among all age groups less than 50 years of age. The largest decreases by age group were among young children under five years of age and young men 25 to 34 years of age (see chart #2). By activity group, recreational powerboaters and sport fishermen have seen the largest decrease in the number of drownings (see chart #4). These high-risk groups have been the primary targets of the Lifesaving Society's Water Smart® public education campaign since 1990.

Unfortunately, drowning is the third leading cause of unintentional death for Canadians under 60 years of age, surpassed only by motor vehicle collisions and poisoning. This makes drowning prevention a long-term commitment for the Lifesaving Society and its partners. To further reduce drownings in Canada, the Lifesaving Society recommends that Canadians:

- **Always wear lifejackets or PFDs when boating. Wear a flotation suit when snowmobiling or ice fishing.**
- **Always boat sober and ride sober. Do not drink and drive a boat or snowmobile.**
- **Get trained in boating safety, get carded. Get the Pleasure Craft Operator card.**
- **Always supervise young children closely in, on, or around water, and always swim with a buddy.**
- **Learn to swim and learn lifesaving skills.**

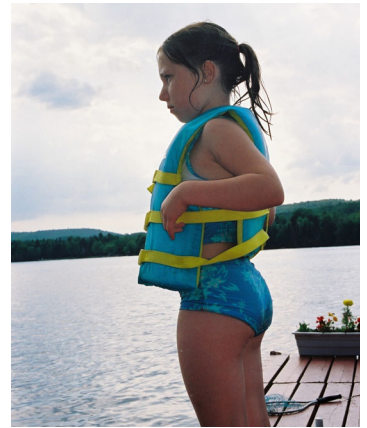
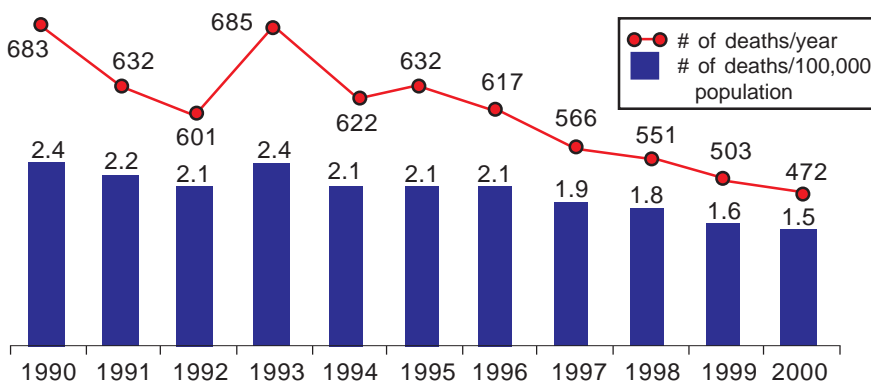


Chart #1

Canadian Drownings Continue to Decrease

Preventable Water-Related Deaths and Death Rates in Canada: 1990–2000



IN THIS REPORT...

WHO IS DROWNING
WHERE WERE THEY
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Stay Off Thin Ice!

After trying to rescue their dog when it fell through thin ice, two women found themselves submerged in freezing water. Thankfully a neighbour witnessed the event, and ran to get some rope and a strong tree branch. With the help of other bystanders, the women and their dog were rescued from the frigid water.



WHO IS DROWNING?

- Men—83% of Canadian drowning victims are male. This makes men almost five times more likely to drown than women.
- All age groups, but especially young men and young children. The highest drowning death rate is among 18 to 24-year olds (see chart #2).
- Trend toward lower drowning death rate among all age groups, but largest decrease is among children under 5 years (see chart #2).
- Both swimmers (71% of victims) and non-swimmers.

WHERE WERE THEY?

- Usually on lakes and ponds (37% of 1996–2000 fatalities), or rivers and streams (29%) (see chart #3).
- Trend toward fewer lake, river, and backyard pool drownings (see chart #3). Bathtub and public pool drownings down the most (-26% and -23% respectively for 1996–2000) compared with previous 5 years.
- Although the absolute number of drownings in backyard pools is fewer than for lakes or rivers, a backyard pool carries a similar degree of drowning risk as powerboats and canoes. The water-related death rate for Canadian backyard pools is 4.0 deaths per year per 100,000 pools, on average for 1996–2000; compared to 6 and 3 deaths per year per 100,000 boats for powerboats and canoes respectively.
- Across Canada, the largest decreases in the annual number of provincial drownings occurred in New Brunswick and the northern territories, with decreases of 35% and 30% respectively in the last five years.

WHAT WERE THEY DOING?

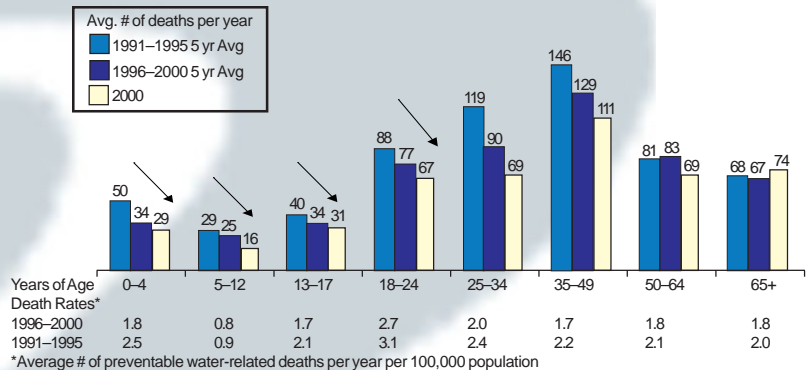
- The majority of drownings occur while victims have been engaged in recreational activities (63%), followed by daily living activities (22%), and occupational activities (6%).
- More drownings occur while swimming, sport fishing, and powerboating than during any other recreational activities. There is an encouraging trend toward fewer fatalities for each of these three activities from 1996–2000 compared to the previous 5 years (see chart #4). There is also a trend toward fewer drownings while playing in or near water, which often involve toddler victims.
- Boating accounts for 33% of water-related fatalities. Most often, boating victims drowned while operating a small powerboat. Transportation incidents other than boating (16% of water-related deaths) usually involved motor vehicles going off roads, bridges, or through ice. In-water activities (22%) such as swimming or wading, and near water activities (19%) such as walking near water, each account for about one-fifth of water-related fatalities.
- With the rapid increase in popularity of personal watercraft (PWC), there has been a sharp increase in PWC-related fatalities (+53%). Although the total number of PWC fatalities is low, the water-related death rate for PWCs (11 deaths per year per 100,000 boats) is higher than the death rate for powerboats (6) or canoes (3).

Saved by the Jacket!

Two canoeists are alive after they were dumped into cold water by the wake of a passing powerboat. The boat did not stop to assist them. Fortunately they were wearing lifejackets and decided to stay with their overturned canoe. They were later rescued by another passing boat.

Chart #2

Fewer Drownings Among Canadians Under 50 Years of Age
Number of Preventable Water-Related Deaths per Year by Age Group, Canada: 1991–2000



THE RISK FACTORS

1. Not wearing a lifejacket or PFD is the number one problem contributing to recreational boating drownings

- Most boating victims were not wearing a PFD (85% of all boating victims for whom PFD information was available). Victim was usually not wearing a PFD in recreational powerboating (82%), sport fishing (90%), and canoeing (86%) incidents, which usually involved capsizing, swamping, or falling overboard.
- PFD not even present in one-quarter (26%) of total boating deaths, and one-third of sport fishing and canoeing fatalities.

2. Drinking alcoholic beverages continues to be a major problem with boaters and snowmobilers

- Alcoholic beverage consumption involved in 41% of preventable water-related deaths involving victims 18+ years of age. Some progress made, as there were 18% fewer drownings involving alcohol consumption in the past five years compared to the previous five years.
- Alcoholic beverages involved in 38% of all boating deaths, 44% of recreational powerboating deaths, 43% of canoeing deaths, and two-thirds (64%) of recreational snowmobiling drownings.

3. Lack of supervision of young children

- Young victims under 5 years of age were usually alone (58%) and playing near water (58%) when they fell into a backyard pool, lake, river, or bathtub and drowned.



Photo Courtesy of Bruno Schlumberger and The Ottawa Citizen

4. Rough water

- Rough water/waves cited in 27% of boating fatalities; capsizing or swamping involved in half of boating deaths.

5. Cold water

- 27% of all drownings known to involve water 10 degrees Celsius or colder.
- Hypothermia cited as a cause of death by Coroners and Medical Examiners in 12% of deaths.

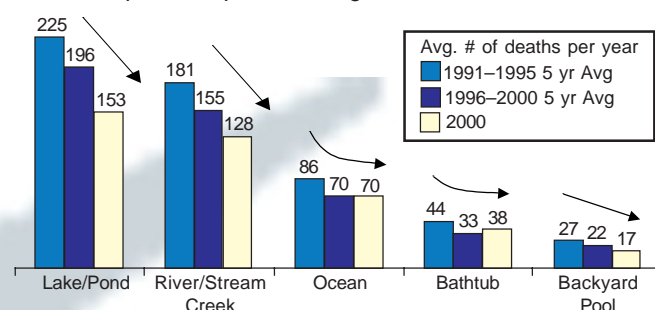
6. Snowmobiling on ice after dark

- Almost two-thirds (62%) of snowmobiling drownings occurred after dark.

Chart #3

Fewer Drownings in Most Aquatic Settings

Number of Preventable Water-Related Deaths/Year for Top Five Aquatic Settings, Canada: 1991–2000



THE “UNATTENDED TODDLER”

- 1 to 4 years old—can walk, but can’t swim.
- Playing near water and falls in.
- Alone, or momentary lapse in parent or caregiver’s attention.
- Not wearing a lifejacket.
- Drowns, or suffers near drowning brain damage.
- Backyard pools particularly dangerous; also unsupervised beaches, waterfronts, cottages, and bathtubs.

THE “RISK TAKER”

- Young men 18 to 34 years, active in outdoor recreational activities, especially fishing, powerboating, swimming, diving into shallow water, canoeing, and snowmobiling; and put themselves into high risk situations.
- Often partying with friends, including drinking alcoholic beverages.
- Almost never wearing a lifejacket or PFD, and may be guilty of careless driving of a boat or snowmobile.
- Usually on lakes, rivers, and oceans.

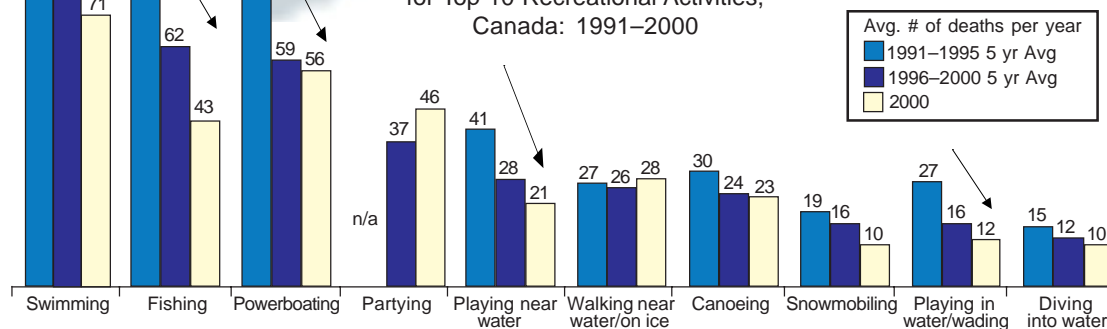
Alcohol and Boating a Lethal Mix

Police were called to stop a small aluminum boat seen circling the lake without a driver. Witnesses had earlier seen a young man standing, fishing from the boat. His body was found several hours later. He was not wearing a PFD and toxicology reports showed a high blood alcohol level.

Chart #4

Recreational Drownings Down for Swimming, Powerboating, Sport Fishing, and Playing In or Near Water

Number of Preventable Water-Related Deaths/Year for Top 10 Recreational Activities, Canada: 1991–2000



SUMMARY FACTS & FIGURES

Canadian Preventable Water-Related Deaths: 1996–2000 Five-Year Totals

Total WHO	# (% of Total)		% Change	WHEN Month of Year:	# (% of Total)		% Change vs. Prev. 5 yrs.	TYPE OF CRAFT	# (% of Boating)		% Change vs. Prev. 5 yrs.	
	2709 (100)		-15%									
Age of Victim:												
0 - 4 years	172	(6)	-32%	May - June	662	(25)	-8%	Powerboat				
5 - 12	123	(5)	-16%	July - August	873	(33)	-18%	- small (5.5m and under)	281	(32)	-30%	
13 - 17	170	(6)	-15%	September - October	387	(15)	-16%	- large (over 5.5m)	127	(14)	-26%	
18 - 24	385	(14)	-13%	November - April	688	(26)	-18%	- size unknown	111	(13)	+12%	
25 - 34	450	(17)	-24%	DOING WHAT								
35 - 49	643	(24)	-12%	Type of Activity:				- personal watercraft	29	(3)	+53%	
50 - 64	414	(15)	-2%	Recreational	1708	(63)	-12%	- Total Powerboats	548	(62)	-20%	
65 +	333	(12)	-2%	Occupational	160	(6)	-30%	Canoe	156	(18)	-20%	
Gender of Victim:												
Male	2231	(83)	-15%	Daily Living	607	(22)	-25%	Sailboat	32	(4)	+45%	
Female	473	(17)	-13%	Boating	888	(33)	-17%	Rowboat	38	(4)	+15%	
WHERE												
Aquatic Setting:												
Lakes/Ponds	978	(37)	-13%	Aquatic & Bathing	762	(28)	-11%	WHY				
Rivers/Streams	777	(29)	-14%	Non-Aquatic	946	(35)	-17%	Contributing Factors:				
Oceans	351	(13)	-19%	Specific Recreational Activities:								
Bathtubs	164	(6)	-26%	# (% of Recreational Deaths)				(% of Boating) % Change Total				
Backyard Pools	111	(4)	-18%	Swimming	382	(22)	-15%	Alcohol Involved	(38)	-21%	(35)	-18%
Public Pools	17	(<1)	-23%	Fishing	308	(18)	-24%	After Dark	(18)	-48%	(19)	-27%
Province/Territory:												
Nfld and Labrador	123	(4)	-8%	Powerboating	296	(17)	-33%	Alone	(25)	-14%	(42)	-11%
Nova Scotia	148	(5)	+3%	Partying	184	(11)	n/a	With Others	(75)	-17%	(57)	-15%
Prince Edward Island	17	(1)	-15%	Playing Near Water	141	(8)	-31%	Cold Water				
New Brunswick	70	(3)	-35%	Walking Near Water/On Ice	131	(8)	-4%	<10 degrees Celsius	(32)	+25%	(27)	+37%
Quebec	570	(21)	-7%	Canoeing	120	(7)	-19%	PFD:				
Ontario	736	(27)	-19%	Snowmobiling	81	(5)	-15%	Not worn (properly)	(72)	±0%		
Manitoba	136	(5)	-20%	Playing in Water/Wading	78	(5)	-42%	Not present	(26)	-9%		
Saskatchewan	113	(4)	-13%	Hunting	68	(4)	+15%	Worn (properly)	(13)	-7%		
Alberta	180	(7)	-1%	Diving/Jumping	62	(4)	-19%	PFD info not available	(15)	-55%		
British Columbia	552	(20)	-18%	Occupational Activities:								
N.W.T. & Nunavut	48	(2)	-29%	# (% of Occupational Deaths)								
Yukon	16	(1)	-33%	Commercial Fishing	68	(42)	-21%	Fell or thrown overboard	(25)	-28%		
Daily Living Activities:												
# (% of Daily Living Deaths)												
				Automobile Travel	237	(39)	-11%	Capsized	(37)	-12%		
				Bathing	158	(26)	-25%	Swamped	(13)	-26%		
				Walking/Travel on Foot	72	(12)	-12%	Rough Water	(27)	-32%		
				Boat Travel	31	(5)	-65%	Standing up in craft	(10)	+22%		
								Overloaded craft	(9)	+24%		
								Collisions	(9)	-22%		
								Abrupt turn	(7)	n/a		



LIFESAVING SOCIETY®

The Lifeguarding Experts

The Lifesaving Society, Canada's lifeguarding expert, is a national, charitable organization working to prevent drowning and water-related injury through its training programs, Water Smart® public education, and lifesaving competitions.

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 Or contact the Lifesaving Society office in your province or territory. The Lifesaving Society and the Canadian Red Cross Society collaborate to collect drowning data from the offices of the Chief Coroners and Medical Examiners in each province and territory. The Lifesaving Society thanks the Canadian Coast Guard for data re: the number of boats in Canada; and Pool & Spa magazine for data re: the number of backyard swimming pools in Canada.

HOW TO BE WATER SMART®...

1) CHOOSE IT. USE IT! ALWAYS WEAR A LIFEJACKET OR PFD!

Don't just have it in the boat. Pick one and WEAR it.

2) THINK ABOUT IT. BOAT SOBER & RIDE SOBER!

Don't drink and drive your boat or snowmobile.

3) GET CARDED. GET THE PLEASURE CRAFT OPERATOR CARD!

The Lifesaving Society's Boat Operator Accredited Training® course (BOAT) is available at participating recreation departments and other aquatic facilities...to help you know the boating "rules of the road," how to respond in a boating emergency and how to operate pleasure craft safely.

4) KNOW BEFORE YOU GO!

Check the weather forecast and complete a simple safety checklist.

5) DRIVE POWERBOATS, PWCs, & SNOWMOBILES RESPONSIBLY!

6) CLOSELY SUPERVISE YOUNG CHILDREN NEAR WATER!

If you're not within arms reach, you've gone too far.

7) ALWAYS SWIM WITH A BUDDY!

And play and swim in areas supervised by a lifeguard.

8) WEAR A FLOTATION SUIT & DON'T DRIVE YOUR SNOWMOBILE ON THIN ICE!

9) PROTECT YOUR NECK!

Feet first, first time. Never dive into shallow water.

10) LEARN TO SWIM & LEARN LIFESAVING SKILLS!

Go further... take a Lifesaving Society Canadian Swim Patrol, Bronze Star, Bronze Medallion, Bronze Cross, National Lifeguard Service, or other lifesaving program at your local pool or aquatic facility.