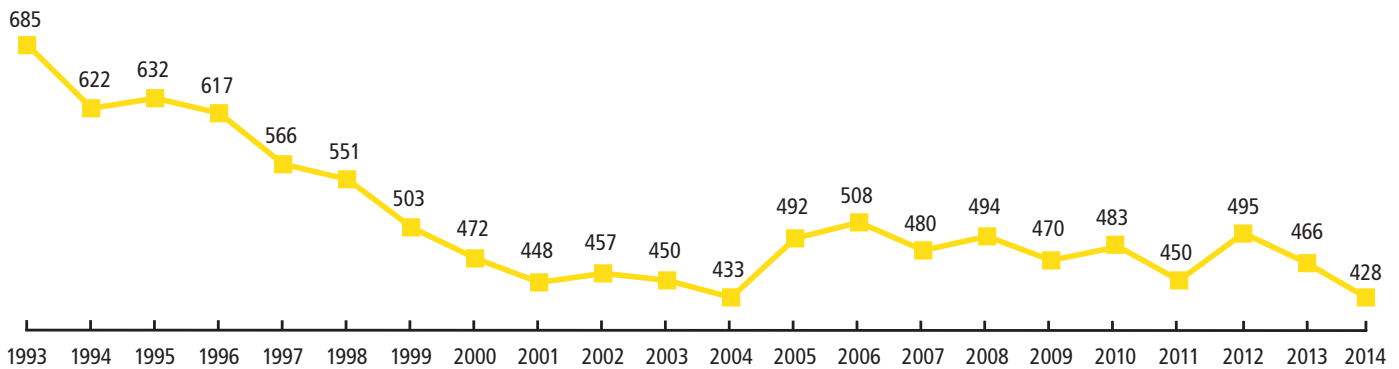


DROWNING REPORT

Prepared for the Lifesaving Society Canada by the Drowning Prevention Research Centre

Canadian Totals 1993 - 2014



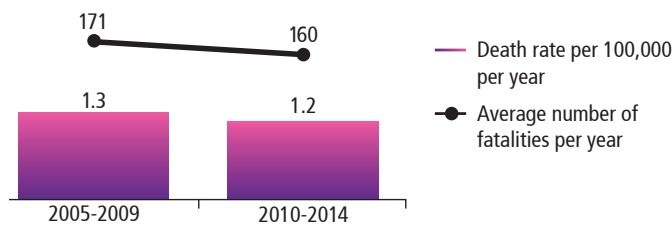
The most recent data available from the Office of the Chief Coroner for Ontario reveals that 130 water-related fatalities occurred in 2014. This number is substantially lower than what has been reported in previous years. In the most current 10 year period, at least 160 water-related fatalities occurred in each year except for 2014, and the average water-related fatality rate ranged from 1.2 to 1.4. In 2014, the drowning death rate decreased to 1.0 per 100,000 population – a rate that remains lower than the national average of 1.2 per 100,000. This decrease can be partially explained by fewer than normal drowning fatalities occurring in July. In 2014, 12 water-related deaths occurred in July, compared to a typical yearly average of over 32. It is worth noting that cooler than average temperatures were reported in July 2014.

Preliminary interim data

For drowning deaths since 2014, only preliminary, interim data from media and internet reports are available. In Ontario, these numbers indicate that at least 92 drowning deaths occurred in 2015 and at least 117 in 2016.

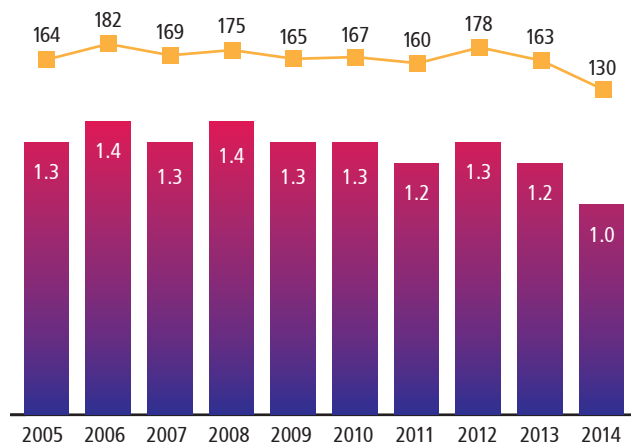
Ontario Water-Related Fatalities and Death Rates 2005-2014

Ontario Water-Related Fatalities and Death Rates, Five-Year Averages



Looking at the most current five years (2010-2014) of data as a whole, the average water-related fatality rate in Ontario decreased 8% from the previous five-year period (1.2 per 100,000 in 2010-2014 compared to 1.3 per 100,000 in 2005-2009). In total, 798 people lost their lives in an unintentional water-related incident in Ontario waters between 2010 and 2014.

Death rate per 100,000 per year ■
 Number of fatalities per year ■



WHO is drowning?



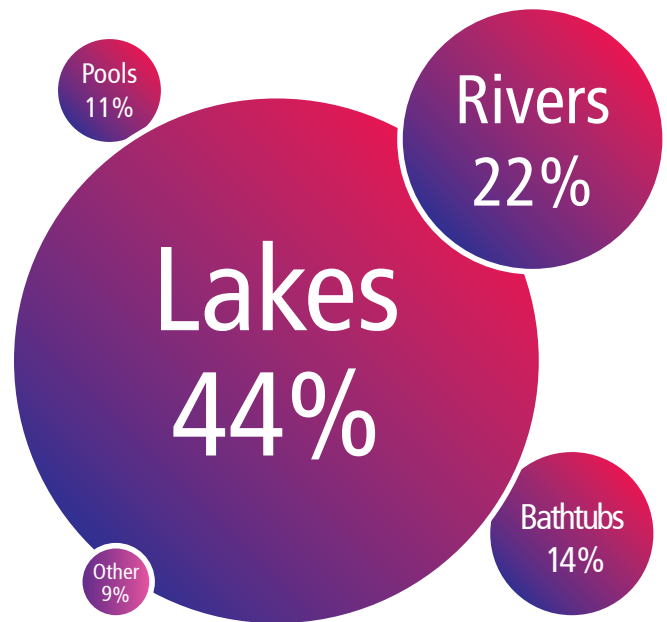
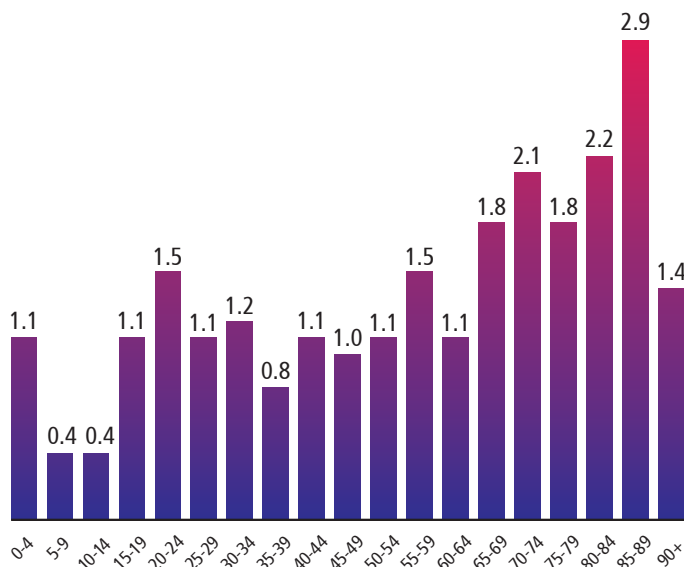
The vast majority of Ontario drowning victims continue to be males (8 out of 10). Between 2010 and 2014, the average water-related fatality rate for males was 1.9 per 100,000 population compared to 0.5 for females. In previous years (2012 and 2013), we reported a slight increase in the number of female drowning victims – 25% were female in each of these two years. In 2014, the proportion of drowning deaths that occurred among females decreased slightly to 22%.

By age, the highest drowning rates in Ontario continue to be found among adults over 65 years of age, ranging from 1.8 per 100,000 (among 65-69 year-olds) to 2.9 per 100,000 (among 85-89 year-olds). The next highest water-related fatality rates were found in young adults 20-24 years of age and baby boomers 55-59 years of age (both 1.5 per 100,000). The greatest number and proportion of drowning deaths occurred in these two age groups in the 2010-2014 period; sixty-nine 20-24 year-olds drowned and sixty-six 50-59 year-olds drowned.

There has been a long term trend towards decreased drowning death rates among children under 5 years in Canada, and in the 2010-2014 period the drowning death rate among children in Ontario is consistent with the national average of 1.1 per 100,000. In 2014 however, very few children under the age of 5 drowned in Ontario, less than 1% of all water-related fatalities occurred in this age group.

Water-Related Death Rate By Age, 2010-2014

— Average death rate per 100,000 per year



WHERE are they drowning?

Natural bodies of water (66%) continued to account for the largest proportion of drowning deaths in Ontario in the 2010-2014 period. Lakes were the most common site for drowning fatalities (44%), followed by rivers and streams (22%). In 2014, 81 people drowned in one of these two bodies of water; 46 in a lake or pond and 35 in flowing water.

Once again bathtubs (14%) were the most common man-made setting where drowning deaths occurred in Ontario. There were 113 bathtub drownings during the five-year period (2010-2014), representing a 35% increase over the previous five-year period (84 in 2005-2009). Seniors are disproportionately at risk for drowning in a bathtub. In 2014, 22 bathtub drowning deaths occurred, contributing to 17% of all drowning deaths that year.

Private pools (11%) continued to account for the next highest proportion of drowning deaths in man-made bodies of water in 2010-2014. Children under the age of 5 are particularly vulnerable to drowning in this setting. In the current five-year period, 15 children 0-4 years of age drowned in a private backyard pool, and this continues to be the most common setting for drowning in this age group (40%). In 2014 an even higher proportion (16%) of water-related fatalities occurred in private pools than usual, but no backyard pool drowning deaths among children under 5 were reported in the coroner data.

Drowning deaths in lifeguard-supervised settings continue to be rare: in 2010-2014, 1% of water-related fatalities in Ontario occurred under lifeguard supervision.

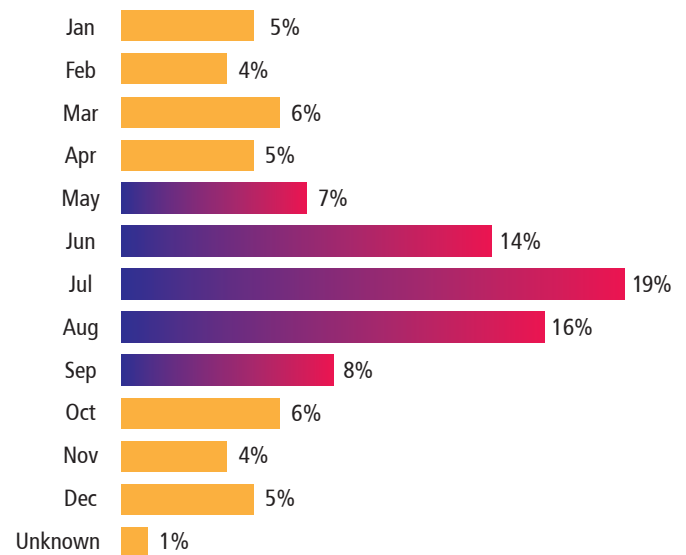
Drowning fatalities continued to more commonly occur in urban (67%) than rural (33%) settings. By district, the three most common locations for drowning deaths in 2014 were Toronto (18%), Ottawa (10%), and Kenora (7%).

WHEN are they drowning?

By time of year, the warmer months continued to account for the majority of drowning deaths in Ontario. Almost two-thirds (64%) of water-related fatalities in the 2010-2014 period occurred in May through September. The greatest proportion of drowning fatalities occurred in July (19%) followed by August (16%). In 2014 however, June (22%) had the highest proportion of drowning deaths followed by August (17%) and 9% of all drowning deaths occurred in July.

Over half (53%) of the 2010-2014 drowning deaths happened on the weekend (Friday, Saturday or Sunday) and the most frequent day for drowning fatalities was Saturday (22%). In 2014, the highest proportion of Ontario drowning fatalities occurred on Sunday (21%).

Water-Related Fatalities by Time of Year



WHAT were they doing?

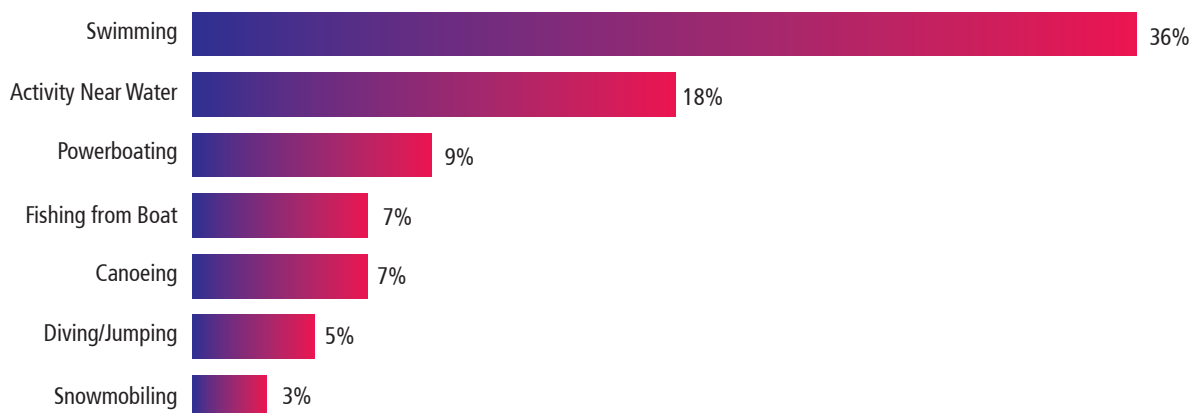
By purpose of activity, recreational activities continued to account for the majority of water-related fatalities in Ontario. Almost two-thirds (62%) of individuals who drowned between 2010 and 2014 were engaged in a recreational activity at the time. Once again, swimming (36%) and walking, running, or playing near water or ice (18%) were the most common recreational activities that individuals participated in prior to drowning.

The next most common type of activity was daily living (27%). Over half of these (51%) were bathing fatalities, and almost a quarter (23%) occurred as the result of a motor vehicle collision where the vehicle

ended up in the water. Consistent with the five-year trend, in 2014, 50% of daily living drowning deaths occurred as the result of bathing and 18% occurred as the result of a motor vehicle incident.

Aquatic activities (30%), where the person intended to be in the water and something went wrong, continued to be the most common type of activity engaged in prior to drowning in 2010-2014. This was followed by non-aquatic activities (22%) and boating (19%). Boating incidents were down substantially (-29%) in the 2010-2014 period compared to the previous five-year period (2005-2009). The majority of boating related fatalities in 2010-2014 occurred during powerboat use (56%) or canoeing (25%). Most (86%) of the boaters who fatally drowned were known to not be wearing a lifejacket at the time of the incident, and 36% had consumed alcohol.

Water-Related Fatalities by Most Common Recreational Activity



Risk factors

The major risk factors contributing to drowning incidents in Ontario are consistent with those the Lifesaving Society has identified for the national population in the past.

Boating

Not wearing a PFD (86%)
Capsizing (37%)
Alcohol consumption (36%)
Boating alone (30%)
Falling overboard (29%)

Swimming

Victim unable to swim (40%)
Swimming alone (34%)
Alcohol consumption (29%)
Heart disease/heart attack (22%)

Age

<5

Supervision absent or distracted (92%)
Alone near water (63%)

5-14

With other minors only (39%)

15-19

Not wearing a PFD when relevant (94%)
Alcohol consumption (33%)
Alone (31%)
After dark (24%)

20-34

Not wearing a PFD when relevant (79%)
Alcohol consumption (52%)
Alone (33%)
After dark (26%)

35-64

Not wearing a PFD when relevant (73%)
Alone (61%)
Alcohol consumption (43%)

65+

Not wearing a PFD when relevant (79%)
Alone (77%)

In summary

The water-related fatality rate in Ontario decreased in 2014. The highest rates were among men and older adults.

Drowning deaths were most likely to occur during the summer, on weekends, and in natural bodies of water such as lakes and rivers.

The highest proportion of incidents occurred during a recreational activity, most commonly swimming. The number of boating fatalities in Ontario has decreased in recent years.

Despite the encouraging decrease in drowning deaths in 2014, there is still an average of 160 preventable water-related deaths occurring each year in Ontario waters. This reinforces the need for continued strong drowning prevention efforts.

Research methodology

Complete data from 2005-2014

The drowning research process involves data collection; research tabulation and analysis. Water-related death data is extracted from the office of the Chief Coroner of Ontario. The scope of this research:

- collects the data needed to profile victims of aquatic incidents, including the circumstances and contributing factors under which these incidents occurred.
- includes all deaths in Ontario resulting from incidents "in, on or near" water; "near-water" incidents were included if the incident was closely related to water-based recreational, vocational or daily living activity, or if the presence of water appeared to be an attraction contributing to the incident.
- includes only unintentional deaths, not deaths due to natural causes, suicide, or homicide.

Interim data

Complete final data on more recent drownings and other water-related deaths are not yet available from the Office of the Chief Coroner. The interim, preliminary data are derived from media releases, media clippings, news reports and internet searches.

Acknowledgments

We gratefully acknowledge the support, co-operation and efforts of:

- The Office of the Chief Coroner in Ontario which permitted and facilitated confidential access to coroners' reports on preventable water-related deaths.
- The volunteers who contributed their time and energy including data extraction on preventable water-related deaths from the coroner's files.
- Tessa Clemens who was primary author and data analyst for this report and Lucie Simoes who provided data input and verification.

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Drowning Prevention Research Centre Canada

The Drowning Prevention Research Centre is the lead agency for drowning and water-incident research in Canada. The Centre conducts research into fatal and non-fatal drowning, significant aquatic injury and rescue interventions.

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The Lifesaving Society

The Lifesaving Society – Canada's lifeguarding experts – works to prevent drowning and water-related injury through its training programs, Water Smart® public education, aquatic safety management, drowning research and lifesaving sport. Annually, over 1,000,000 Canadians participate in the Society's swimming, lifesaving, lifeguard and leadership training programs. The Society sets the standard for aquatic safety in Canada and certifies Canada's National Lifeguards.



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