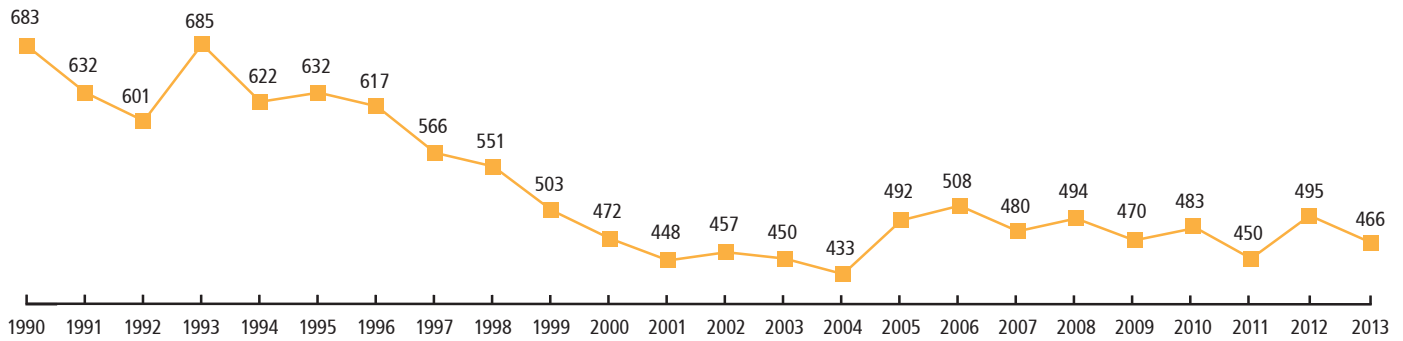


DROWNING REPORT

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

Canadian Totals 1990 - 2013



The most recent data available from the Chief Coroner’s and Medical Examiner’s offices in the Canadian Maritime provinces reveal a decrease in the overall water-related fatality rate. Between 2009 and 2013, the average drowning rate in New Brunswick, Nova Scotia, and Prince Edward Island was 1.5 per 100,000, down 17% from 1.8 per 100,000 in the previous five-year period (2004-2008).

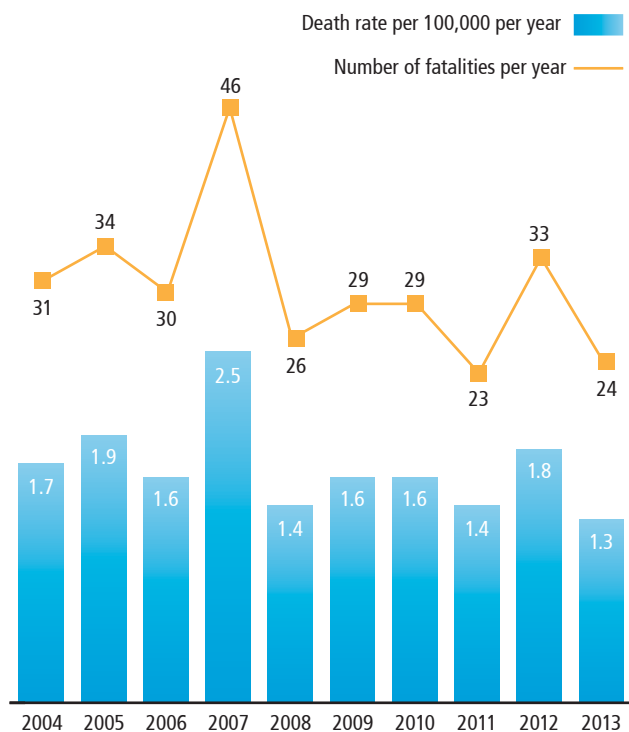
By province, the water-related fatality rate decreased by more than half in PEI from 1.9 per 100,000 in 2004-2008 when 13 people drowned to 0.7 per 100,000 in 2009-2013 when 5 people drowned. Nova Scotia and New Brunswick saw more moderate decreases (12% and 17% respectively). In both Nova Scotia and New Brunswick the water-related fatality rate was 1.6 in the most current data, down from 1.8 and 1.9 respectively.

Despite this encouraging overall decline, there was a notable surge in drowning deaths in 2012. In this year, 33 water-related fatalities occurred in the Maritime provinces and the drowning death rate peaked at 1.8 per 100,000, the highest rate in the five year period. Between 2009 and 2013, 138 drowning fatalities occurred in Maritime waters.

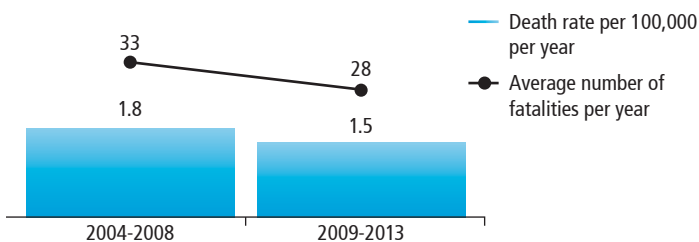
Preliminary interim data

For drownings since 2013, only preliminary, interim data from media and internet reports are available. In the Maritimes, these numbers indicate that at least 19 drownings occurred in 2014 and at least 26 occurred in 2015.

Maritimes Water-Related Fatalities and Death Rates 2004-2013



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



WHO is drowning?

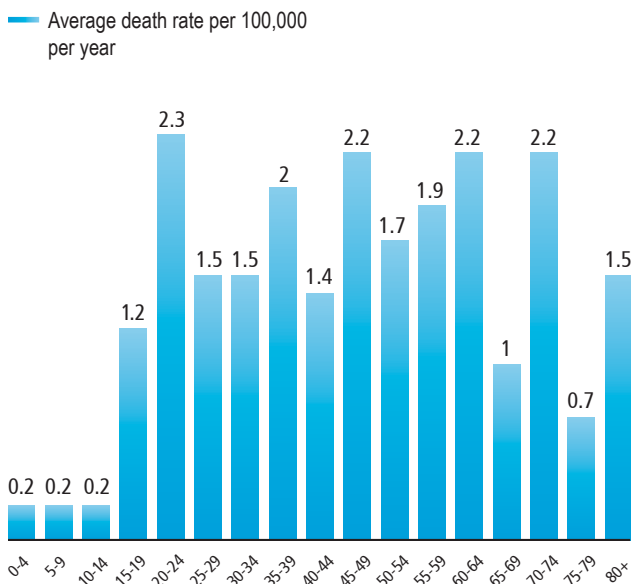


The vast majority of drowning victims in the Maritimes continue to be men. In 2009-2013, the average water-related fatality rate was 2.8 per 100,000 for men, and 0.2 per 100,000 for women. While this trend is characteristic of all provinces, the proportion of male drownings in the Maritimes is even higher than national averages. Typically, 8 out of 10 drowning victims are male. In the Maritimes, this number jumps to 9 out of 10. All PEI drowning fatalities occurred among males and 95% of the Nova Scotia drowning victims were male.

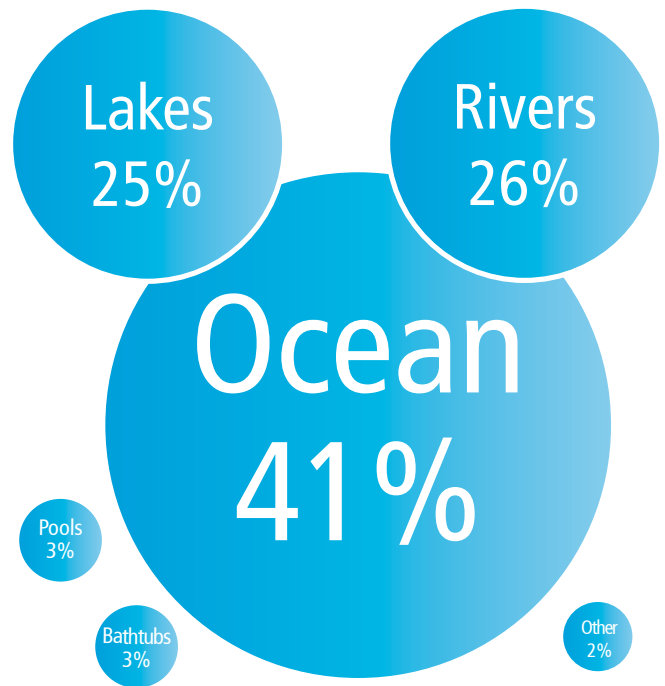
Consistent with national trends, the highest drowning rates by age in the Maritimes were found among young adults 20-24 years old. Middle-aged and older adults 45-49 years of age, 60-64 years of age, and 70-74 years of age also had high rates in the 2009-2013 period (each 2.2 per 100,000 population).

Water-related fatality rates among children and youth in the Maritimes were low. Children under the age of 5, 5-9 and 10-14 each had a death rate of 0.2 per 100,000. These rates are lower than what is seen in most other provinces, especially for children under the age of 5. Comparatively, the national death rate for children under the age of 5 was 1.1 per 100,000, for 5-9-year-olds it was 0.6 per 100,000 and for 10-14-year olds, 0.4 per 100,000.

Water-Related Death Rate By Age, 2009-2013



Death rates should be interpreted with caution due to small sample size



WHERE are they drowning?

The vast majority of drowning deaths in the Maritime Provinces continue to occur in natural bodies of water (92%). In 2009-2013, the highest proportion of water-related fatalities occurred in the ocean (41%), followed by flowing water such as rivers and streams (26%) and lakes (25%). By province, the ocean was once again the number one setting for water-related fatalities in PEI (80%) and Nova Scotia (51%). In New Brunswick, more drownings occurred in a river or stream (44%) than in the ocean (24%).

Drowning deaths in man-made settings such as bathtubs (3%) and pools (3%) continue to be few in the Maritimes. This proportion is lower than in most other provinces. Nationally, 9% of drowning fatalities occur in bathtubs and 7% in pools. In 2009-2013, just 8 of the 138 Maritime drownings occurred in such a setting, 4 in a bathtub and 4 in a pool. Once again, very few water-related fatalities occurred in lifeguard supervised settings. In the current five-year period, fewer than 1% of drowning fatalities in the Maritimes occurred in a lifeguard supervised setting.

Water-related fatalities more commonly occurred in urban (63%) than rural (37%) settings. In Nova Scotia and New Brunswick, just over half of the population (approximately 57% and 53% respectively) live in urban areas. In PEI, just over half of the population (approximately 53%) live in a rural area.

WHEN are they drowning?

Over two thirds (69%) of drowning deaths in the Maritimes occurred during the warmer months (May through September). In 2009-2013, July through September had the greatest number and proportion of drownings; 23 people drowned in each of July and August and 24 in September. By province, New Brunswick drowning deaths most commonly occurred in July and August (19% each), whereas Nova Scotia drownings most frequently occurred in September (19%). In PEI all drownings occurred in either June, August or September.

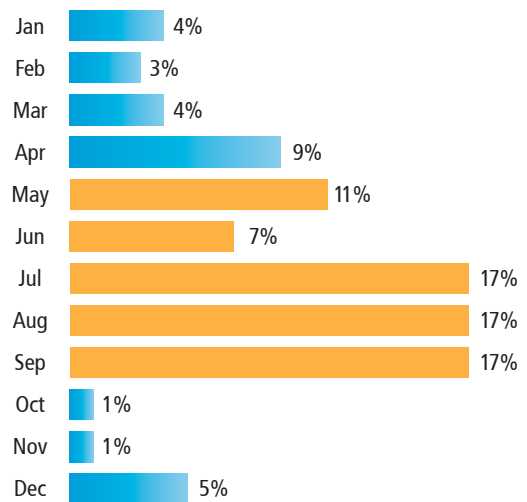
Almost two thirds (64%) of water-related fatalities in the Maritimes occurred on the weekend (Friday, Saturday, or Sunday).

WHAT were they doing?

Recreational activities (57%) continued to account for the greatest proportion of water-related fatalities in 2009-2013. The most common primary recreational activities were swimming (28%), fishing (17%), and powerboating (13%). A higher proportion of recreational fishing fatalities occur in the Maritimes (especially in Nova Scotia and Prince Edward Island) than in most other provinces. In New Brunswick powerboating (17%) was a more common primary recreational activity than fishing (10%).

Once again, daily living incidents accounted for the next highest proportion of water-related fatalities in the Maritimes (23%).

Water-Related Fatalities by Time of Year

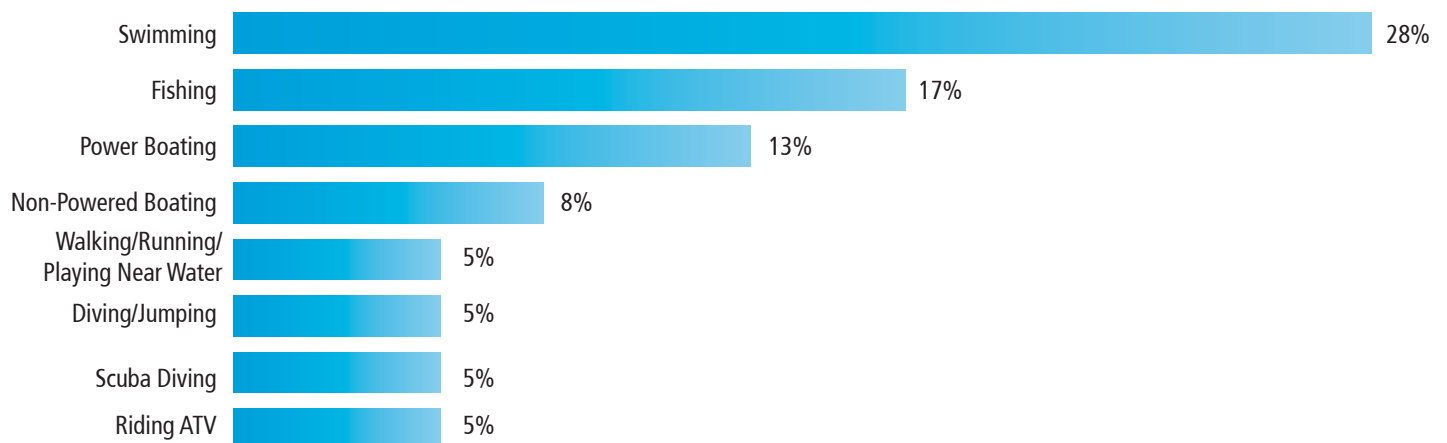


The most common daily living activity was motor vehicle travel (38%). By province, New Brunswick had the highest proportion of daily living incidents (32%).

Occupational incidents (16%) continue to account for a higher proportion of drowning deaths in the Maritimes than in most other provinces. Comparatively, the national average for occupational drownings is about 6%. Over 90% of these drowning deaths occurred during fishing, and 64% occurred in Nova Scotia.

By type of activity, the greatest proportion of incidents occurred while the victim was boating (39%). The majority (72%) of these incidents involved a powerboat. Fewer than 10% of victims involved in boating incidents were wearing a lifejacket properly at the time. The next most common type of activity was an aquatic activity (28%), where the victim intended to be in the water and something went wrong.

Water-Related Fatalities by Most Common Recreational Activity



Risk factors

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

Boating

Not wearing a PFD (80%) of cases where known
Boating in twilight or darkness (54%)
Alcohol consumption (35%)
Boating alone (31%)

Swimming

Alcohol consumption (63%)
Victim unable to swim (35%) of cases where known
Swimming alone (27%)

Age

15-34

Not wearing a PFD when relevant (90%) of cases where known
After dark (43%)
Alcohol consumption (38%)

35-64

Not wearing a PFD when relevant (81%) of cases where known
Alcohol consumption (47%)
Alone (42%)

65+

Alone (81%)
Alcohol consumption (48%)

In summary

Water-related fatality rates in the Maritimes were highest among men and people 20-24 years of age.

Drownings were most likely to occur during the warmer months in natural bodies of water such as the ocean, rivers and lakes.

The highest proportion of incidents occurred during a recreational activity, most commonly swimming, fishing, or powerboating. There were substantially more occupational drownings in the Maritimes than in other provinces; these were most commonly fishing related.

Despite an overall decrease in the Maritimes drowning death rate in the most current five-year period, the death rate spiked to a five year high in 2012. This reinforces the need for continued strong drowning prevention efforts.

Research methodology

Complete data from 2004-2013

The drowning research process involves data collection; research tabulation and analysis. Water-related death data is extracted from the offices of Canada's Chief Coroners and Medical Examiners. 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 each provincial/territorial jurisdiction 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 offices of the provincial/territorial Chief Coroners and Medical Examiners. 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 Offices of the Chief Coroner of New Brunswick and the Chief Coroner of Prince Edward Island, and the Office of the Chief Medical Examiner of Nova Scotia which permitted and facilitated confidential access to reports on preventable water-related deaths.
- The volunteers who contributed their time and energy including data extraction on preventable water-related deaths from coroners' files.
- Tessa Clemens, who was primary author and data analyst for this report and Lucie Simoes who provided data input and verification.

Contact us

Lifesaving Society New Brunswick
Tel: 506-455-5762
Email: info@lifesavingnb.ca
www.lifesavingnb.ca

Lifesaving Society Nova Scotia
Tel: 902-425-5450
Email: experts@lifesavingsociety.ns.ca
www.lifesavingsociety.ns.ca

Lifesaving Society Prince Edward Island
Tel: 902-368-7757
Email: info@lifesavingsocietypei.ca
www.lifesavingsocietypei.ca

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.

Contact Barbara Byers, Research Director
Email: experts@drowningresearch.ca
Telephone: 416-490-8844

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.

