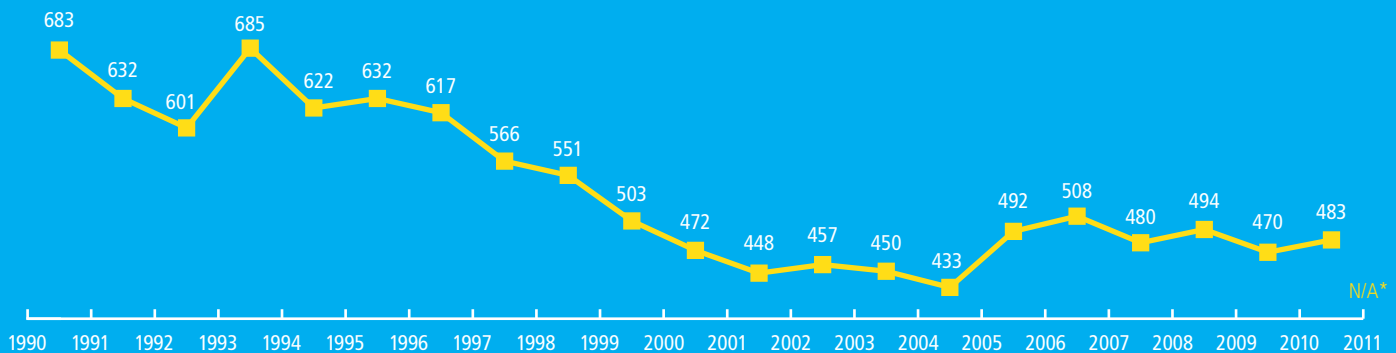


DROWNING REPORT

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

Canadian Totals 1990 - 2011



*National total unknown due to unavailability of 2011 Alberta data.

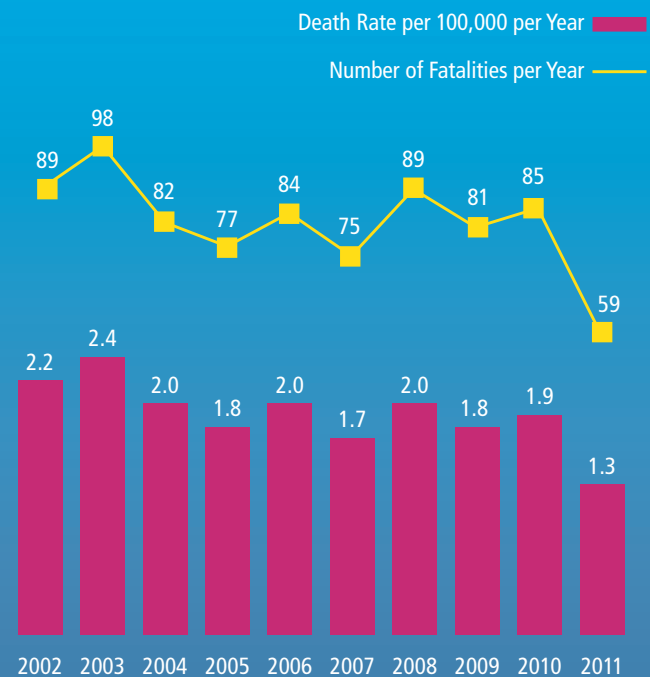
Between 2007 and 2011, 389 drownings occurred in British Columbia waters. In these most recent Coroner's data collection years, the average drowning rate in British Columbia decreased by 14%. The average water-related fatality rate for 2007-2011 was 1.8 per 100,000 population, down from 2.1 in the previous five-year period. This decrease can partially be accounted for by a dramatic dip in drownings in 2011. In 2011, there were 59 water-related fatalities in British Columbia, the fewest in the last 10 years.

Although this decline in drowning deaths is encouraging, when compared to historic national averages, the average drowning rate over the last five years in British Columbia (1.8 per 100,000) remains higher than that of Canada as a whole (1.5 per 100,000).

Preliminary interim data

For drownings since 2011, only preliminary, interim data from media and internet reports are available. In British Columbia these numbers indicate that at least 61 drownings occurred in 2012 and at least 74 occurred in 2013.

British Columbia Water-Related Fatalities and Death Rates 2002-2011



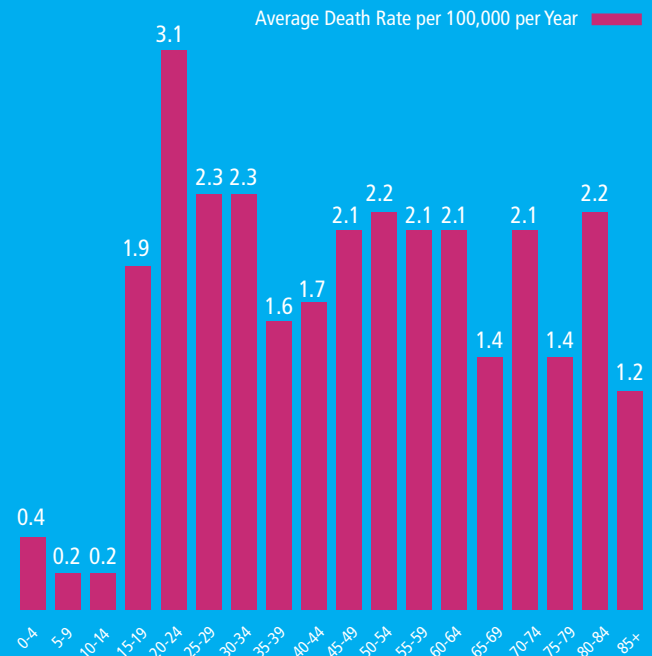
WHO is drowning?

The vast majority of British Columbia drowning victims are men, mirroring the trends in national statistics. In the 2007-2011 period, the average yearly water-related fatality rate for men in British Columbia was 2.9 per 100,000 population compared to a rate of 0.6 for women, with roughly 8 out of 10 drowning victims being male.

By age, the highest drowning rates in British Columbia were found among young adults 20-34. Historically, national statistics show high rates among this age group. In British Columbia the problem is especially severe among 20-24-year-olds who had the highest rate of all age groups at 3.1 per 100,000 per year. Also at a high risk were 25-34-year-olds with a drowning death rate of 2.3 per 100,000.

Lower death rates are evident among children in British Columbia. Few drownings occurred among individuals under the age of 15.

Death Rate 2007-2011 by Age



30%
lakes

7%
bathtubs

8%
other

34%
rivers

21%
ocean

WHERE are they drowning?

Natural bodies of water are the number one site for water-related fatalities in British Columbia. The vast majority (85%) of drownings in 2007-2011 occurred in natural bodies of water with the greatest proportion occurring in flowing water such as rivers and streams (34%), followed by lakes (30%), and the ocean (21%).

The most common man-made setting for drownings in British Columbia was bathtubs (7%). Few drownings took place in other man-made settings such as ditches (2%) and pools (2%).

Very few drownings occur in lifeguard supervised settings: between 2007 and 2011, only 1% of all water-related fatalities in British Columbia occurred in a lifeguard supervised setting.

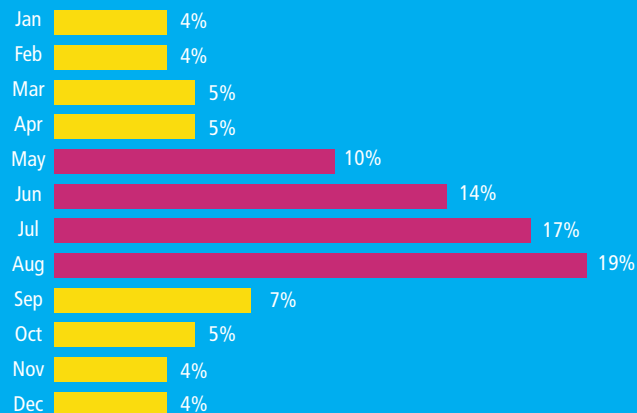
Despite the fact that 86% of the population lives in an urban setting, almost half (49%) of British Columbia drownings occurred in a rural setting.

WHEN are they drowning?

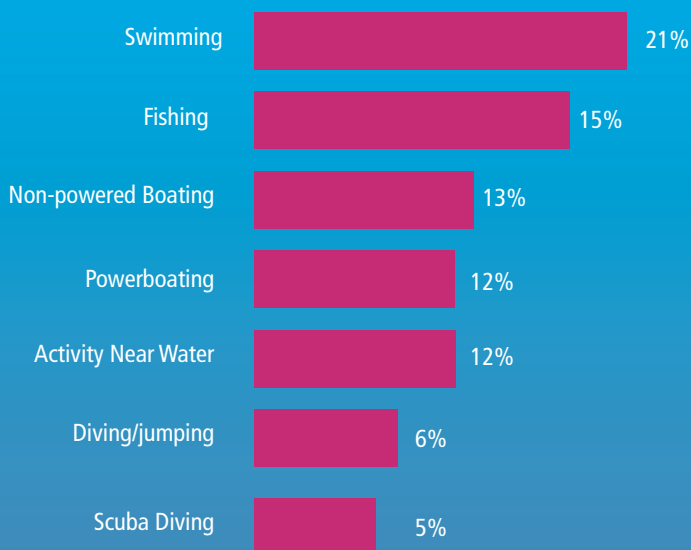
The majority of drownings in British Columbia occur during the warmer months with almost two thirds (60%) of water-related fatalities between 2007 and 2011 occurring in May through August. The greatest proportion of drownings occurred in summer months July and August (36%).

Over half (52%) of British Columbia drownings occurred on weekend days (Friday, Saturday or Sunday).

Victims by Time of Year



Victims by Most Common Recreational Activity



WHAT were they doing?

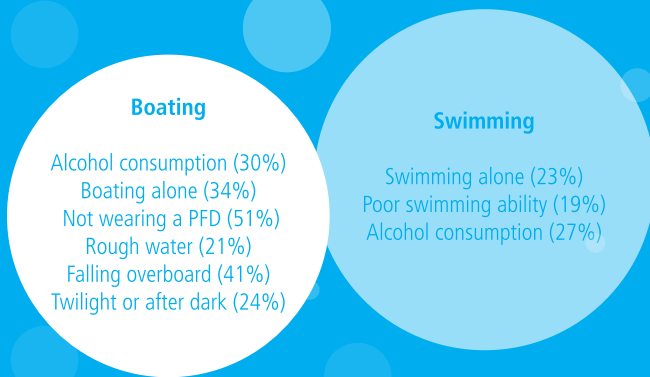
Over half (58%) of victims who drowned in British Columbia between 2007 and 2011 were engaged in a recreational activity at the time of the incident. Among these, the most common primary recreational activities were swimming (21%); fishing (15%); and canoeing, kayaking or other non-powered boating (13%).

Daily living activities accounted for the next highest proportion of incidents in British Columbia (31%), almost half (42%) of which are attributed to motor vehicle travel. Bathing fatalities also accounted for a large proportion of daily living incidents (23%).

By type of activity, the greatest proportion of incidents occurred as the result of a boating accident (29%), almost half of which occurred during powerboat use (46%). Inflatable crafts were the next most common type of watercraft in boating incidents (12%). Just one quarter (24%) of victims who suffered a water-related fatality while boating in British Columbia were wearing a lifejacket and 30% had consumed alcohol. After boating, aquatic activities where the victim intended to be in the water and something went wrong, were the next most common (24%).

Risk Factors

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



Age

< 15

Alone or with other minors only (38%)

15-19

Alcohol consumption (27%)
Alone (27%)
After dark (20%)
Not wearing PFD when relevant (67%)
Poor swimming ability (19%)

20-34

Alcohol consumption (37%)
Alone (31%)
After dark (31%)
Not wearing PFD when relevant (56%)

35-64

Alcohol consumption (31%)
Alone (50%)
Twilight or after dark (29%)
Not wearing PFD when relevant (61%)

65+

Alcohol consumption (23%)
Alone (79%)
Not wearing PFD when relevant (50%)

In Summary

Water-related fatality rates in British Columbia are highest among men, and young adults 20-34 years old.

Drownings are most likely to occur on weekends during the warmer months in natural bodies of water such as rivers and lakes.

The highest proportion of incidents occur during a recreational activity, most commonly swimming, fishing or boating. Motor vehicle accidents contribute to a high proportion of drownings during daily living incidents in British Columbia.

Despite the dip in drownings in 2011, the water-related fatality rate in British Columbia remains higher than historic national averages. This reinforces the need for continued strong drowning prevention efforts.

Research methodology

Complete data from 2007-2011

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 preventable (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 Office of the Chief Coroner of British Columbia 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

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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.

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.



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