

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, 139 drownings occurred in Manitoba waters. In these most recent data collection years, the average drowning rate in Manitoba has increased by 35%. The average water-related fatality rate for 2007-2011 was 2.3 per 100,000 population, up from 1.7 in the previous five-year period. This increase can partially be accounted for by a spike in drownings in 2011. In 2011, there were 40 water-related fatalities in Manitoba, the greatest number to occur in any of the last 10 years.

Manitoba Water-Related Fatalities and Death Rates 2002-2011



Preliminary interim data

For drownings since 2011, only preliminary, interim data from media and internet reports are available. In Manitoba these numbers indicate that at least 14 drownings occurred in 2012 and at least 5 occurred in 2013.

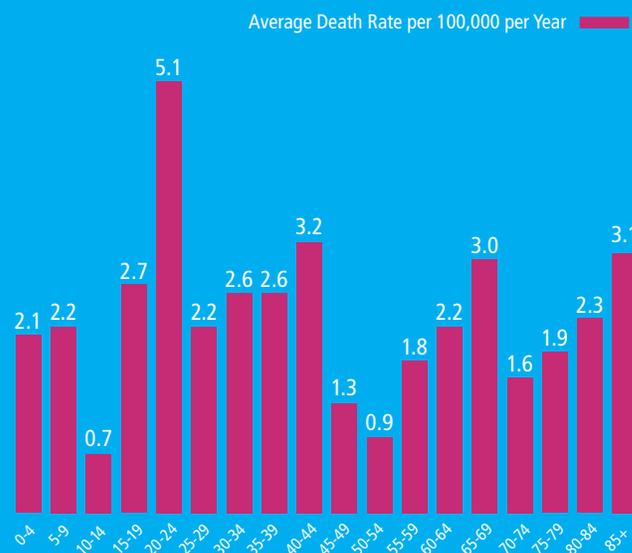
WHO is drowning?

The vast majority of Manitoba 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 Manitoba was 3.8 per 100,000 population compared to a rate of 0.9 for women with roughly 8 out of 10 drowning victims being male.

By age, the highest drowning rates in Manitoba were found among young adults 20-24. Historically, national statistics show high rates among this age group. The problem is even more severe in Manitoba where 20-24-year-olds had the highest proportion of drownings of all age groups between 2007 and 2011, with an average yearly drowning rate of 5.1 per 100,000 – 2.6 times higher than the historic national average for that age group.

Drowning death rates in Manitoba were also high among children under 10 (2.1), teenagers 15-19 (2.7) middle aged adults 30-44 (2.8), and adults over the age of 65 (2.4).

Death Rate 2007-2011 by Age



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

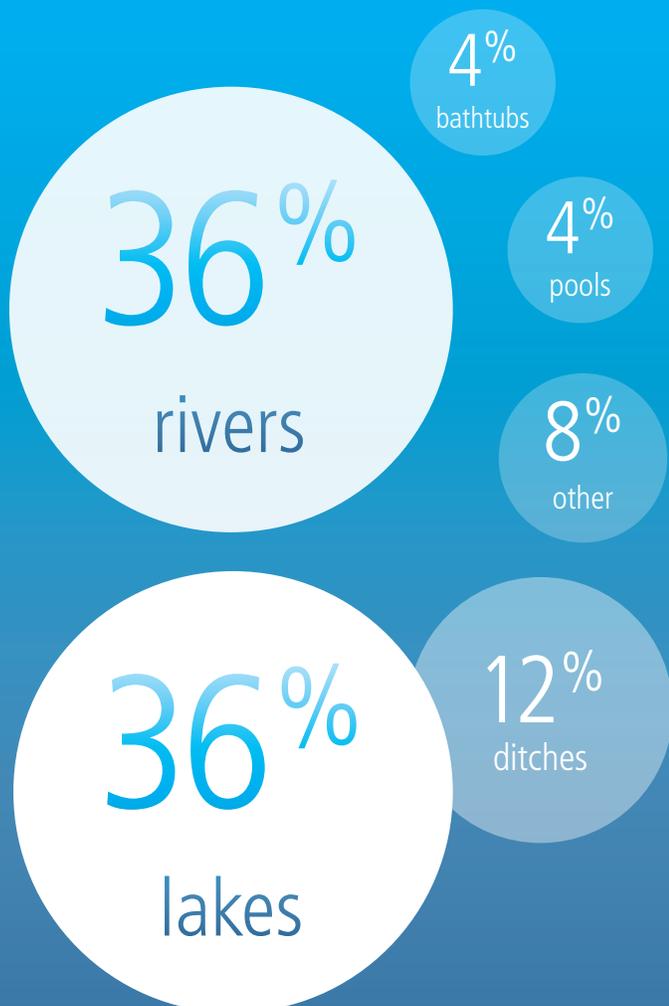
WHERE are they drowning?

Natural bodies of water are the number one site for drownings in Manitoba. Over two-thirds (72%) of drownings in 2007-2011 occurred in natural bodies of water divided equally between lakes (36%), and flowing water such as rivers and streams (36%).

Few drownings took place in man-made settings such as bathtubs (4%), and pools (4%). In other provinces private pools typically account for a large proportion of deaths in children under the age of five. However, in Manitoba children were more likely to drown in a natural body of water than a pool. An unusually large proportion of incidents occurred in ditches (12%). Adolescents (15-24) and middle aged adults (30-49) were the most likely to drown in ditches. These two groups accounted for 76% of ditch drownings.

Few drownings occur in lifeguard supervised settings: in 2007-2011, less than 2% of all drownings in Manitoba occurred in a lifeguard supervised setting.

Despite the fact that over two-thirds of the population lives in an urban setting, the vast majority (75%) of Manitoba drownings occurred in a rural setting.

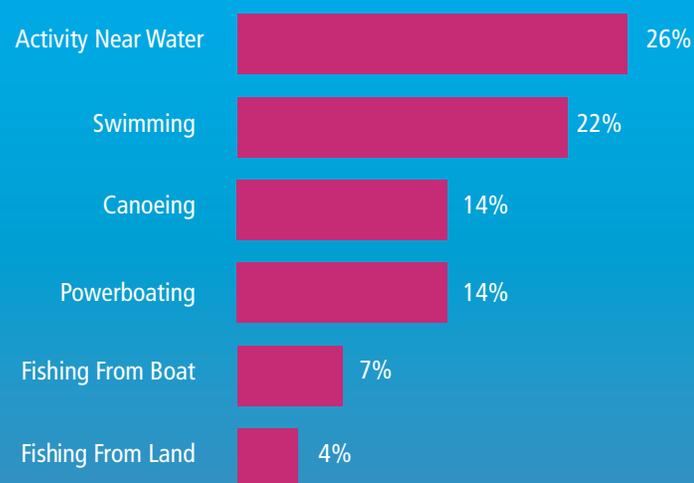


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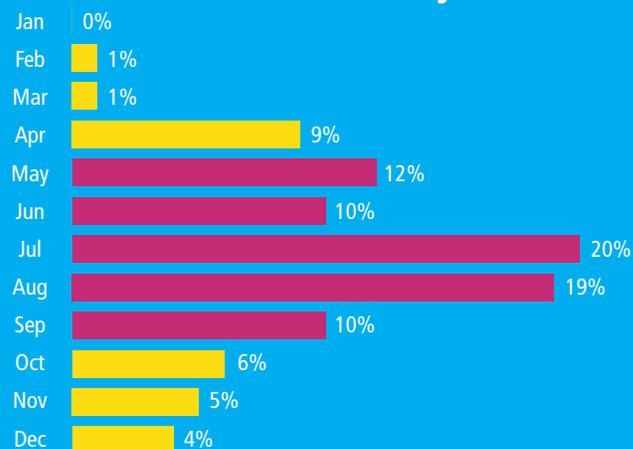
The majority of drownings in Manitoba occur during the warmer months. Over two thirds (71%) of water-related fatalities between 2007 and 2011 occurred May through September. The greatest proportion of drownings occurred in July and August (40%). Fewer drownings took place during the colder months. No drownings occurred in January in the 2007-2011 period.

Over half (55%) of Manitoba drownings occurred on weekend days (Friday, Saturday or Sunday).

Victims by Most Common Activity



Victims by Time of Year



WHAT were they doing?

Over half (53%) of victims who drowned in Manitoba between 2007 and 2011 were engaged in a recreational activity at the time of the incident. The most common primary recreational activities were walking, running or playing near water (26%), swimming (22%), powerboating (14%) and canoeing (14%).

Daily living activities accounted for the next highest proportion of incidents in Manitoba (32%), almost two-thirds (64%) of which are attributed to motor vehicle travel. Compared to national trends, this proportion is high. Nationally, motor vehicle travel accounts for approximately one-third of daily living incidents.

By type of activity, non-aquatic activity where the victim fell into the water (25%), and land, ice or air transportation (24%) accounted for the greatest proportion of incidents. This breakdown differs from what is demonstrated by national trends. Boating typically accounts for the greatest proportion of water-related fatalities followed by aquatic activities where the victim intended to be in the water and something went wrong.

In Manitoba between 2007 and 2011, 21% of drownings occurred as the result of a boating incident. The largest proportion of these incidents occurred during powerboat use (44%) followed closely by canoeing (38%). Only 2 of 29 victims who drowned while boating in Manitoba were known to be wearing a lifejacket. A higher proportion of boating incidents in Manitoba involved alcohol consumption (76%) than has been reported for the national population in the past (39%). The vast majority of victims were boating with others, 86% were with at least one adult at the time of the incident.

Risk Factors

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

Boating

Not wearing a PFD (69%)
Alcohol consumption (76%)
Capsized (45%)
Swamped (24%)
Boating in twilight or darkness (28%)

Swimming

Alcohol consumption (42%)
Swimming alone or with minors only (37%)
Poor swimming ability (21%)

Age

< 5

Alone (75%) or
With other minors only (25%)

5-14

With other minors only (55%)
Poor swimming ability (45%)

15-34

Alcohol consumption (64%)
Twilight or after dark (43%)
Alone (36%)
Not wearing PFD when relevant (77%)

35-64

Alcohol consumption (64%)
Twilight or after dark (23%)
Alone (47%)
Not wearing PFD when relevant (59%)

65+

Alcohol consumption (50%)
Twilight or after dark (28%)
Alone (61%)

In Summary

Water-related fatality rates in Manitoba are highest among men, and people 20-24 years old.

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

The highest proportion of incidents occur during a recreational activity, most commonly recreating near the water, swimming, powerboating or canoeing. Motor vehicle accidents contribute to a high proportion of drownings during daily living incidents in Manitoba.

The increased water-related fatality rate in Manitoba evident in the most recent five-year average as well as the surge in drownings in 2011 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 Medical Examiner of Manitoba who 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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