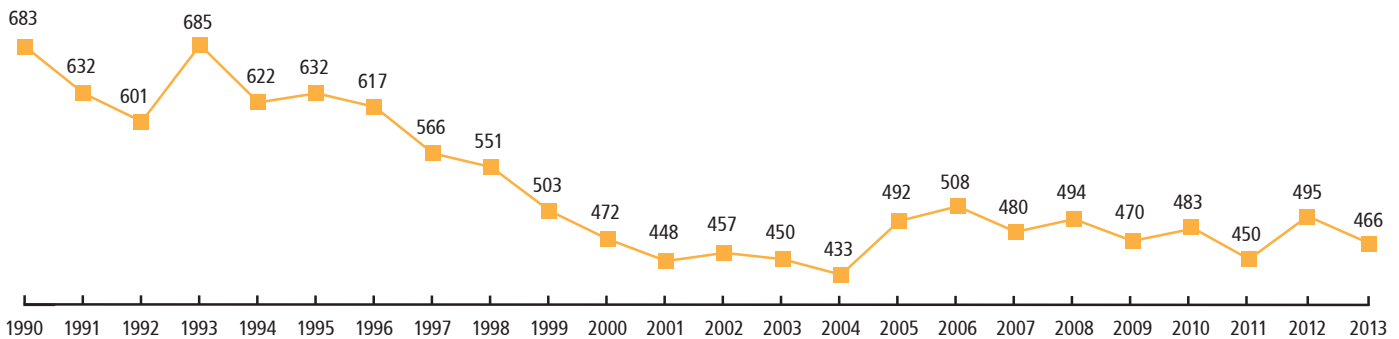


DROWNING REPORT

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

Canadian Totals 1990 - 2013



The most recent data available from the Office of the Chief Medical Examiner of Manitoba reveals that the drowning death rate has remained steady in 2013. After a surge in drowning deaths in 2011 (40), 2012 and 2013 saw a 50% decrease in the number of water-related fatalities (20), and a return to a more typical death rate of 1.6 per 100,000 population.

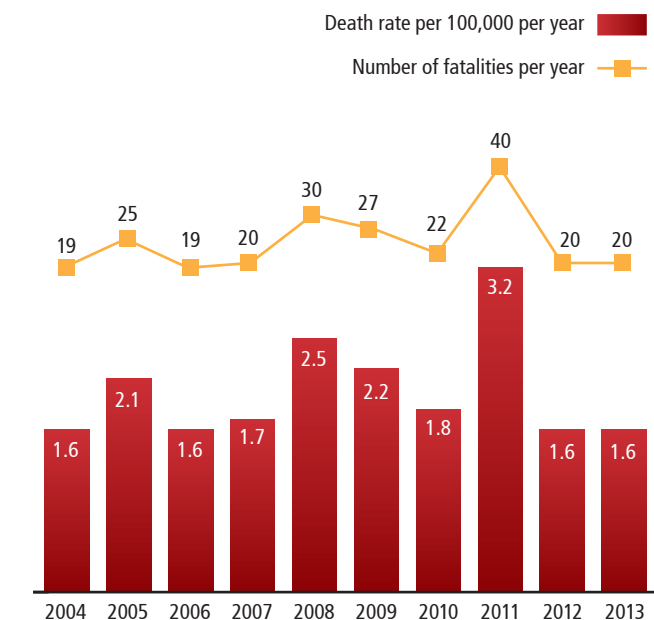
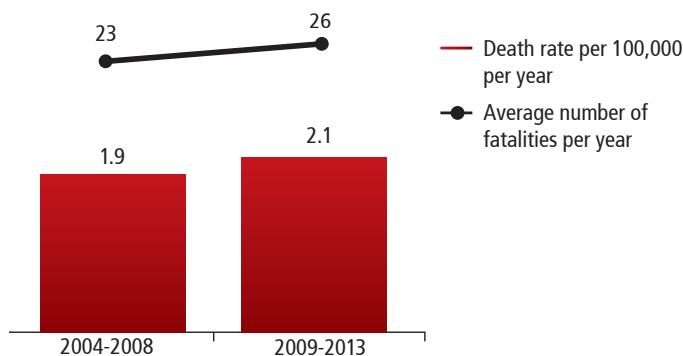
Despite this encouraging reduction in drowning deaths, looking at the most current five years (2009-2013) of data as a whole, the average water-related fatality rate has increased slightly (+11%) over the previous five year period. The average drowning rate for 2009-2013 was 2.1 per 100,000 population, up from 1.9 in 2004-2008. A total of 129 unintentional water-related fatalities occurred in Manitoba between 2009 and 2013.

Preliminary interim data

For drownings since 2013, only preliminary, interim data from media and internet reports are available. In Manitoba, these numbers indicate that at least 15 drownings occurred in 2014 and at least 9 in 2015.

Manitoba Water-Related Fatalities and Death Rates 2004-2013

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



WHO is drowning?

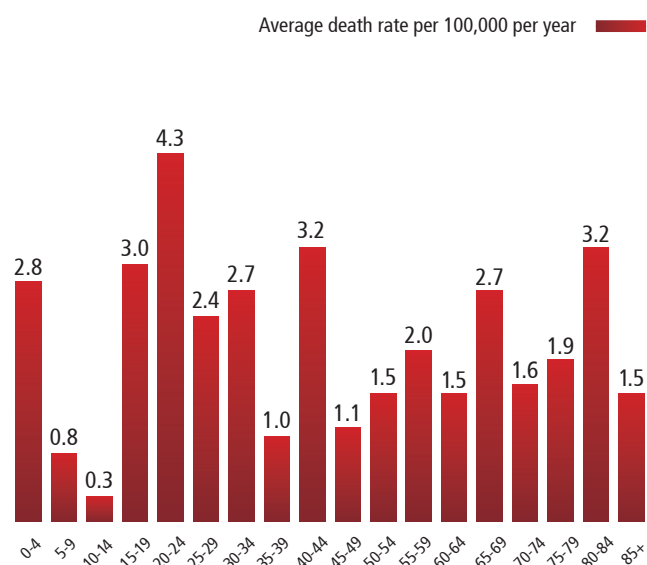


The vast majority of Manitoba drowning deaths occurred among men (82%). Between 2009 and 2013, the average water-related fatality rate for men was 3.5 per 100,000 population compared to 0.7 for women. In 2013 however, a greater proportion of females drowned than usual, 25% of the victims that year were female and 75% were male.

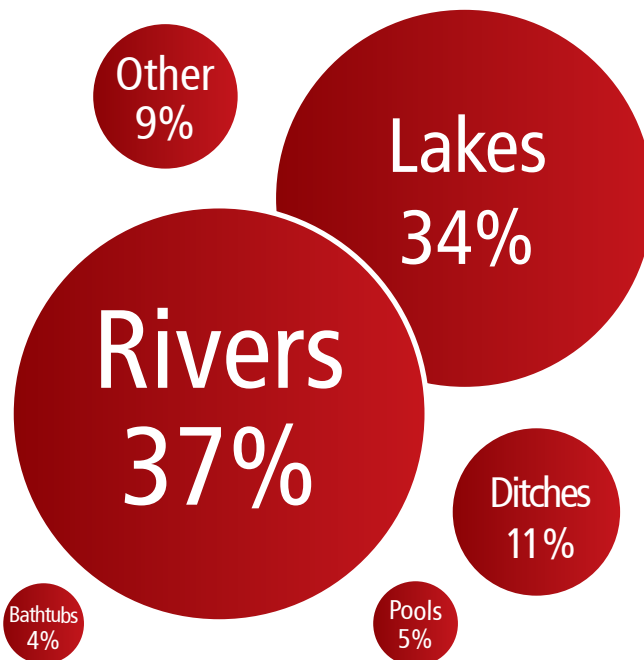
By age, the highest drowning rates in Manitoba continue to be found among young adults 20-24 years old (4.3 per 100,000). This is a common high risk age group for drowning in many provinces, but the water-related fatality rate for 20-24-year-olds is especially high in Manitoba, where it is more than double the national average for that age group (1.9 per 100,000). Other age groups with high drowning rates in Manitoba in the 2009-2013 period were 40-44-year-olds (3.2), 80-84-year-olds (3.2), and 15-19 year olds (3.0).

Drowning rates among children under the age of 5 in Manitoba are the highest of any province in Canada. Between 2009 and 2013, the average water-related fatality rate for children under 5 was 2.8 per 100,000, compared to a national drowning rate of 1.1 per 100,000 in this age group. The majority (73%) of young children in Manitoba drowned in a lake or river. This also differs from other provinces where the most common site for drowning among children is private backyard pools. In 2013, one quarter of all drowning victims in Manitoba were children under the age of 5.

Water-Related Death Rate By Age, 2009-2013



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



WHERE are they drowning?

Natural bodies of water continue to account for the largest proportion of drowning deaths in Manitoba in 2009-2013 (71%). Flowing water, such as rivers and streams claimed the greatest number of lives (37%) followed by lakes and ponds (34%) in the five year period. In 2013, rivers and streams were the most frequent body of water where drowning deaths occurred (40%) but fewer fatalities occurred in lakes and ponds than usual (15%, compared to an average of 40% in the previous four years).

Drowning fatalities in man-made settings such as pools (5%) and bathtubs (4%) continue to be few in Manitoba. Water-related fatalities were more likely to occur in a ditch (11%) than in a bathtub or pool. More ditch related drowning deaths occurred in Manitoba than in any other province; the majority of these fatalities (79%) were the result of motor vehicle incidents, 36% of which occurred among young adults 15-24 years of age.

Drownings in lifeguard supervised settings continue to be rare: in 2009-2013 less than 2% of drowning deaths in Manitoba occurred under lifeguard supervision.

In 2009-2013, water-related fatalities more commonly occurred in rural (69%) versus urban (31%) settings. This proportion is different from most other provinces where the majority of drownings occur in urban environments. The greatest number of drownings in 2013 occurred in Winnipeg (25%).

WHEN are they drowning?

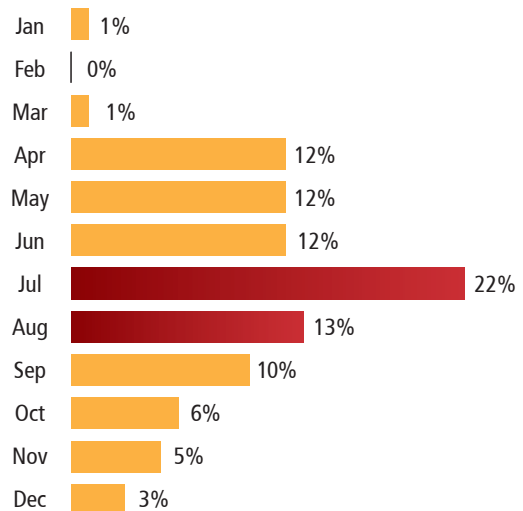
By time of year, the warmer months still account for the majority of drowning deaths in Manitoba. Over two thirds (69%) of water-related fatalities in the 2009-2013 period occurred in May through September. The highest number of drownings occurred in July (22%). In 2013, more drowning deaths occurred in the spring than usual, 9 drownings occurred in May and June, which accounted for 45% of the total water-related fatalities in Manitoba that year.

Over half (53%) of the 2009-2013 drownings happened on the weekend (Friday, Saturday or Sunday). In 2013, Friday was the most common day when drowning fatalities occurred, one quarter of all drownings in Manitoba occurred on a Friday that year.

WHAT were they doing?

By purpose of activity, recreational activities continue to account for the majority of drowning deaths in Manitoba. Over half (53%) of individuals who drowned between 2009 and 2013 were engaged in a recreational activity at the time. Among these, the most common primary activity was swimming (20%), followed closely by walking, running or playing near water (19%). In 2013 however, twice as many drowning deaths occurred while the victim was walking, running or playing near water (33%) as occurred while the victim was swimming (17%).

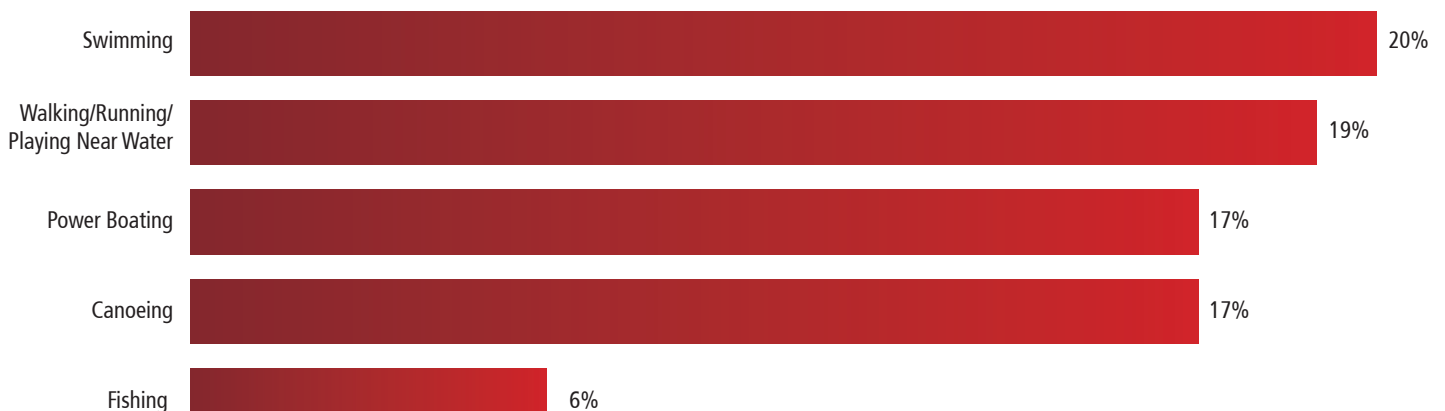
Water-Related Fatalities by Time of Year



Consistent with previous years, daily living incidents accounted for a high proportion of drowning fatalities in Manitoba (27%), and once again almost two thirds of these deaths occurred during motor vehicle travel. Motor vehicle incidents most commonly involved a river or a ditch. The next highest proportion of daily living drownings in Manitoba occurred during travel on foot (14%).

Boating (25%) continued to be the most common type of activity that victims were engaged in prior to drowning in 2009-2013. The majority of boating incidents occurred while canoeing (44%) or during powerboat use (31%). These numbers differ from national trends, in other provinces powerboat incidents make up a larger proportion of boating deaths. In cases where the information was available, none of the victims were wearing a lifejacket when the boating incident occurred. In most of the water-craft related fatalities (75%) the victim had consumed alcohol, and the most common cause of incident was capsizing (34%). After boating, the second most common type of activity was land, ice or air transportation (22%).

Water-Related Fatalities by Most Common Recreational Activity



Risk factors

The major risk factors contributing to drowning incidents in Manitoba continue to be consistent with those the Lifesaving Society has identified for the national population in the past, however alcohol consumption appears to be even more of a factor in Manitoba than in other provinces.

Boating

Not wearing a PFD
(100% of cases where known)

Alcohol consumption (75%)
Capsizing (34%)

Boating in twilight
or darkness (28%)

Falling overboard (20%)

Swimming

Alcohol consumption (36%)

Alone (29%)

Victim was a
non-swimmer (21%)

Age

<15

Supervision absent or
distracted (87%)

Alone or with other
minors only (80%)

15-34

Not wearing a PFD when relevant
(100% of cases where known)

Alcohol consumption (68%)

Alone (40%)

After dark (34%)

35-64

Not wearing a PFD when relevant
(100% of cases where known)

Alcohol consumption (69%)

Alone (48%)

65+

Alone (68%)

Alcohol consumption (53%)

In summary

Water-related fatality rates in Manitoba were highest among men, and people 20-24 years old. Manitoba had a higher drowning rate for children under the age of 5 than any other province in Canada.

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

The highest proportion of incidents occurred during a recreational activity, most commonly swimming or recreating near the water.

Despite the dip in Manitoba drownings in 2012 and 2013, the increased death rate demonstrated by the five-year average 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 office of the Chief Medical Examiner of Manitoba. 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 Manitoba 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 Medical Examiner. 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 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 medical examiner'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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