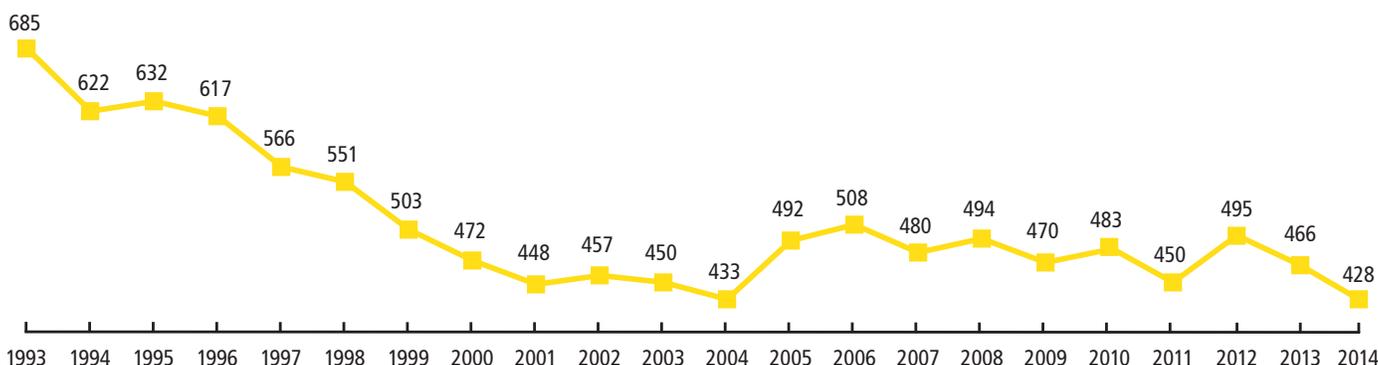


DROWNING REPORT

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

Canadian Totals 1993 - 2014

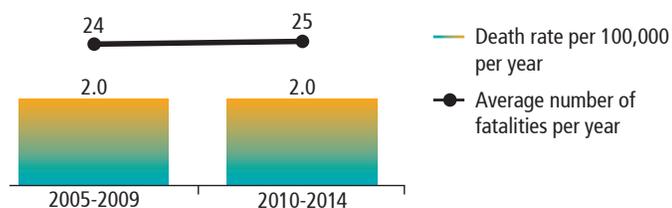


Analysis of the most recent data available from the Office of the Chief Medical Examiner of Manitoba reveals that the drowning death rate continues to remain steady in 2014. After a surge in drowning deaths in 2011 (40), 2012, 2013, and 2014 saw a 50% decrease in the number of water-related fatalities and a return to a more typical death rate of 1.6 per 100,000 population.

Preliminary interim data

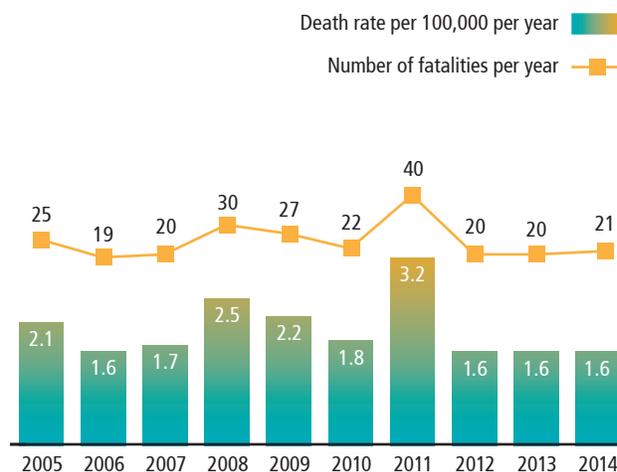
For drowning fatalities since 2014, only preliminary, interim data from media and internet reports are available. In Manitoba, these numbers indicate that at least 8 drowning deaths occurred in 2015 and at least 14 in 2016.

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



Despite this encouraging reduction in the number of drowning deaths, the average water-related fatality rate in the most current five years (2010-2014) has remained the same as in the previous five year period (2005-2009). The average drowning rate for 2010-2014 was 2.0 per 100,000 population, consistent with the 2005-2009 period and substantially higher than the national average of 1.3 per 100,000 population. An average of 25 water-related fatalities occurred each year in Manitoba between 2010 and 2014.

Manitoba Water-Related Fatalities and Death Rates 2005-2014



WHO is drowning?

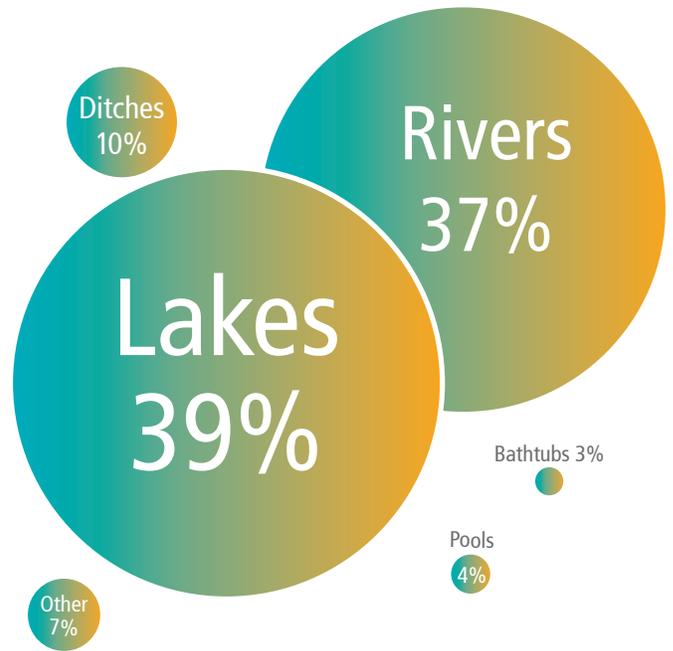
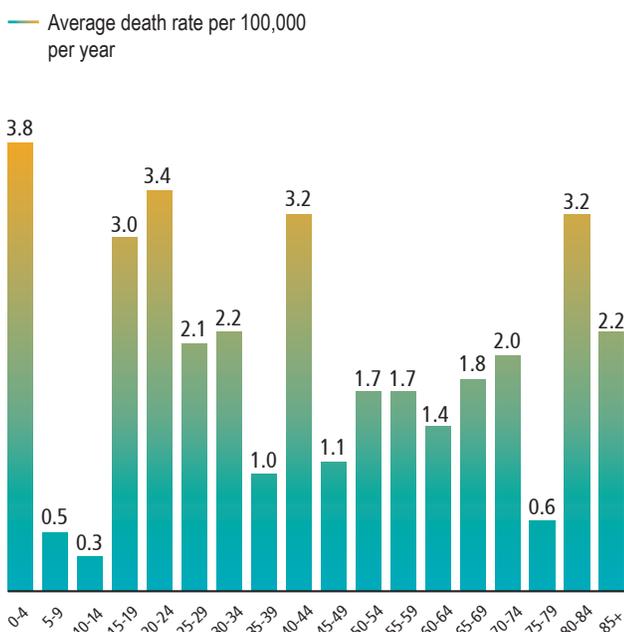


Consistent with previous years, the vast majority of Manitoba drowning victims were male (84%). In the 2010-2014 period, the average water-related fatality rate for males was 3.3 per 100,000 population, compared to 0.6 for females. In 2014, 9 out of 10 Manitoba drowning victims were male.

By age, the highest drowning death rate in Manitoba was found among children less than five years of age (3.8 per 100,000). Drowning rates among children under the age of 5 in Manitoba were the highest of any province in Canada. In the 2010-2014 period, the national water-related fatality rate for children under 5 was 1.1 per 100,000. In 2014, more drowning deaths in Manitoba occurred among children under the age of 5 than in any other age group.

The next highest drowning death rate occurred among young adults 20-24 years of age (3.4 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. By comparison, the national water-related fatality rate for 20-24 year-olds in 2010-2014 was 1.8 per 100,000. Consistent with previous years, other age groups with high drowning rates in Manitoba were 40-44 year-olds (3.2), 80-84 year-olds (3.2), and 15-19 year-olds (3.0).

Water-Related Death Rate By Age, 2010-2014



WHERE are they drowning?

Natural bodies of water continue to account for the largest proportion of drowning deaths in Manitoba in 2010-2014 (76%). Lakes and ponds claimed the greatest number of lives (39%), followed closely by flowing water, such as rivers and streams (37%). In 2014, 9 people drowned in a lake or pond and 7 people drowned in a river or stream.

Drowning fatalities in man-made settings such as pools (4%) and bathtubs (3%) continue to be few in Manitoba. Once again ditches (10%) accounted for more water-related fatalities in Manitoba than in any other province. The majority of these fatalities (83%) were the result of a motor vehicle incident where the vehicle left the road and entered water, and one third (33%) occurred among young adults 15-24 years of age.

Drowning deaths in lifeguard-supervised settings continue to be rare: in 2010-2014 less than 1% of drowning deaths in Manitoba occurred under lifeguard supervision.

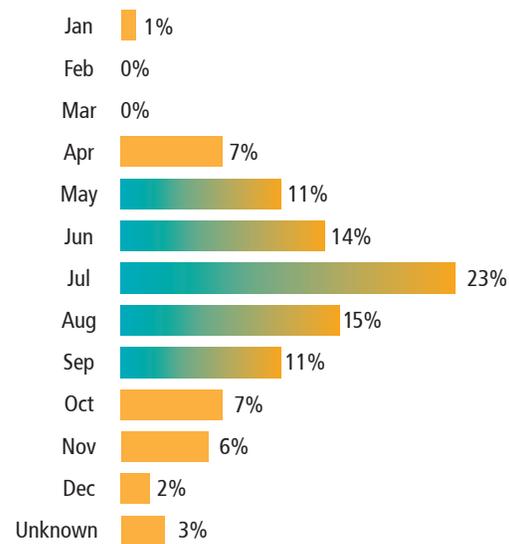
Consistent with previous years, water-related fatalities more commonly occurred in rural (68%) than urban (32%) settings in 2010-2014. In contrast, approximately 72% of the population in Manitoba live in an urban setting, and approximately 28% live in a rural setting. In 2014, the greatest number of drowning deaths occurred in the Thompson and North Central area.

WHEN are they drowning?

By time of year, the warmer months continue to account for the majority of drowning deaths in Manitoba. Almost three quarters (74%) of water-related fatalities in the 2010-2014 period occurred in May through September. The highest number of drowning deaths occurred in July (23%). In 2014, all water-related fatalities occurred between April and October; there were no winter drowning deaths in Manitoba that year.

Consistent with previous years, over half (52%) of the 2010-2014 drowning fatalities happened on the weekend (Friday, Saturday or Sunday). However in 2014, Monday was the most common day when drowning fatalities occurred.

Water-Related Fatalities by Time of Year



WHAT were they doing?

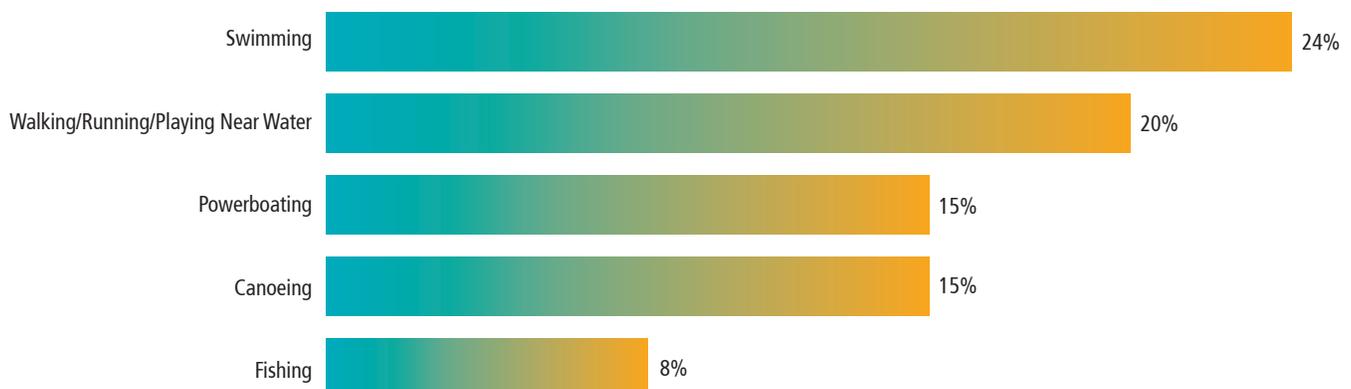
By purpose of activity, recreational activities continue to account for the majority of drowning deaths in Manitoba. Over half (58%) of individuals who drowned between 2010 and 2014 were engaged in a recreational activity at the time. Among these, the most common primary activity was swimming (24%), followed by walking, running, or playing near water (20%). In 2014 however, 50% of recreational drowning deaths occurred while the victim was walking, running or playing near water and 33% occurred while the victim was swimming.

Consistent with previous years, daily living incidents accounted for a high proportion of drowning fatalities in Manitoba (20%), and once again over half (56%) of these deaths occurred during motor vehicle

travel. Motor vehicle incidents most commonly involved a river or a ditch. In 2014, all daily living related drowning deaths occurred during motor vehicle travel. The next highest proportion of daily living drowning deaths in Manitoba in the 2010-2014 period occurred while the victim was bathing (16%).

Boating (27%) continued to be the most common type of activity that victims were engaged in prior to drowning in 2010-2014. The majority of boating incidents occurred while canoeing (39%) or during powerboat use (33%). In cases where the information was available, 96% of the victims were not wearing a lifejacket when the boating incident occurred. In two-thirds (67%) of the water-craft related fatalities the victim had consumed alcohol. After boating, the next most common types of activity were land, ice or air transportation (17%) and aquatic activities (17%) where the victim intended to be in the water and something went wrong. In 2014 however, boating was the least frequent activity type. More people drowned while engaged in land, ice or air transportation, aquatic activities, and non-aquatic activities than boating that year.

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, particularly when boating.

Boating

Not wearing a PFD (96% of cases where known)

Alcohol consumption (70%)

Capsizing (27%)

Falling overboard (21%)

Boating in twilight or darkness (21%)

Boating alone (21%)

Swimming

Alcohol consumption (47%)

Victim was a non-swimmer (24%)

Age

<5

Supervision absent or distracted (93%)

Alone or with other minors only (93%)

5-34

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

Alcohol consumption (67%)

Alone (30%)

After dark (30%)

35-64

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

Alcohol consumption (69%)

Alone (43%)

65+

Not wearing a PFD when relevant (80% of cases where known)

Alone (71%)

Alcohol consumption (47%)

In summary

Water-related fatality rates in Manitoba were highest among males, children under the age of 5, and young adults 20-24 years of age.

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 the most recent three years for which data is available, the consistent drowning death rate demonstrated by the five-year average 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 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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