# DROWNINGREPORT

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, 104 drownings occurred in Saskatchewan waters. In these most recent Coroner's data collection years, the average drowning rate in Saskatchewan increased by 25%. The average water-related fatality rate for 2007-2011 was 2 per 100,000 population, up from 1.6 in the previous five-year period. In four out of the five years, 20 or more people drowned in Saskatchewan.

#### Preliminary interim data

For drownings since 2011, only preliminary, interim data from media and internet reports are available. In Saskatchewan these numbers indicate that at least 10 drownings occurred in 2012 and at least 17 occurred in 2013.

## Saskatchewan Water-Related Fatalities and Death Rates 2002-2011



#### Death Rate 2007-2011 by Age

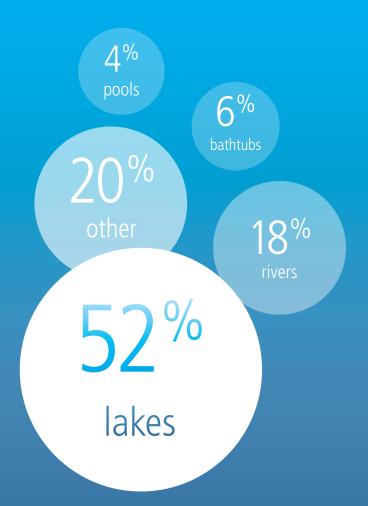
Average Death Rate per 100,000 per Year

# WHO is drowning?

The vast majority of Saskatchewan 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 Saskatchewan was 3.3 per 100,000 population compared to a rate of 0.7 for women.

By age, the highest drowning rates in Saskatchewan are found among young adults 20-24 and older adults 70-74. Historically, national statistics show high rates among young adults. The problem is even more severe in Saskatchewan where the greatest proportion of drowning victims are 20-24-year olds (13%) with a death rate of 3.4 per 100,000 – which is 70% higher than the national average for that age group.

Drowning death rates are also higher than historic national averages among children in Saskatchewan. The average yearly water-related fatality rate for Saskatchewan children 14 years and under is 1.9 — which is 2.4 times that of the national population.



### 3.6 3.4 2.4 2.1 1.8 1.8 1.3 1.3 1.5 1.7 1.3 1.3 1.3

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

# WHERE are they drowning?

Over two thirds (70%) of drownings in Saskatchewan occur in natural bodies of water with the highest proportion occurring in lakes (52%), followed by flowing water such as rivers and streams (18%).

Few drownings take place in man-made settings such as ditches or culverts (8%), bathtubs (6%), and pools (4%). While these settings do not account for a large proportion of drownings in Saskatchewan, they pose a serious concern for young children. Between 2007 and 2011, the majority (83%) of water-related fatalities for children under five years occurred in a man-made body of water, 60% of which were private pools.

Very few drownings occur in lifeguard supervised settings: in 2007-2011, less than 1% of all drownings in Saskatchewan occurred in a lifeguard supervised setting.

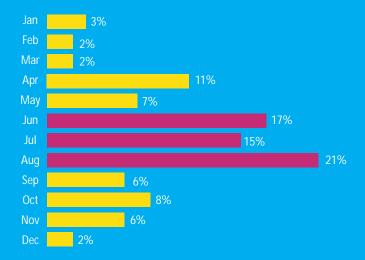
Despite the fact that approximately two thirds of the population lives in an urban setting, the vast majority (81%) of Saskatchewan drownings occur in rural settings.

#### **Victims by Time of Year**

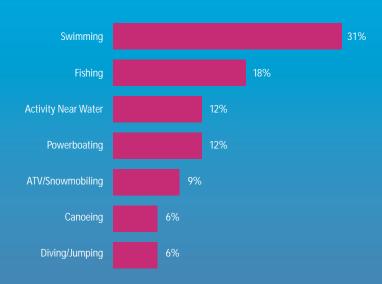
# WHEN are they drowning?

The majority of drownings in Saskatchewan occur during the warmer months with over half (53%) of water-related fatalities between 2007 and 2011 occurring in June, July or August. The greatest number of drownings occurred in August with 22 water-related fatalities during the five year period, 3.7 times more than had occurred in August between 2002 and 2006.

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



# Victims by Most Common Recreational Activity



# WHAT were they doing?

Almost half (49%) of victims who drowned in Saskatchewan 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 (31%), fishing (18%), walking, running or playing near water (12%), and powerboating (12%).

Daily living activities account for the next highest proportion of incidents in Saskatchewan (38%). Almost two thirds (62%) of daily living incidents in Saskatchewan can be 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.

In keeping with the high proportion of water-related fatalities involving motor vehicle travel, by type of activity the greatest percentage of incidents in Saskatchewan occur during land, ice or air transportation (34%). The next most common activity type was aquatic (21%), where the victim intended to be in the water and something went wrong. This is followed closely by boating incidents (19%), the majority of which occurred during powerboat use (65%) or canoeing (25%). Only 10% of victims who drowned while boating in Saskatchewan were wearing a lifejacket and 60% had consumed alcohol.

#### **Risk Factors**

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

#### **Boating**

Not wearing a PFD (80%) Alcohol consumption (60%) Boating alone (25%) Boating in twilight or darkness (20%) Rough water (30%)

#### **Swimming**

Alcohol consumption (36% Swimming alone or with minors only (23%)

#### Age

< 5

Alone or with other minors only (67%), often because supervision was distracted

5-14

With other minors only (31%)

15-34

Alcohol consumption (72%) Twilight or after dark (31%) Not wearing PFD when relevant (86%) 35-64

Alcohol consumption (38%) After dark (28%) Alone (55%) Not wearing PFD when relevant (71%)

65+

Alcohol consumption (23%) Alone (38%)

## In Summary

Water-related fatality rates in Saskatchewan are highest among men, and people 20-24 and 70-74 years.

Drownings are most likely to occur on weekends during June, July and August in natural bodies of water such as lakes and rivers.

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

The increased drowning death rate in Saskatchewan evident in the most recent five-year average 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

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- The Office of the Chief Coroner of Saskatchewan 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.

