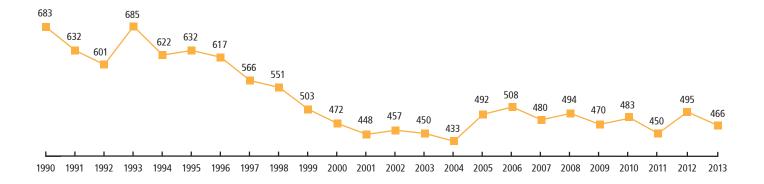
# DROWNING REPORT

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

## Canadian Totals 1990 - 2013

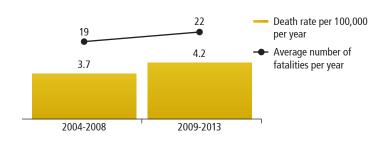


The decline in drowning deaths in Newfoundland and Labrador continues in the most recent data available from the Office of the Chief Medical Examiner. From 2009 to 2013 water-related fatalities have decreased annually; in 2013 the drowning rate was the lowest in the five-year period at 2.7 per 100,000 population.

However, looking at the most current five years of data (2009-2013) combined, the water-related fatality rate in Newfoundland and Labrador has increased by 14% over the previous five-year period (from 3.7 per 100,000 in 2004-2008 to 4.2 per 100,000 in 2009-2013). The average number of drowning deaths per year in 2009-2013 was 22. The greatest number of drownings (36) occurred in 2009, when 17 people suffered a water-related fatality as the result of a single helicopter incident.

Between 2009 and 2013, 110 drowning fatalities occurred in Newfoundland and Labrador. The average death rate of 4.2 per 100,000 in this province continues to be substantially higher than the national average of 1.4 per 100,000.

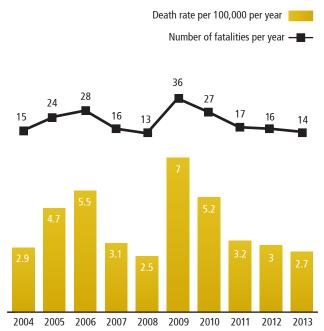
# Newfoundland & Labrador Water-Related Fatalities and Death Rates, Five Year Averages



### Preliminary interim data

For drownings since 2013, only preliminary, interim data from media and internet reports are available. In Newfoundland and Labrador, these numbers indicate that at least 14 drownings occurred in 2014 and at least 18 in 2015.

# Newfoundland & Labrador Water-Related Fatalities and Death Rates 2004-2013



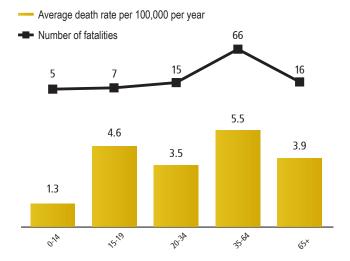
# WHO is drowning? ††††††††††

The vast majority of Newfoundland and Labrador drowning victims continue to be men (95%). In 2013, all of the drowning victims were male. Although gender is a risk factor for drowning in all provinces (approximately 80% of all Canadian drowning deaths occur among males), the risk may be even higher in Newfoundland and Labrador where this is the third year in a row that drowning deaths occurred exclusively among men. Between 2009 and 2013, the average water-related fatality rate for men was 8.1 per 100,000 population compared to 0.4 for women.

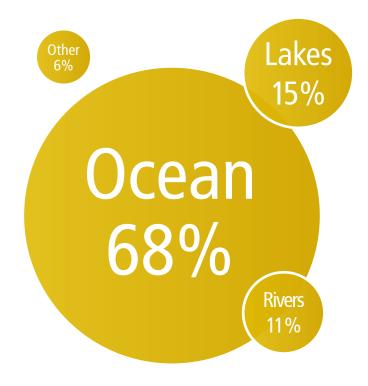
By age, the highest drowning rates in Newfoundland and Labrador were once again found among middle aged adults 35-64 years of age (5.5 per 100,000), followed by teenagers 15-19 years of age (4.6 per 100,000). This differs from national trends. In most other provinces, the highest rates were found among young adults 20-24 years of age and seniors over the age of 65. In 2013, 9 of the 14 drowning deaths in Newfoundland and Labrador occurred among middle aged adults, and no 20-24-year olds drowned.

Water-related fatality rates in Newfoundland and Labrador continue to be low for children. Few drownings occur among individuals under the age of 15.

# Water-Related Death Rate By Age, 2009-2013



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



# WHERE are they drowning?

Once again, natural bodies of water accounted for the vast majority of drownings in Newfoundland and Labrador. In 2013, 12 of the 14 drowning deaths occurred in a natural body of water, most commonly the ocean (8). In the 2009-2013 period as a whole, (94%) of all water-related fatalities occurred in natural bodies of water such as the ocean (68%), a lake or pond (15%) or a river or stream (11%).

Very few drownings in 2009-2013 took place in a man-made setting such as a bathtub, pool, ditch or culvert (5%). In 2013 however, 2 of the 14 drownings (14%) occurred in a man-made body of water; one in a bathtub and one in a ditch.

Drownings in lifeguard supervised settings continue to be very rare: none of the 110 drownings in the current five year period occurred under lifeguard supervision.

Despite the fact that approximately 59% of the Newfoundland and Labrador population lives in an urban setting, drownings more commonly occurred in rural (63%) than urban (37%) settings between 2009 and 2013. By district, the greatest number of drownings in 2013 occurred in Bonavista/Trinity-Clarenville (21%) and Avalon Peninsula-St. John's (21%).

# WHEN are they drowning?

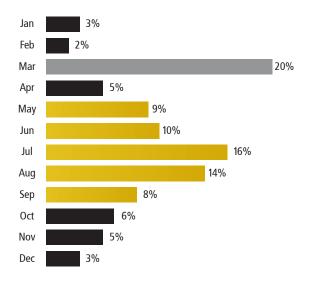
The majority of water-related fatalities in Newfoundland and Labrador once again occurred during the warmer months. In 2013, 71% (10 of the 14 drowning deaths) occurred in May through September. Looking at the current five-year period as a whole, over two thirds (68%) of water-related fatalities occurred during these warmer months (excluding the helicopter incident which occurred in March of 2009).

In 2009-2013, over half (53%) of Newfoundland and Labrador drownings occurred on weekend days (Friday, Saturday, or Sunday), with the greatest proportion (29%) occurring on Saturday (excluding the helicopter incident which occurred on a Thursday). In 2013 however, more drowning deaths occurred on a Monday (4) than any other day.

# WHAT were they doing?

Over half (57%) of Newfoundland and Labrador drowning fatalities in 2013 occurred during a recreational activity. This is consistent with the other years in the five-year period; overall in 2009-2013 recreational activities (49%) accounted for the largest proportion of drownings. The most common primary recreational activities were fishing (19%) and powerboating (19%). In 2013, fishing was the most common primary recreational activity and walking or playing near water was the second most common activity. Swimming related drowning deaths continue to be fewer in Newfoundland and Labrador than in most other provinces (9% in 2009-2013). The next most common purpose of activity in 2013 was daily living (21%).

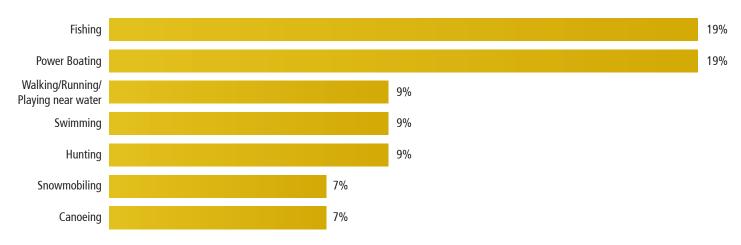
# **Water-Related Fatalities by Time of Year**



Occupational activities (14%) account for a higher proportion of drowning fatalities in Newfoundland and Labrador than in most other provinces. Comparatively, about 6% of all Canadian drowning deaths are occupation related. Looking at the five-year period (2009-2013) as a whole, occupational activities made up an even higher proportion of drowning fatalities in Newfoundland and Labrador than usual (31%) because those who drowned in the helicopter incident were engaged in occupational travel. Excluding these deaths, the most common occupational activity in 2009 to 2013 was fishing (65%), followed by marine shipping (10%).

By type of activity, boating (36%) continued to account for the majority of incidents in 2013. This is consistent with the other years in the five year period. In 2009-2013, 42% of all water-related fatalities occurred during boating. The majority of these deaths occurred during powerboat use (67%) followed by canoeing (11%). Only 15% of the victims of a boating-related fatality were wearing a lifejacket properly at the time of the incident and 33% had consumed alcohol.

# **Water-Related Fatalities by Most Common Recreational Activity**



# Risk factors

The major risk factors contributing to drowning incidents in Newfoundland and Labrador continue to be consistent with those the Lifesaving Society has identified for the national population in the past.

### **Boating**

Not wearing a PFD (75% of cases where known)
Capsizing (43%)
Falling overboard (35%)
Alcohol consumption (33%)
Alone (33%)
Boating in twilight or darkness (24%)

# Age

#### 15-19

Not wearing a PFD when relevant (75%)

Alcohol consumption (71%)

#### 20-34

Not wearing a PFD when relevant (100%)

Alone (40%)

Alcohol consumption (27%)

After dark (27%)

#### 35-64

Not wearing a PFD when relevant (77%)

Alcohol consumption (37%)

Alone (36%)

Twilight or after dark (23%)

#### 65+

Not wearing a PFD when relevant (71%)

Alone (53%)

Twilight or after dark (27%)

Alcohol consumption (20%)

# In summary

Water-related fatality rates in Newfoundland and Labrador were highest among men, and middle aged adults 35 to 64 years old.

Drowning deaths were most likely to occur on weekends during the warmer months in natural bodies of water, especially the ocean.

The highest proportion of incidents occurred during a recreational activity, the most common of these were fishing and powerboating. Occupational incidents continued to contribute to a high proportion of drownings in Newfoundland and Labrador in 2009-2013.

Despite the decline in Newfoundland and Labrador drowning fatalities over the last few years, 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 Newfoundland and Labrador. 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 Newfoundland and Labrador 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 Newfoundland and Labrador 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.

