



LIFESAVING SOCIETY®
The Lifeguarding Experts



Report

Edition

Canadian Drowning Report

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



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FATAL DROWNING IN CANADA BY THE NUMBERS

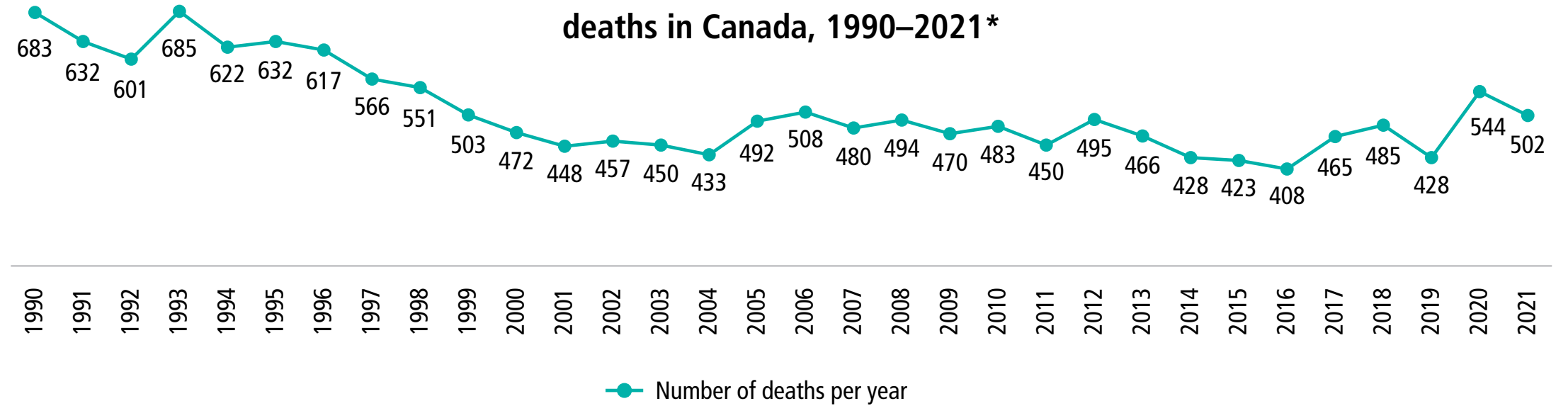


FATAL DROWNING IN CANADA BY THE NUMBERS

A total of 2,424 people lost their lives to unintentional water-related deaths during 2017–2021, according to the most recent data from the Chief Coroner’s and Medical Examiner’s offices. After decades of decline, the number of drowning deaths increased sharply to over 500 deaths each year in 2020 (544 deaths) and 2021 (502 deaths) for the first time since 2006. Drowning may have been impacted by infrastructure disruptions caused by the COVID-19 pandemic during 2020 and 2021. Drowning rates increased in many countries around the world during these two years.

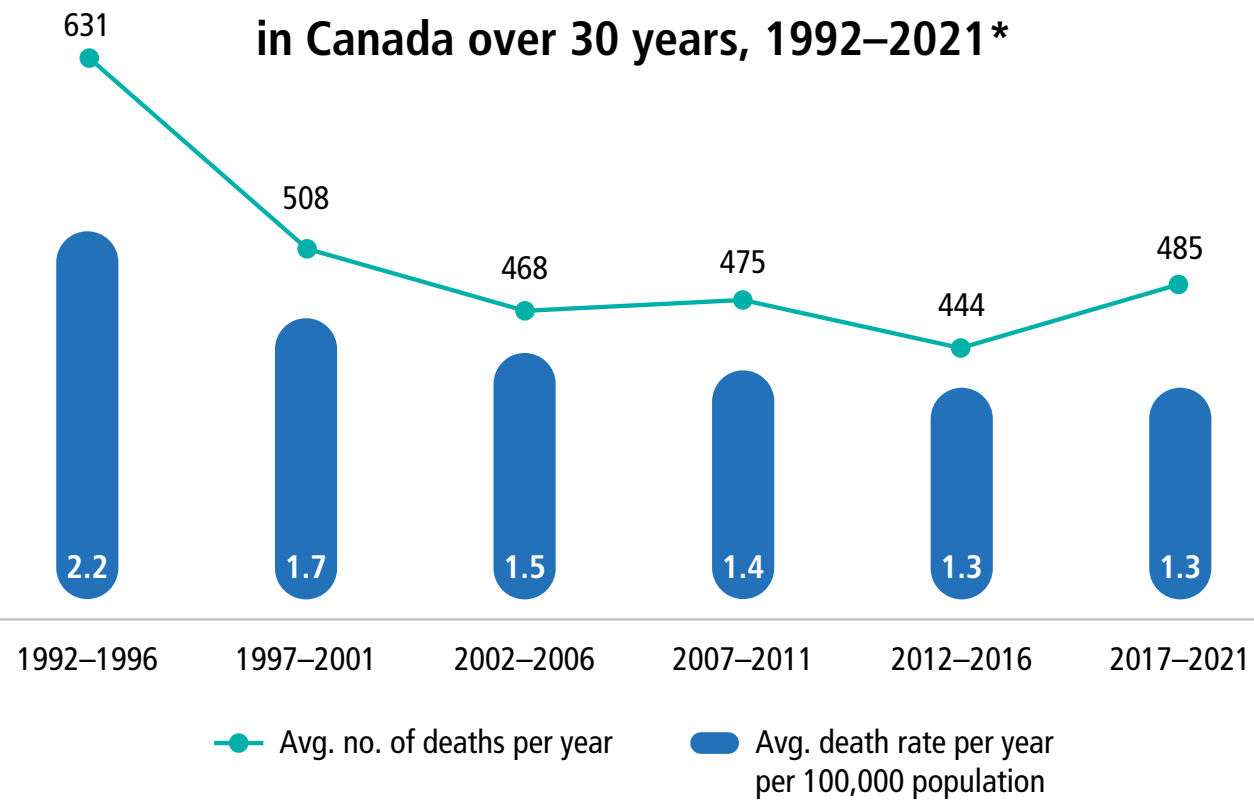
An average of 485 drowning deaths occurred each year in the most current five-year period (2017–2021), up from an average of 444 drowning deaths per year in the previous five years (2012–2016). The average annual water-related death rate has decreased over the past 30 years, from 2.2 per 100,000 during 1992–1996 to 1.3 per 100,000 in the most recent data. Despite this long-term progress, recent increases in drowning deaths in 2020 and 2021 reinforce the need for continued focus on drowning prevention efforts.

Number of unintentional water-related deaths in Canada, 1990–2021*



*Totals for 2016–2021 are based on partial data as not all data for British Columbia were available at the time of data collection.

Change in number of unintentional water-related deaths and death rates in Canada over 30 years, 1992–2021*



*Avg. number of deaths and death rates for 2016–2021 are based on partial data as not all data for British Columbia were available at the time of data collection.



WHO DROWNS?



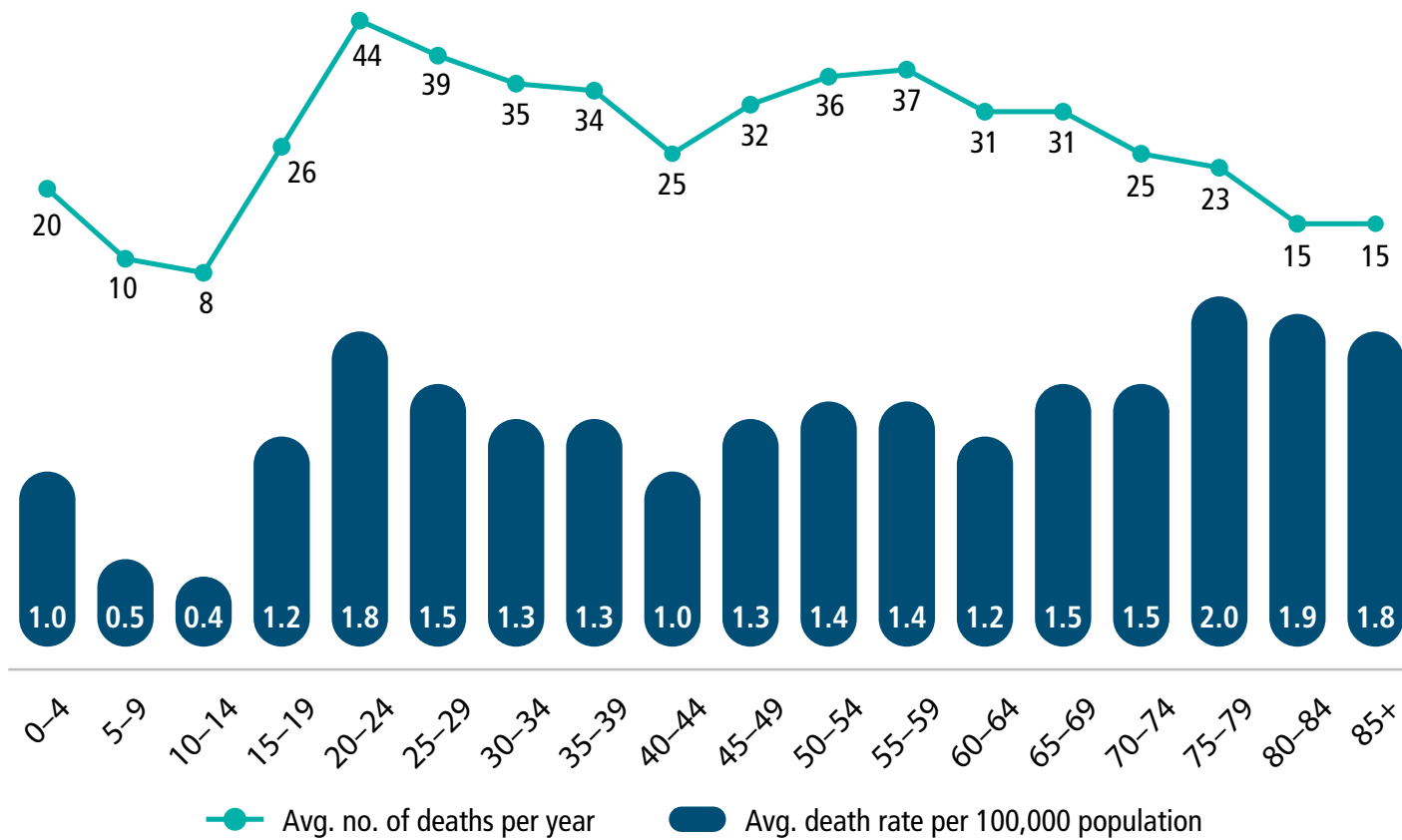
WHO DROWNS?

Older adults aged 75+ had the highest drowning rates of all age groups: 75–79 years (2.0 per 100,000), 80–84 years (1.9 per 100,000), and 85+ (1.8 per 100,000).

Young adults 20–24 years also had high drowning rates (1.8 per 100,000) and the highest average number of drowning deaths each year occurred among 20–24-year-olds (44 deaths). The next highest number of drowning deaths each year was among 25–29-year-olds (39 deaths, 1.5 per 100,000).

Consistent with the overall increase in the number of drowning deaths in Canada, drowning rates increased in most age groups during 2017–2021 when compared to the previous five-year period (2012–2016).

Number of unintentional water-related deaths and death rates by age group in Canada, 2017–2021



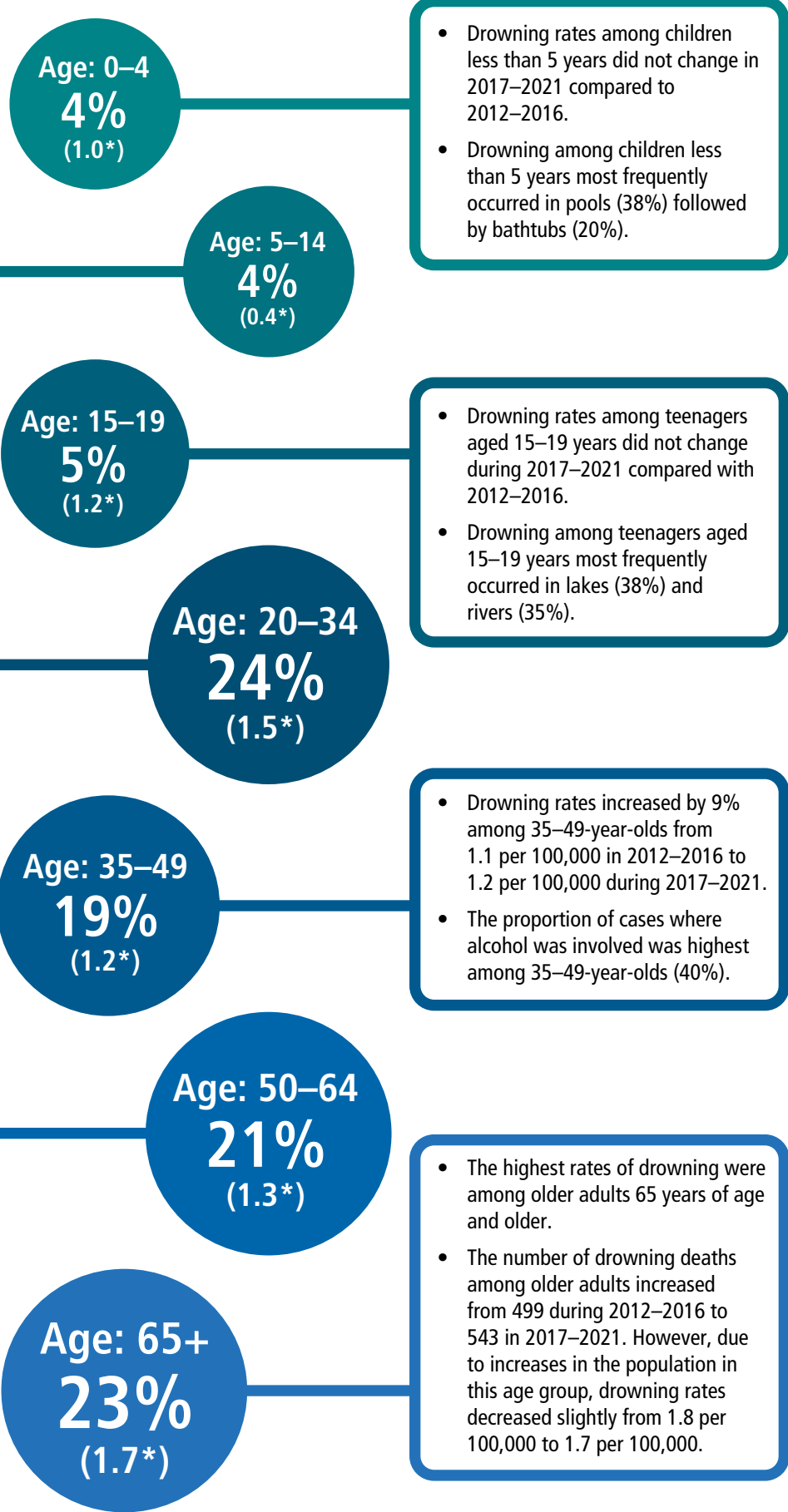
An average of 380 males and 105 females died from drowning each year during 2017–2021. Males drowned at rates more than three times as high as females (2.0 per 100,000 vs. 0.6 per 100,000).



- The lowest rates of drowning were among children 5–14 years of age.
- Drowning rates increased by 25% among 5–9-year-olds, from 0.4 per 100,000 in 2012–2016 to 0.5 per 100,000 during 2017–2021.
- Children 5–14 years of age were most frequently swimming (33%) or walking, running, or playing near water (24%) at the time of drowning.

- Drowning rates were the second highest among young adults aged 20–34 years, increasing by 7% from 1.4 per 100,000 in 2012–2016 to 1.5 per 100,000 during 2017–2021. The greatest increase was among 30–34-year-olds (+19%).
- A high proportion of drowning among 20–34-year-olds occurred during an aquatic activity (34%), where the person intended to be in the water (e.g., swimming or wading).

- Despite overall increases in drowning rates in 2017–2021, rates decreased slightly (-3%) among 50–64-year-olds from 1.4 per 100,000 during 2012–2016 to 1.3 per 100,000 during 2017–2019.
- A high proportion of drowning among 50–64-year-olds occurred during recreational boating.



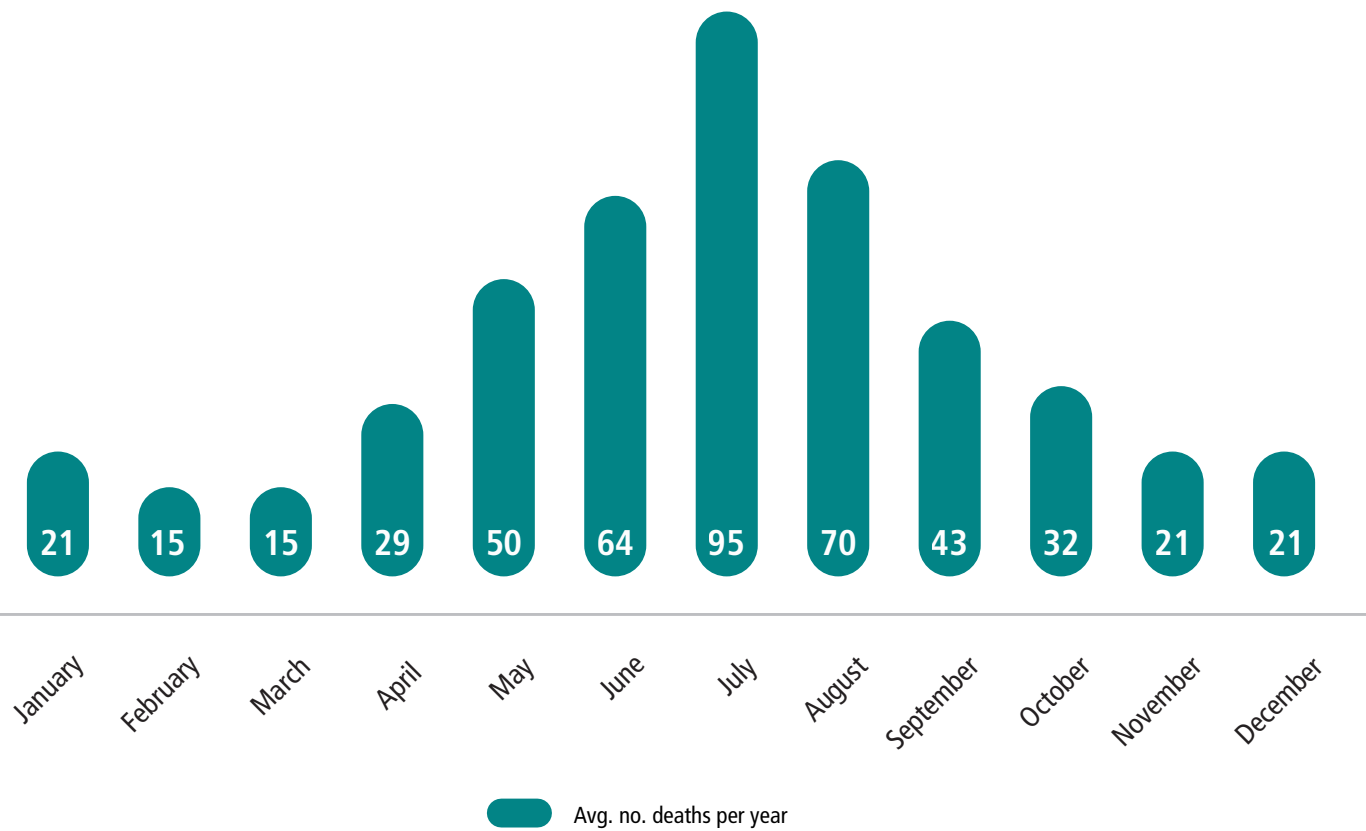
*Death rate per 100,000.

WHEN ARE THEY DROWNING?

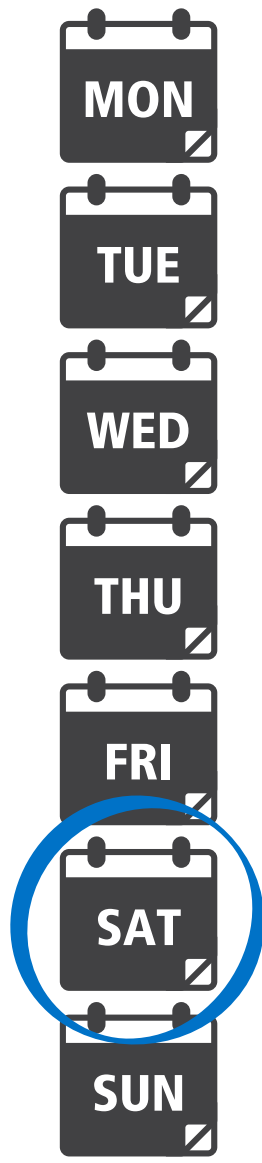
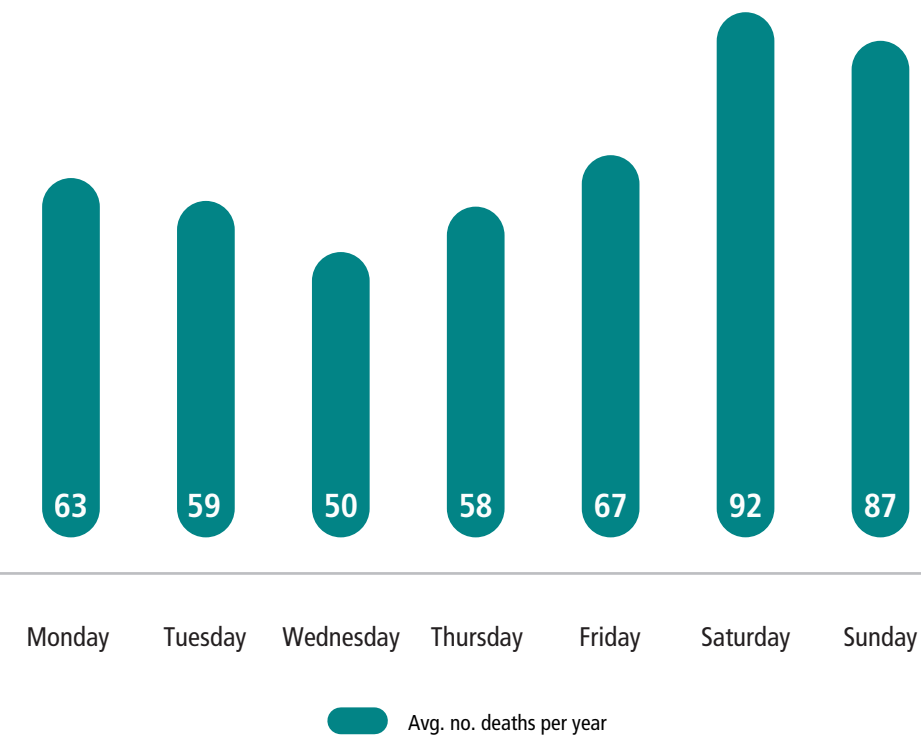


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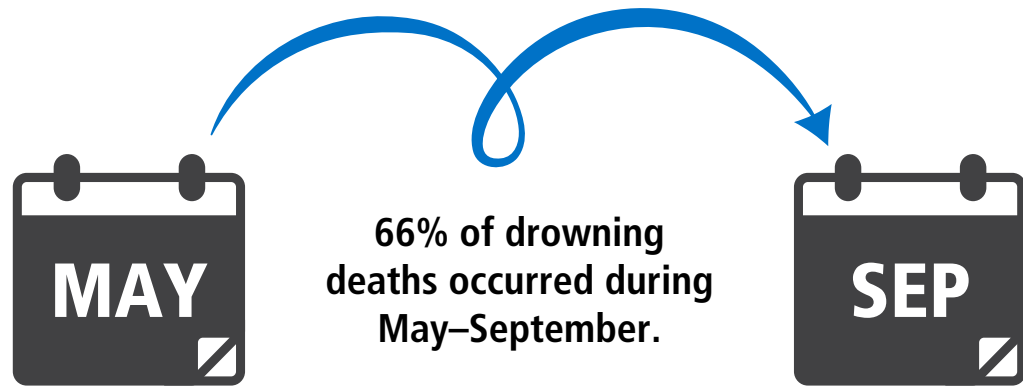
Unintentional water-related deaths by month, 2017–2021



Unintentional water-related deaths by day of the week, 2017–2021



Drowning most frequently occurred on Saturday, with an average of 92 deaths occurring on Saturday each year during 2017–2021 (19%).



Although water-related deaths occur in every month of the year, the majority occur during the warmest months. Drowning most frequently occurred in July, with an average of 95 deaths occurring in July each year during 2017–2021 (20%).

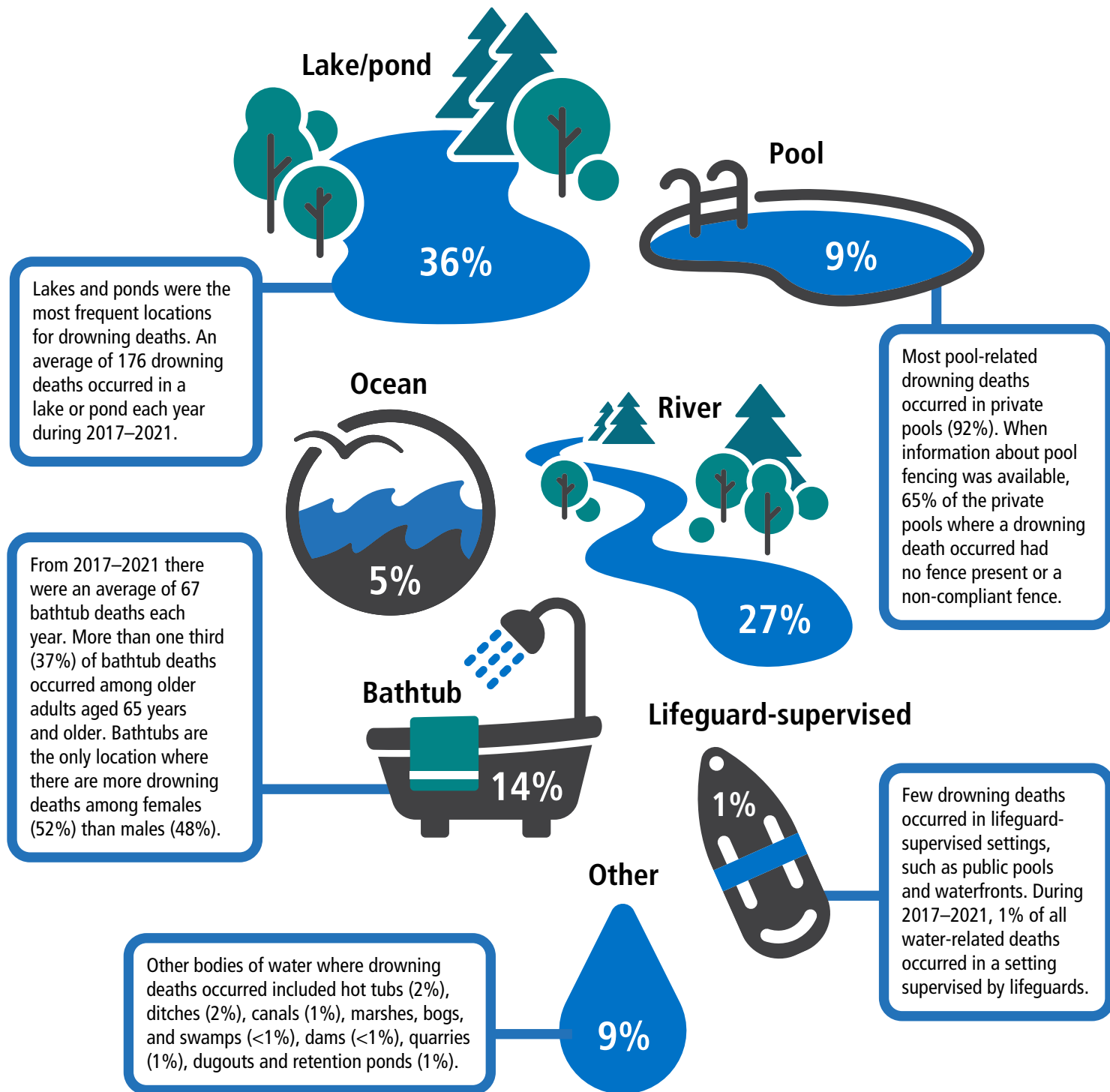


WHERE ARE THEY DROWNING?

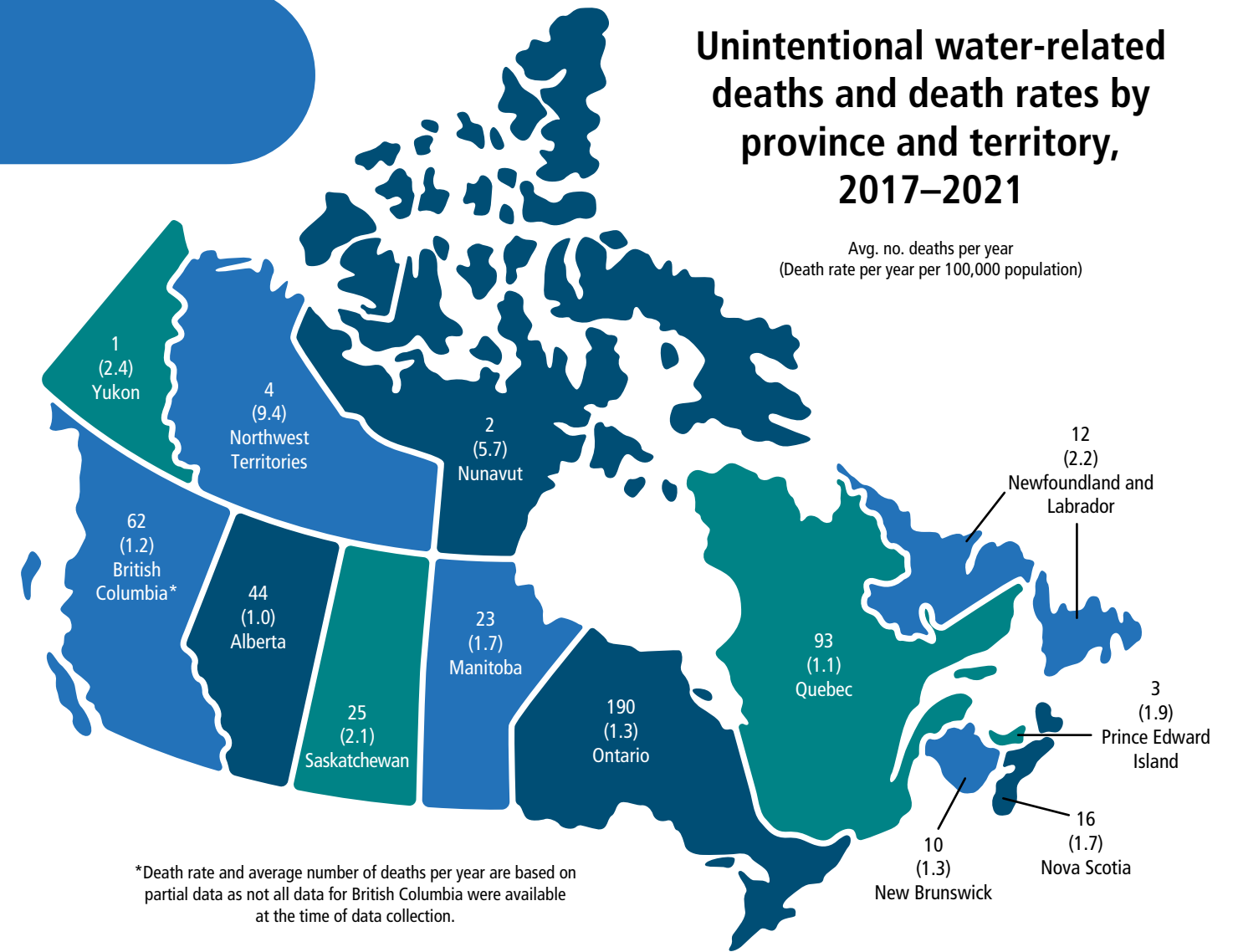


WHERE ARE THEY DROWNING?

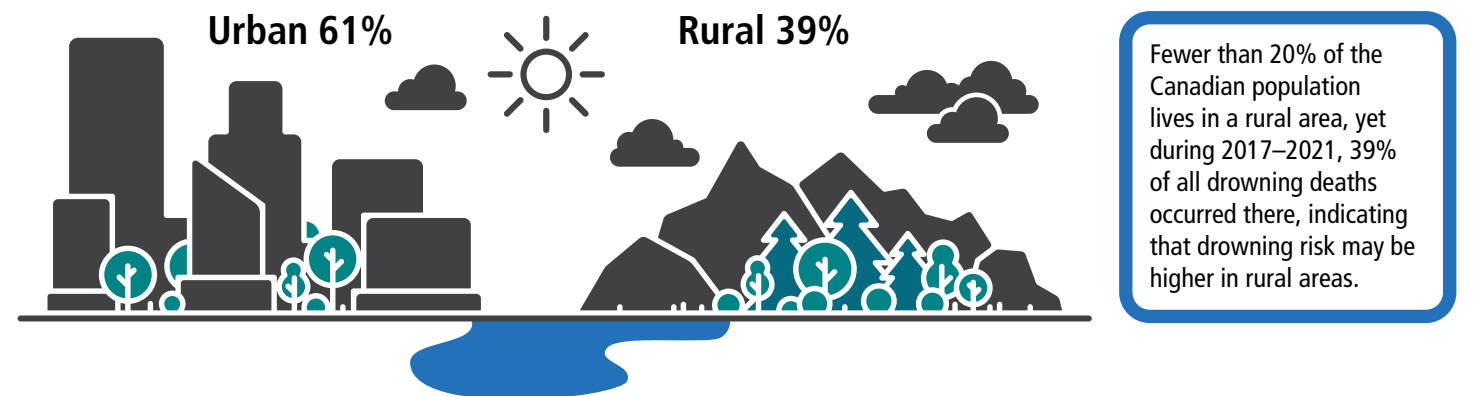
Unintentional water-related deaths by type of body of water, 2017–2021



Unintentional water-related deaths and death rates by province and territory, 2017–2021



- Water-related death rates were highest in the Northwest Territories (9.4 per 100,000), followed by Nunavut (5.7 per 100,000).
- The next highest rates occurred in Yukon (2.4 per 100,000), Newfoundland and Labrador (2.2 per 100,000), and Saskatchewan (2.1 per 100,000).
- The highest number of annual water-related deaths occurred in Ontario, the most populous province (an average of 190 deaths per year).
- Consistent with the overall increase in drowning death rates in Canada, rates increased in most provinces and territories during 2017–2021. However, rates decreased by 69% in the Yukon, 39% in Nunavut, and 25% in Newfoundland and Labrador.

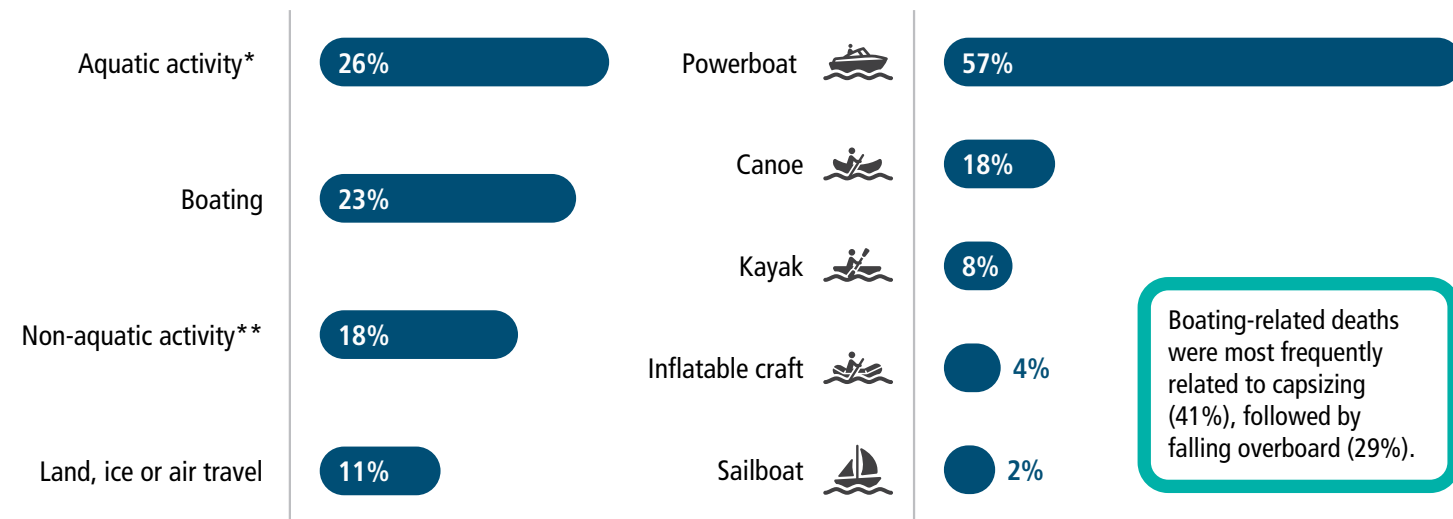


WHAT WERE THEY DOING?



WHAT WERE THEY DOING?

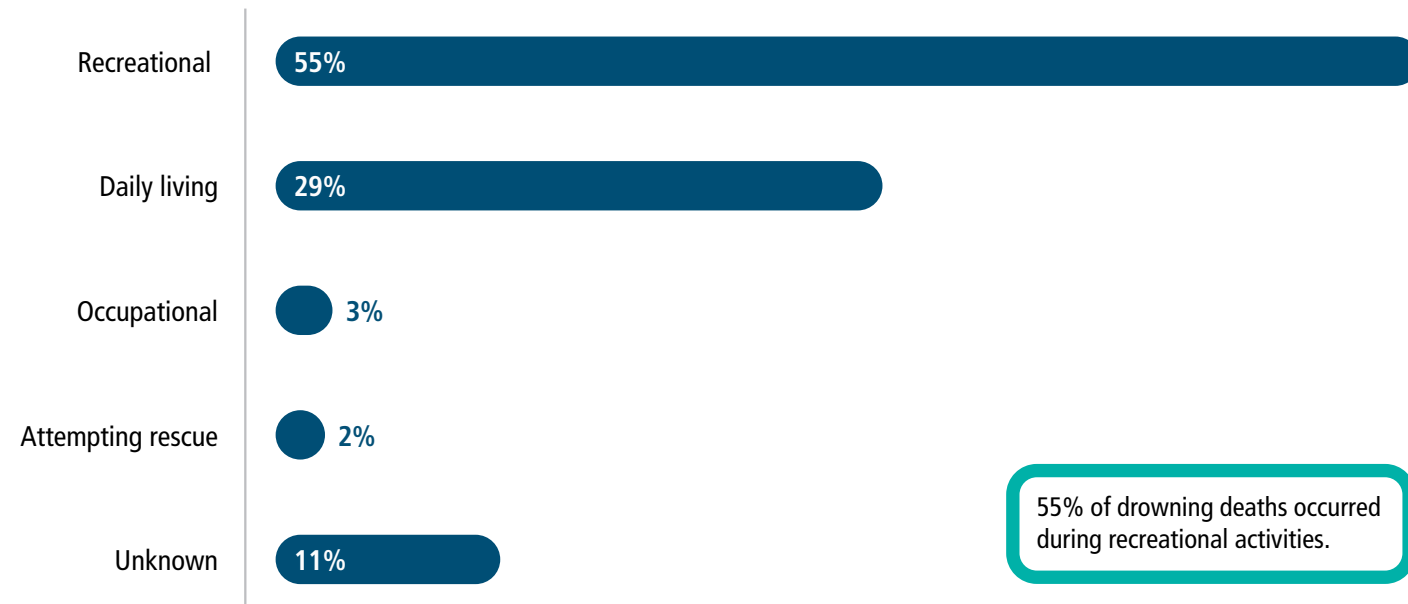
Unintentional water-related deaths by type of activity, 2017–2021



Boating-related deaths were most frequently related to capsizing (41%), followed by falling overboard (29%).

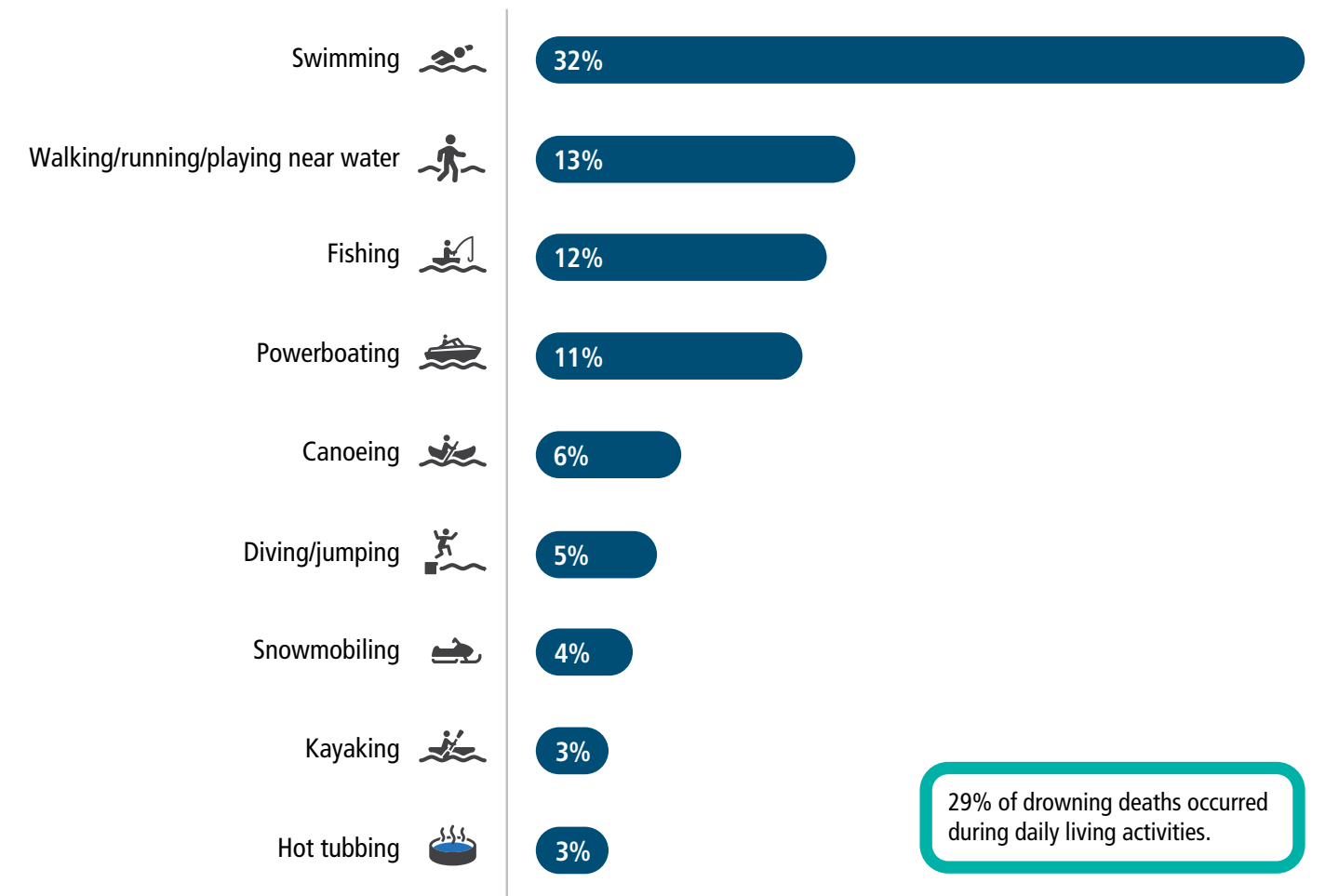
* The person intended to be in the water (e.g., swimming or wading)
 ** Unintentional fall into water (e.g., walking, biking or working near water and falling in)

Unintentional water-related deaths by purpose of activity, 2017–2021



55% of drowning deaths occurred during recreational activities.

Unintentional water-related deaths by most common recreational activity, 2017–2021



29% of drowning deaths occurred during daily living activities.

Unintentional water-related deaths by most common daily living activity, 2017–2021



An average of 10 people died each year while attempting to rescue another person (68%) or animal (32%).
 The most common occupational activities associated with unintentional drowning were fishing (49%) and driving (10%).

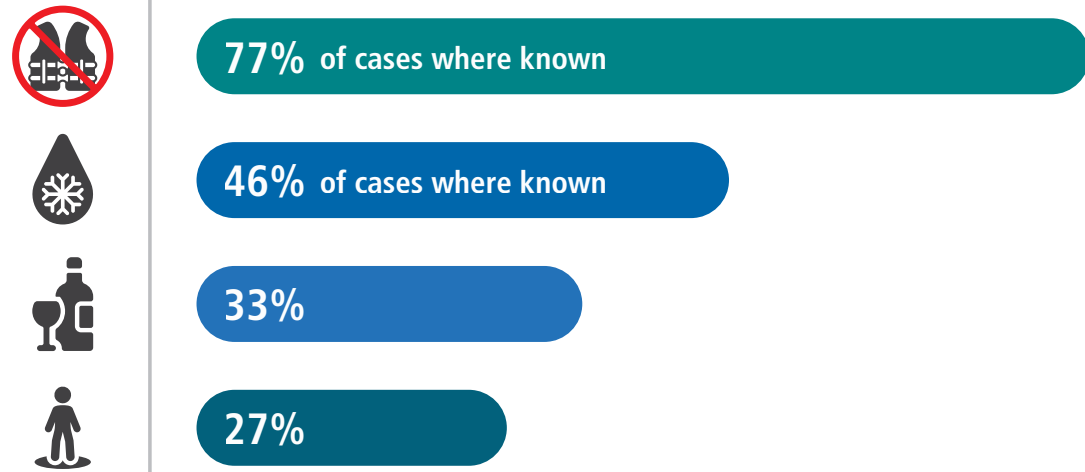
RISK FACTORS



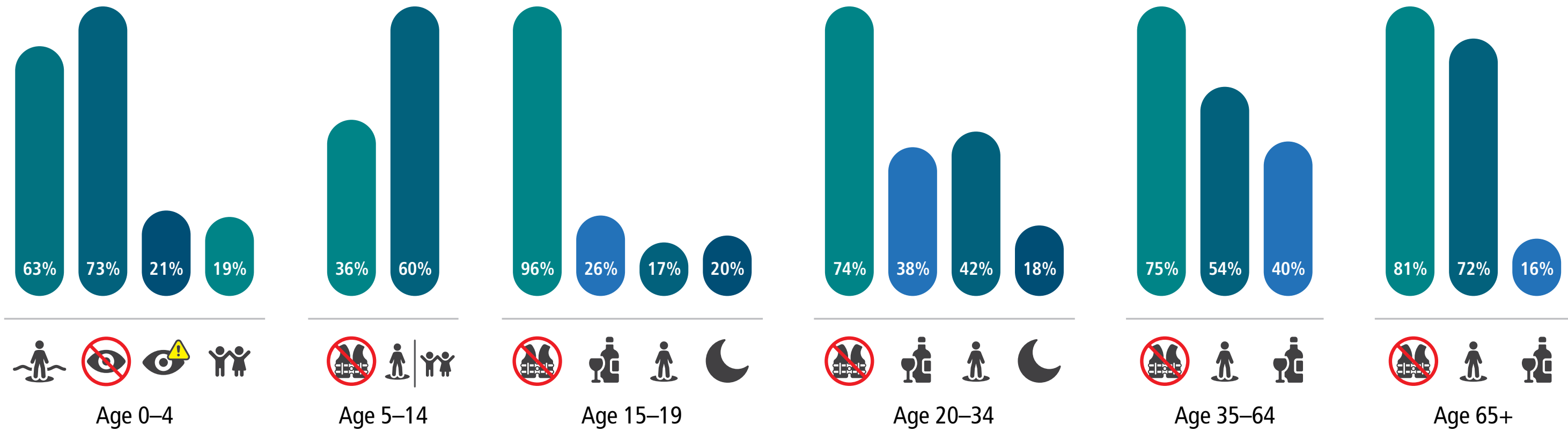
RISK FACTORS

-  Not wearing a lifejacket
-  Weak or non-swimmer
-  Supervision absent
-  Supervision present but distracted
-  Heart disease/sudden cardiac event
-  Cold water
-  Consuming alcohol
-  After dark
-  Alone
-  Alone near water
-  With other minors only

Boating



Swimming



RESEARCH METHODOLOGY

The drowning research process involves data collection, tabulation, and analysis. Water-related death data is extracted from the offices of the Chief Coroners and Medical Examiners in each province and territory. This research:

- Collects the data needed to profile victims of aquatic incidents, including circumstances and contributing factors.
- Includes all deaths in each province and territory 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 contribute to the activity.
- Includes only unintentional deaths. It does not include deaths due to natural causes, suicide, or homicide.

ACKNOWLEDGEMENTS

We gratefully acknowledge the support, cooperation, and efforts of:

- The Chief Coroners’ and the Chief Medical Examiners’ offices in each province and territory, who permitted and facilitated confidential access to the Coroners’ reports on unintentional water-related deaths that provided the base data for this report.
- The volunteers who contributed their time and energy to extract data on preventable water-related deaths from Coroners’ files.

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. More than a million Canadians participate in the Society’s swimming, lifesaving, lifeguard, and leadership training programs every year. The Society sets the standard for aquatic safety in Canada and certifies Canada’s National Lifeguards.



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DROWNING PREVENTION RESEARCH CENTRE CANADA

The Drowning Prevention Research Centre Canada (DPRC) is the lead agency for drowning and water-incident research in Canada. The DPRC conducts research into fatal and non-fatal drowning, significant aquatic injury and rescue interventions. Contact the DPRC by phone 416-490-8844 or email info@dprc-crpn.ca or visit www.dprc-crpn.ca.

