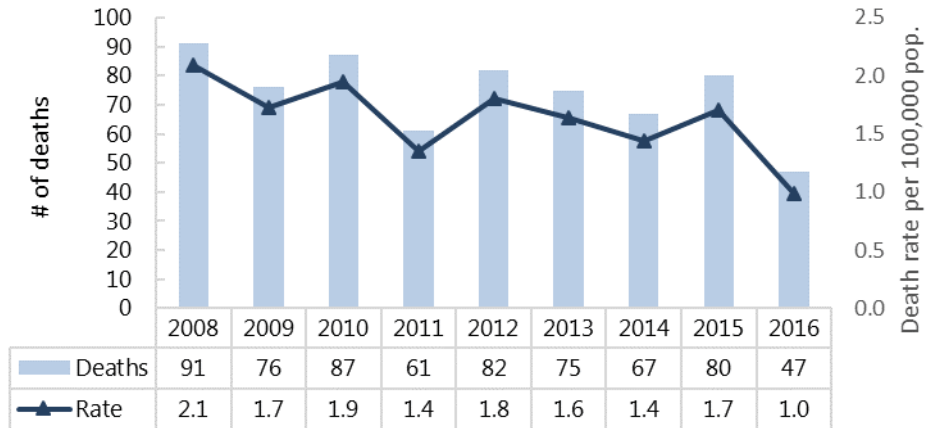


This report summarizes all accidental drowning deaths reported to the BC Coroners Service (BCCS) between January 1, 2008 and December 31, 2016. The data include all deaths where the final cause of death was determined to be drowning and cases still under investigation where preliminary circumstances indicate unintentional drowning.

The BCCS operates in a live database environment. The data are considered preliminary until all investigations are complete. As such, data are subject to change and are not directly comparable to previously published counts. These data were compiled by date of death, which may differ from the date of injury. In some cases, the death may occur months or years subsequent to injury. These statistics may vary from those reported by other agencies due to differences in data definitions or reporting standards.

Summary of 2008-2016 Data

- The crude rate of accidental drowning deaths from 2008 to 2016 was 1.6 per 100,000 population. The lowest rate during this time period was in 2016 (1.0 deaths per 100,000 population). This finding should be interpreted with caution, as cases are still open.
- More than one in three accidental drowning deaths (34.5%) occurred in the Interior Health Authority region.
- Fatal drownings were most common in the summer months, peaking at an average of 13.6 deaths per year in August.
- 79.6% of decedents were male, and 20.4% were female.
- 19-29 year olds accounted for the largest proportion of deaths (23.7%), followed by 50-59 year olds (17.0%).
- Alcohol and/or drugs contributed to 40.1% of drowning deaths between 2008 and 2015.
- Boating (21.8%), swimming (16.8%), and falls into water (16.5%) were the three activities/contexts in which drownings were most likely to occur.
- Most deaths occurred in lakes/ponds (30.9%), rivers/creeks (30.0%), or the ocean (20.3%).
 - The lakes/ponds with the highest number of deaths were Okanagan Lake (24), Shuswap Lake (12), and Kalamalka Lake (10).
 - The Fraser River had the most deaths of any river/creek (32), followed by the Thompson River (11).
- 12.0% of decedents resided outside of British Columbia.

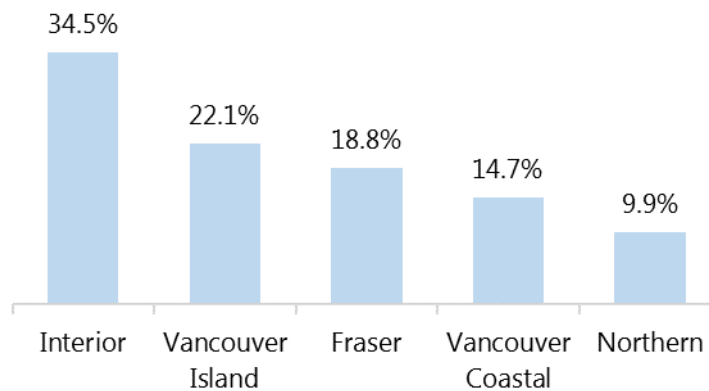


Drowning Deaths, 2008-2016: Crude Rate per 100,000 Population

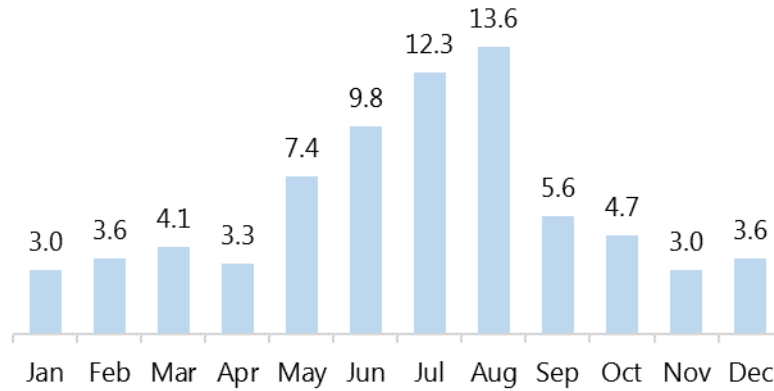
Drowning Deaths by Health Authority of Injury, 2008-2016

Health Authority	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Interior	33	26	34	24	28	27	25	20	13	230
Vancouver Island	22	25	18	14	19	9	10	20	10	147
Fraser	13	10	13	9	12	17	19	18	14	125
Vancouver Coastal	13	11	16	10	10	9	8	15	6	98
Northern	10	4	6	4	13	13	5	7	4	66
Total*	91	76	87	61	82	75	67	80	47	666

*Includes two cases in which injury occurred outside of BC. In these cases, health authority of death was used.



Percentage of Drowning Deaths by Health Authority of Injury, 2008-2016*

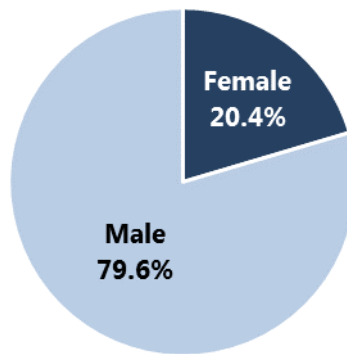


Average Number of Drowning Deaths per Year by Month of Injury, 2008-2016*

*Excludes one case in which month of injury is unknown.

Drowning Deaths by Sex, 2008-2016

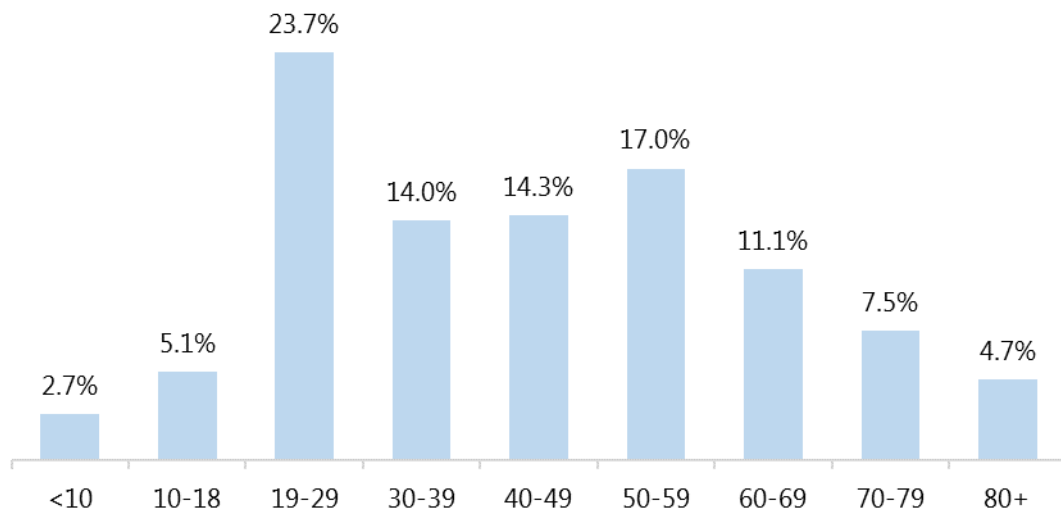
Sex	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Female	14	15	14	13	24	19	14	11	12	136
Male	77	61	73	48	58	56	53	69	35	530
Total	91	76	87	61	82	75	67	80	47	666



Percentage of Drowning Deaths by Sex, 2008-2016

Drowning Deaths by Age Group, 2008-2016

Age Group	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
0-9	2	2	2	-	2	1	3	2	4	18
10-18	5	2	2	1	2	6	4	6	6	34
19-29	23	18	22	16	11	21	15	21	11	158
30-39	14	6	17	12	12	11	9	6	6	93
40-49	12	15	12	9	10	14	7	13	3	95
50-59	13	22	13	10	21	5	8	17	4	113
60-69	10	7	9	5	13	5	10	10	5	74
70-79	7	4	7	4	7	6	7	3	5	50
80+	5	0	3	4	4	6	4	2	3	31
Total	91	76	87	61	82	75	67	80	47	666



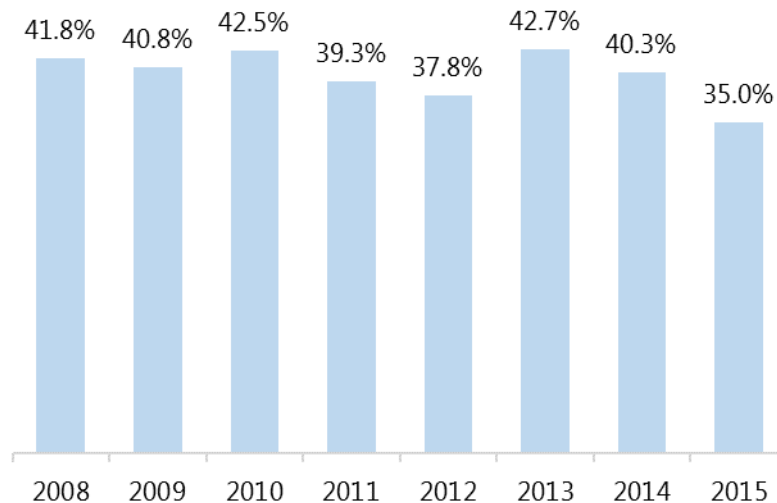
Percentage of Drowning Deaths by Age Group, 2008-2016

Drowning Deaths With Drugs and/or Alcohol Contributing, 2008-2015*

	2008	2009	2010	2011	2012	2013	2014	2015	Total
Alcohol	19	23	25	15	23	20	22	17	164
Drugs	5	3	4	5	4	8	3	4	36
Alcohol & Drugs	14	5	8	4	4	4	2	7	48
Total	38	31	37	24	31	32	27	28	248

*Alcohol/drug data for 2016 are not available as these data require at least one year to settle. Data for recent years are subject to change as investigations are completed.

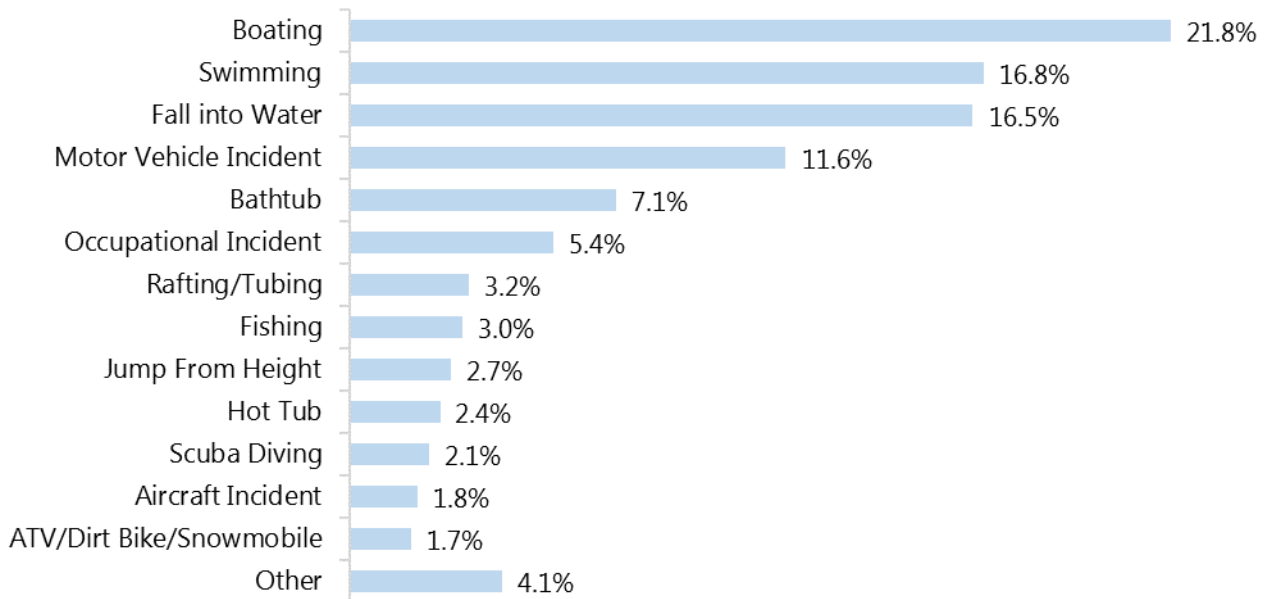
Percentage of Drowning Deaths with Alcohol and/or Drugs Contributing*, 2008-2015



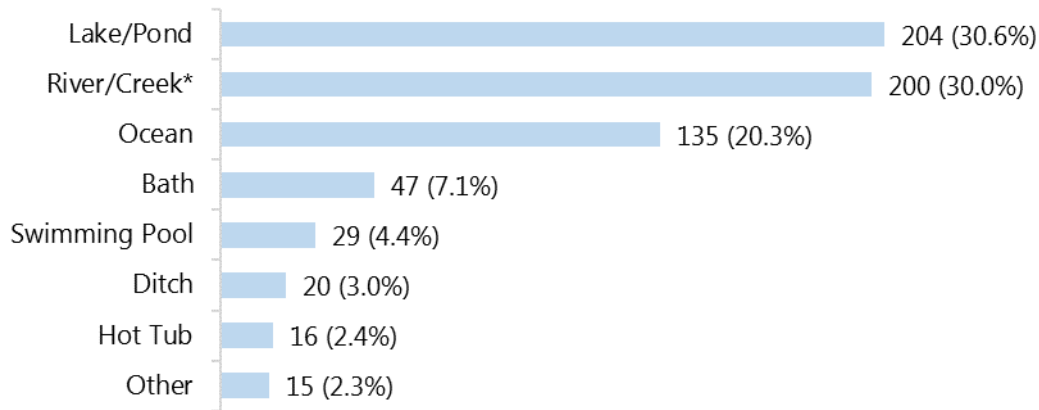
Drowning Deaths by Activity/Context*, 2008-2016

Activity/Context	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Boating	12	18	18	7	18	24	13	26	9	145
Swimming	15	13	13	7	12	19	10	14	9	112
Fall into Water	20	12	13	11	15	8	17	10	4	110
Motor Vehicle Incident	12	9	12	8	9	7	8	9	3	77
Bathtub	5	4	4	8	7	6	4	4	5	47
Occupational Incident	7	3	6	3	4	1	4	6	2	36
Rafting/Tubing	4	2	1	2	4	2	-	4	2	21
Fishing	2	3	6	3	1	-	1	-	4	20
Jump From Height	2	2	2	1	4	1	3	2	1	18
Hot Tub	1	1	2	2	1	2	4	1	2	16
Scuba Diving	-	3	5	2	1	1	-	2	-	14
Aircraft Incident	1	6	2	1	1	1	-	-	-	12
ATV/Dirt Bike/Snowmobile	3	-	1	1	3	1	1	-	1	11
Other	7	-	2	5	2	2	2	2	5	27
Total	91	76	87	61	82	75	67	80	47	666

*See activity definitions (page 9).



Percentage of Drowning Deaths by Activity/Context, 2008-2016



Number and Percentage of Drowning Deaths by Type of Body of Water, 2008-2016

*'River/Creek' includes waterfall incidents.

Deaths by Lake/Pond, 2008-2016*

Lake/Pond	Deaths
Okanagan Lake	24
Shuswap Lake	12
Kalamalka Lake	10
Kootenay Lake	6
Harrison Lake	5
Slocan Lake	5
Skaha Lake	5
Wood Lake	5
Alouette Lake	4
Pitt Lake	3
Sasamat Lake	3
Comox Lake	3
Sugar Lake	3
Cultus Lake	3
Mara Lake	3

*Only includes lakes with 3 or more deaths for 2008-2016.

Deaths by River/Creek, 2008-2016*

River/Creek	Deaths
Fraser River	32
Thompson River	11
Kettle River/Cascade Falls	9
Columbia River	8
Skeena River	7
Shuswap River	6
Similkameen River	6
Cowichan River	5
Lynn Creek	4
Vedder River	4
Cheakamus River	3
Chilliwack River	3
Squamish River	3
Gold Creek Falls	3
Goose Creek	3
Willow River	3

*Only includes rivers with 3 or more deaths for 2008-2016.

Drowning Deaths by Decedent Residence, 2008-2016

Residence	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total	Total %
B.C. Resident	80	59	73	59	76	69	64	64	42	586	88.0%
Out of Province	7	6	8	1	2	6	2	10	3	45	6.8%
Out of Country	4	11	6	1	4	-	1	6	2	35	5.3%
Total	91	76	87	61	82	75	67	80	47	666	100.0%

Activity/Context Definitions

Note: All occupational incidents, regardless of circumstances, are coded as 'Occupational Incident'.

Aircraft Incident

The incident involved powered or unpowered aircraft.

ATV/Dirt Bike/Snowmobile

The incident occurred while riding an ATV, dirt bike, or snowmobile.

Bathtub

The incident occurred in a bathtub.

Boating

The incident involved powered or unpowered watercraft, including personal watercraft (e.g. Jet Skis, Sea-Doos). Includes incidents in which the decedent was fishing from a boat. Excludes incidents involving docked/moored watercraft used for habitation. See also 'Rafting/Tubing'.

Fall Into Water

The decedent unintentionally entered the water while walking near water, playing near water, or climbing above water. This category includes people falling through ice and people falling from docked/moored watercraft used for habitation.

Fishing

The incident occurred when the decedent was fishing from shore, on ice, or in water. Excludes fishing from a boat (see 'Boating').

Hot Tub

The incident occurred in a hot tub.

Jump From Height

The incident involved a deliberate jump into water from a cliff, bridge, or other height.

Motor Vehicle Incident

The drowning resulted from a motor vehicle incident. Includes traffic and non-traffic (i.e. not on public roads) incidents. Excludes ATV, dirt bike, and snowmobile incidents.

Occupational Incident

The decedent was an employee or employer on a worksite.

Rafting/Tubing

The incident occurred while travelling on an inflatable tube, inflatable raft, or paddleboard. Includes white-water rafting.

Scuba Diving

The incident occurred while scuba diving.

Swimming

The incident occurred while swimming, wading, or playing in water; or the incident occurred while attempting to retrieve an object or rescue another individual from the water. Includes jumps into water from boats, shore, and other structures for which height is not a factor in the activity. Excludes cases where entry to water occurred in the context of another activity; e.g. jumping from a capsizing boat to swim to shore.

Other

The circumstances of the incident are unknown or the activity/context does not fit any of the categories above.