Accidental Drowning Deaths 2013-2023

This report summarizes all accidental drowning deaths reported to the BC Coroners Service (BCCS) between January 1, 2013, and December 31, 2023. The data include all deaths where the cause of death was determined to be accidental drowning or where preliminary circumstances indicate accidental drowning. An accidental death is defined as a death due to unintentional or unexpected injury, including death resulting from complications reasonably attributed to the drowning accident.

Caveats: As the BCCS operates in a live database environment, the data are considered preliminary and subject to change. 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 after injury. These statistics may vary from those reported by other agencies because of differences in data definitions or reporting standards.

While alcohol and/or drugs are identified as contributory factors in this report, other factors may also contribute (i.e., swimming experience, weather conditions, etc.). These potential additional contributors are not accounted for in this report and will be included in a future release.

Summary:

- In 2023, there were 101 accidental drowning deaths, equating to a rate of 1.8 deaths per 100,000 population (*Fig. 1*).
- From 2013-2023, the average annual number of drowning deaths was 78 and the average annual rate was 1.5 per 100,000 population.
- Fatal drownings were most common in the summer months, peaking at an average of 13.1 deaths per year in July (Fig. 2).
- Most decedents were male (79%) (Fig. 3).
- Individuals aged 19-29 accounted for 20% of the deaths, followed by individuals aged 50-59 (16%) and those aged 70 and above (16%) (Fig. 4).
- Most individuals were known to have resided in B.C. (89%) (Fig. 4).
- Thirty percent of all accidental drowning deaths occurred in the Interior Health Authority region (Fig. 6).
- Most deaths occurred in rivers/creeks (28%) and lakes/ponds (28%) (Fig. 7).
 - The Fraser River (51 deaths) had the most deaths of any river/creek, followed by the Thompson River (9 deaths) and Columbia River (8 deaths) (*Table 6*).
 - The lakes/ponds with the highest number of deaths were Okanagan Lake (29 deaths), Harrison Lake (12 deaths), and Shuswap Lake (9 deaths) (*Table 7*).
- The most common activities/contexts associated with drowning deaths were boating (18%), fall into water (18%), and swimming (18%) (Fig. 8).
- Between 2013 and 2022, alcohol and/or drugs were found to be a contributing factor in 39% of drowning deaths (*Table 9*).
 - **Note:** There may be more than one contributing factor to an incident. Alcohol/drug contribution is determined by the coroner as relevant to the death when investigations conclude and is therefore only provided for closed investigations. Alcohol/drug data 2023 are not currently available.

• Between 2013 and 2022, alcohol and/or drugs involvement were reported in more than half of the drowning deaths of individuals aged 30-39 (52%) (Fig. 9).

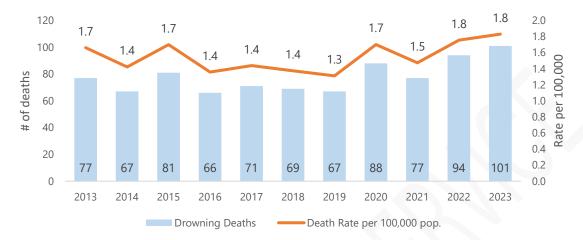


Fig. 1. Drowning Deaths and Death Rate per 100,000 Population, 2013-2023^[1]

Table 1. Dro	Table 1. Drowning Deaths by Month, 2013-2023													
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023			
January	4	5	1	6	5	4	5	5	4	5	6			
February	3	3	3	3	1	3	2	6	7	3	5			
March	10	1	4	3	2	6	6	5	4	5	6			
April	6	3	4	2	11	3	2	7	3	7	7			
May	12	6	4	2	6	10	6	7	7	6	13			
June	4	12	7	8	10	13	6	12	11	11	8			
July	13	8	14	16	16	10	9	12	13	15	18			
August	8	9	15	11	5	6	15	13	8	17	12			
September	5	7	14	3	5	5	6	4	8	8	8			
October	4	7	9	3	3	3	3	7	6	6	5			
November	6	4	2	4	4	0	3	4	2	5	6			
December	2	2	4	5	3	6	4	6	4	6	7			
Total	77	67	81	66	71	69	67	88	77	94	101			

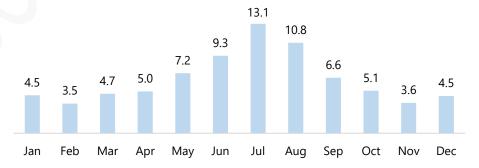


Fig. 2. Average Annual Drowning Deaths by Month, 2013-2023

Table 2.	Table 2. Drowning Deaths by Sex, 2013-2023												
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
Female	19	13	11	19	14	16	15	16	15	17	27		
Male	58	54	70	47	57	53	52	72	62	77	74		
Total	77	67	81	66	71	69	67	88	77	94	101		

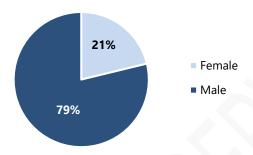


Fig. 3. Drowning Deaths by Sex, 2013-2023

Table 3	Table 3. Drowning Deaths by Age Group, 2013-2023													
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023			
<19	7	7	9	11	6	4	8	2	1	1	6			
19-29	21	15	22	13	15	14	17	22	13	11	8			
30-39	11	9	5	8	13	6	8	19	12	11	14			
40-49	14	6	12	9	12	9	8	7	12	13	13			
50-59	5	8	17	7	9	16	8	15	12	18	19			
60-69	7	10	10	8	11	11	6	12	13	17	19			
70+	12	12	6	10	5	9	12	11	14	23	22			
Total	77	67	81	66	71	69	67	88	77	94	101			

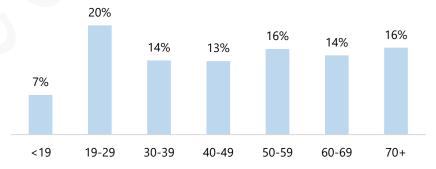


Fig. 4. Drowning Deaths by Age Group, 2013-2023

Table 4. Drowning Deaths by Decedent Residence, 2013-2023												
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
British Columbia	71	64	64	60	60	60	57	77	73	87	94	
Out of Province/Country	6	3	17	6	11	9	10	11	4	7	7	
Total	77	67	81	66	71	69	67	88	77	94	101	

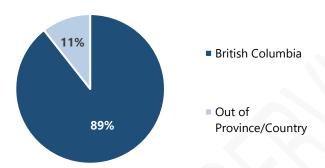


Fig. 5. Drowning Deaths by Decedent Residence, 2013-2023

Table 5. Drowning Deaths by Health Authority of Injury, 2013-2023 ^[2,3]												
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Interior	27	25	20	14	30	16	24	23	23	32	24	
Fraser	17	19	20	20	15	21	11	16	17	16	20	
Van. Coastal	11	8	15	9	10	12	11	20	16	15	19	
Island	9	10	19	14	14	18	12	18	15	23	32	
Northern	13	5	7	9	2	2	9	11	6	8	6	
Total	77	67	81	66	71	69	67	88	77	94	101	

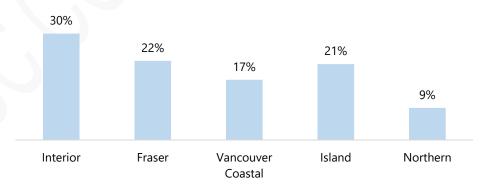


Fig. 6. Drowning Deaths by Health Authority of Injury, 2013-2023^[2,3]

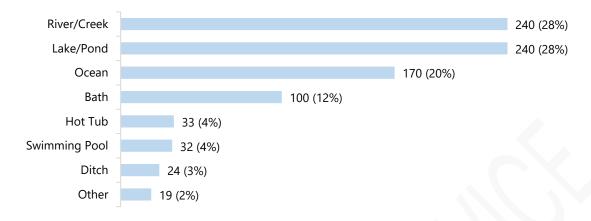


Fig. 7. Number and Percent of Drowning Deaths by Type of Body of Water, 2013-2023 <u>Note:</u> 'River/Creek' includes waterfall incidents.

Table 6. Drowning Deaths 2013-2023	by Top River/Creek,
	Deaths
Fraser River	51
Thompson River	9
Columbia River	8
Similkameen River	6
Skeena River	6
Cowichan River	5
Gold Creek Falls	5
Kootenay River	5

^{*}Includes locations with five or more deaths.

Table 7. Drowning Death 2013-2023	s by Top Lake/Pond,
	Deaths
Okanagan Lake	29
Harrison Lake	12
Shuswap Lake	9
Kalamalka Lake	8
Alouette Lake	6
Kootenay Lake	5
Mara Lake	5
Osoyoos Lake	5

^{*}Includes locations with five or more deaths.

Table 8. Drowning Deaths by Activity/Context, 2013-2023												
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Boating	24	13	25	8	10	10	9	14	13	16	16	
Fall into Water	8	17	11	10	11	21	6	15	15	22	19	
Swimming	19	10	15	10	12	11	11	19	13	16	16	
Other Aquatic Activity	7	8	9	11	11	9	14	9	14	8	15	
Bathing	6	4	4	10	5	6	9	10	13	13	20	
Land, ice or air transport	9	9	9	9	14	9	9	11	5	7	5	
Other/Unknown	2	2	3	6	4	1	7	7	3	10	8	
Occupational Incident	2	4	5	2	4	2	2	3	1	2	2	
Total	77	67	81	66	71	69	67	88	77	94	101	

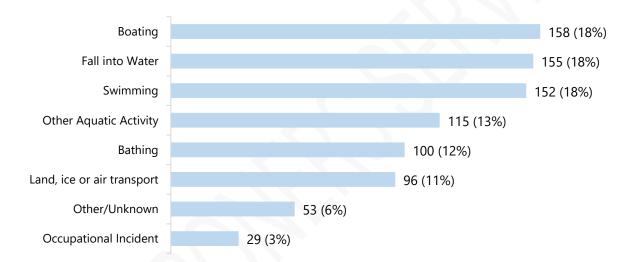


Fig. 8. Drowning Deaths by Type of Body of Water, 2013-2023 * *Refer to Appendix for definitions*.

Table 9. Drowning Deaths Involving Alcohol and/or Drugs, 2013-2022												
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
Alcohol	20	22	20	15	16	20	10	14	11	12		
Alcohol & Drugs	4	2	9	4	2	3	3	3	5	5		
Drugs	8	3	5	7	3	1	5	8	10	6		
Total Alcohol and/or Drugs	32	27	34	26	21	24	18	25	26	23		
% of Total Drowning Deaths	42%	40%	42%	39%	32%	41%	31%	37%	50%	34%		

Note: There may be more than one contributing factor to an incident. Alcohol/drug contribution is determined by the coroner as relevant to the death when investigations conclude, thus data is only available for closed investigations. Alcohol/drug data for 2023 are not currently available.

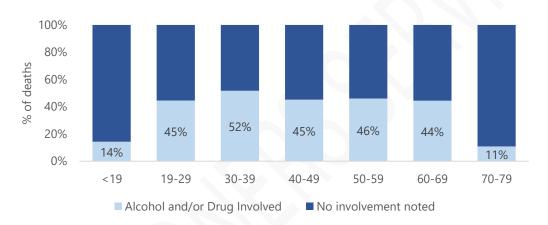


Fig. 9. Drowning Deaths with Drugs and/or Alcohol Involvement by Age Group, 2013-2022

Note: There may be more than one contributing factor to an incident. Alcohol/drug contribution is determined by the coroner as relevant to the death when investigations conclude, thus data is only available for closed investigations. Alcohol/drug data for 2023 are not currently available.

Activity/Context Definitions

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

Bathing

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 'Fall into Water').

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.

Land, Ice or Air Transportation

The drowning resulted from a motor vehicle incident, ATV, dirt bike, or snowmobile incidents.

Occupational Incident

The decedent was an employee or employer on a worksite.

Other Aquatic Activity

The incident occurred while the decedent was participating in a water-related activity such using the hot tub, rafting/tubing, scuba diving, or jumping from height into water. Includes fishing from shore, on ice, or in water. Excludes boating (see 'Boating') and swimming (see 'Swimming').

Other/Unknown

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

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 deaths where entry to water occurred in the context of another activity (e.g., jumping from a capsizing boat to swim to shore).

Notes

- 1. Population estimates were taken from https://www2.gov.bc.ca/gov/content/data/statistics/people-population-community/population/population-estimates
- 2. Health Region breakdowns can be found at: https://www2.gov.bc.ca/gov/content/data/geographic-data-services/land-use/administrative-boundaries/health-boundaries
- 3. Health authority is derived from injury township. Death township is used in cases of unknown or out-of-province injury township.