

Table S12: Marine Occurrences, 2019-2023

						2019-2023 average
Canadian Vessels	2019	2020	2021	2022	2023	
Accidents	217	224	180	205	186	202.4
Shipping Accidents	165	187	145	169	161	165.4
Abandoned	0	0	1	0	0	0.2
Capsizes	9	2	4	9	3	5.4
Collision	15	25	13	21	28	20.4
Explosion	1	1	2	0	1	1.0
Fire	24	35	36	31	29	31.0
Grounding	44	43	31	45	42	41.0
Missing	0	1	2	0	1	0.8
Sank	18	21	21	28	16	20.8
Striking	36	47	25	26	23	31.4
Sustains Damage Render Unseaworthy/Unfit For Purpose	18	12	10	9	18	13.4
Accident Aboard Ship	52	37	35	36	25	37.0
Fatalities	15	18	11	7	17	13.6
Shipping Accident	8	14	9	2	9	8.4
Accident Aboard Ship	7	4	2	5	8	5.2
Injuries	48	35	35	34	27	35.8
Shipping Accident	9	2	5	7	6	5.8
Accident Aboard Ship	39	33	30	27	21	30.0
Type of Vessels Involved in Shipping Accidents (by Vessel Category)	165	187	145	169	161	165.4
Commercial	104	104	84	98	90	96.0
Barge	12	14	9	13	6	10.8
Cargo - Liquid	3	4	3	2	2	2.8
Cargo - Solid	23	27	12	14	16	18.4
Ferry	17	13	14	19	14	15.4
Passenger	15	6	6	10	5	8.4
Survey/Research	2	1	2	0	3	1.6
Service Ship	19	17	14	22	25	19.4
Ships boat	5	4	5	6	4	4.8
Tug	6	18	16	10	14	12.8
Sailing Vessel	0	0	0	0	0	0.0
Other	2	0	3	2	1	1.6
Fishing	57	72	48	62	53	58.4
Non-commercial	4	11	13	9	18	11.0
Commercial Accident Rate						
Commercial vessel accidents (>15 GT, Canadian, non-fishing, non-passenger)	91	96	62	82	83	82.8

2019-2023

average

<i>Canadian Vessels</i>	2019	2020	2021	2022	2023	
Million vessel-kms	12.5	11.7	10.8	14.2	14.4	12.7
Accident Rate/million vessel-kms	7.3	8.2	5.7	5.8	5.8	6.6
Vessel transits	70,087	59,688	59,282	76,317	75,996	68274.0
Accident Rate/thousand vessel trips	1.3	1.6	1.0	1.1	1.1	1.2
Vessels Lost	9	14	12	13	13	12.2
Commercial	3	1	3	2	4	2.6
Fishing	6	13	7	8	9	8.6
Non-Commercial			2	3	0	1.7
Incident	730	684	670	752	613	689.8
<i>Foreign Vessels</i>						
Accidents	54	40	41	39	51	45.0
Shipping Accident	43	35	33	31	38	36.0
Accident Aboard Ship	11	5	8	8	13	9.0
Type of Vessels Involved in Shipping Accidents (by Vessel Category)	43	35	33	31	38	36.0
Commercial	39	33	30	31	36	33.8
Fishing	3	2	3	0	2	2.0
Non-commercial	1	0	0	0	0	0.2
Fatalities	2	0	0	0	1	0.6
Shipping Accident	0	0	0	0	1	0.2
Accident Aboard Ship	2	0	0	0	0	0.4
Injuries	9	6	10	7	12	8.8
Shipping Accident	1	0	0	0	0	0.2
Accident Aboard Ship	8	6	10	7	12	8.6
Vessels Lost	0	0	2	0	0	0.4
Incident	215	241	186	216	181	207.8
<i>Total Marine Occurrences</i>						
Accidents	271	264	221	244	237	247.4
Shipping Accident	208	222	178	200	199	201.4
Accident Aboard Ship	63	42	43	44	38	46.0
Fatalities	17	18	11	7	18	14.2
Injuries	57	41	45	41	39	44.6
Vessels Involved in Shipping Accidents	233	261	202	235	229	232.0
Vessels Lost	9	14	14	13	13	12.6
Incidents (Mandatory reporting)	945	925	856	968	794	897.6

Notes and Sources

Notes: R= Revised data. P= Preliminary data. GT = Gross tons.

Transport Canada (TC) adopted an adjusted methodology to generate the summary table above.

As of 2021, category "Type of Vessels Involved in Shipping Accidents (by Vessel Category)" represents the number of occurrences, not the number of vessels involved.

The term "Commercial" includes all the activities in Transportation Safety Board's (TSB's) MARSIS database (under "Primary Activity Category") except "Government - General", "Not Engaged in Commercial Act", "Fishing" and "Unknown."

The term "Fishing" includes "Fishing" and "Unknown" categories in TSB's MARSIS ("Primary Activity Category").

Transits are based on fused terrestrial and satellite Automatic Identification System (AIS) data processed and analyzed by Transport Canada. The number of transits were only counted for the 17 Canadian Port Authorities.

The number of kilometers sailed are based on fused terrestrial and satellite Automatic Identification System (AIS) data processed and analyzed by Transport Canada. Nautical miles sailed were computed for vessels travelling within the limit of 12 nautical miles (nm) territorial sea and converted to Kilometers using a factor of 1.852. Data is not comparable to previous editions because of changes in sources and concepts.

The Accident Rate is calculated for shipping accidents of Canadian commercial vessels (excluding all fishing, passenger, and pleasure vessels and all vessels under 15 gross tonnage), as vessel activity is captured for these vessel sizes only.

TC's commercial accident rate differs slightly from the TSB's rate due to the capture of passenger vessels data by TC.

As of 2021 only serious injuries are counted.

All definitions can be found in the TSB annual report. <https://www.tsb.gc.ca/eng/stats/marine/2021/sssem-ssmo-2021.html>

When the vessel flag was "unknown", "n/a", or not reported ("blank") it was assumed that the vessel was Canadian.

Source: Transportation Safety Board, Transport Canada, Canadian Coast Guard, Automated Information System (AIS)