

Canadian Motor Vehicle Traffic Collision Statistics: 2022

Collected in cooperation with the Canadian Council of Motor Transport Administrators

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Introduction

Transport Canada's National Collision Database (NCDB) contains data on all reportable motor vehicle collisions in Canada that the provinces and territories provide each year.

The federal, provincial, and territorial governments in Canada work to improve road safety to reduce the number of fatalities and serious injuries and to have the safest roads in the world. The year 2022 saw increases in the number of fatalities, serious injuries, and in the number of total injuries. The 1,931 fatalities in 2022 marked the second highest count in the past 10 years (2013 had 1,951 fatalities), whereas the serious injuries and total injuries were the 3rd lowest in the past decade (only 2020 and 2021 were lower); each injury count is still among the lowest since these data were first collected by Transport Canada in the early 1970's.

- In 2022, the number of motor vehicle fatalities was 1,931; up 6.0% from 2021 (1,821), and was the second highest count in the last 10 years.
- The number of serious injuries increased to 8,851 in 2022; up 8.1% from 2021 (8,185).
- The number of total injuries increased to 118,853 in 2022; up 9.5% from 2021 (108,552).
- The number of fatalities per 100,000 population increased to 5.0 in 2022 (from 4.8 in 2021).
- The number of fatalities per billion vehicle kilometres travelled increased to 4.7 in 2022 (from 4.4 in 2021)
- 2022 saw a small decrease in the percentage of passengers that were killed who were not wearing seatbelts, whereas drivers saw a small increase; The percentage of both passengers and drivers that were seriously injured who were unbelted went down. For example, 17.2% of passenger serious injuries were not wearing seatbelts, compared to 21.3% in 2021, which equates to a 19% decrease.

Collisions and Casualties - 2003-2022

Year	Collisions		Victims		
	Fatal ¹	Personal Injury ²	Fatalities ³	Serious Injuries ⁴	Injuries ⁵ (Total)
2003	2,487	150,493	2,777	15,110	216,123
2004	2,438	145,150	2,735	15,572	206,104
2005	2,551	145,559	2,898	15,792	204,701
2006	2,586	142,517	2,871	16,044	199,976
2007	2,455	138,615	2,753	14,410	192,745
2008	2,193	127,571	2,431	12,851	176,394
2009	2,007	123,449	2,216	11,955	170,770
2010	2,021	123,615	2,238	11,796	172,081
2011	1,849	122,350	2,023	10,940	167,741
2012	1,848	122,834	2,075	11,104	166,727
2013	1,772	120,371	1,951	10,662	164,525
2014	1,675	114,617	1,841	10,445	156,557
2015	1,693	117,857	1,887	10,835	160,806
2016	1,738	116,583	1,900	10,573	158,854
2017	1,698	112,714	1,861	10,104	152,773
2018	1,754	109,580	1,930	9,463	149,065
2019	1,620	103,020	1,761	8,917	139,084
2020	1,602	78,388	1,711	7,868	104,286
2021	1,628	81,962	1,821	8,185	108,552

Year	Collisions		Victims		
	Fatal ¹	Personal Injury ²	Fatalities ³	Serious Injuries ⁴	Injuries ⁵ (Total)
2022	1,746	89,787	1,931	8,851	118,853

1 "Fatal collisions" include all reported motor vehicle crashes that resulted in at least one death, where death occurred within 30 days of the collision, except in Quebec before 2007 (eight days).

2 "Personal injury collisions" include all reported motor vehicle crashes which resulted in at least one injury but not death within 30 days of the collision, except in Quebec before 2007 (eight days).

3 "Fatalities" include all those who died as a result of a reported traffic collision within 30 days of its occurrence, except in Quebec before 2007 (eight days).

4 "Serious Injuries" include persons admitted to hospital for treatment or observation. Serious injuries were estimated because several jurisdictions under-reported these numbers.

5 "Total Injuries" include all reported severities of injuries ranging from minimal to serious.

Fatalities and Injuries by Age Group - 2022

Age Group (yrs)	Fatalities	Serious Injuries	Injuries (Total)
0 - 4	9	85	1,410
5 - 14	35	285	4,503
15 - 19	120	709	9,897
20 - 24	175	901	12,560
25 - 34	323	1,624	22,614
35 - 44	263	1,343	18,866
45 - 54	237	1,269	16,324
55 - 64	316	1,185	14,553
65 +	435	1,345	14,480
Not stated	18	105	3,646
Total	1,931	8,851	118,853

Fatalities by Road User Class 2018-2022

Road User Class		2018	2019	2020	2021	2022
Drivers	#	941	869	847	906	952
	%	48.8	49.3	49.5	49.8	49.3
Passengers	#	337	305	266	271	316
	%	17.5	17.3	15.5	14.9	16.4
Pedestrians	#	351	309	268	314	294
	%	18.2	17.5	15.7	17.2	15.2
Bicyclists	#	48	43	51	42	46
	%	2.5	2.4	3.0	2.3	2.4
Motorcyclists *	#	207	196	249	236	258
	%	10.7	11.1	14.6	13.0	13.4
Not stated/Other	#	46	39	30	52	65
	%	2.4	2.2	1.8	2.9	3.4
<hr/> * Includes moped riders. <hr/>						

Road User Class		2018	2019	2020	2021	2022
Total	#	1,930	1,761	1,711	1,821	1,931
	%	100.0	100.0	100.0	100.0	100.0
<hr/> * Includes moped riders. <hr/>						

Fatalities 2003-2022

Year	Fatalities
2003	2,777
2004	2,735
2005	2,898
2006	2,871
2007	2,753
2008	2,431
2009	2,216
2010	2,238
2011	2,023
2012	2,075
2013	1,951
2014	1,841
2015	1,887

Year	Fatalities
2016	1,900
2017	1,861
2018	1,930
2019	1,761
2020	1,711
2021	1,821
2022	1,931

Fatality Rate (per 10,000 motor vehicles registered)

Year	Fatality Rate
2003	1.47
2004	1.43
2005	1.50
2006	1.43
2007	1.34
2008	1.15
2009	1.04
2010	1.02
2011	0.91
2012	0.93
2013	0.85
2014	0.78
2015	0.79
2016	0.78
2017	0.76
2018	0.77
2019	0.69
2020	0.66
2021	0.69
2022	0.73

Casualty Rates - 2022

	Per 100,000 Population ¹		Per Billion Vehicle-Kilometres ²		Per 100,000 Licensed Drivers	
	Fatalities	Injuries	Fatalities	Injuries	Fatalities	Injuries
Canada	5.0	305.2	4.7	286.5	6.9	424.1
NL	6.6	400.7	7.0	423.0	8.9	539.1
PE	10.8	297.9	10.8	297.5	14.1	389.2
NS	6.9	492.1	5.9	415.8	9.0	636.9
NB	6.2	331.5	5.7	308.4	9.0	484.3
QC	4.5	331.1	4.7	345.4	6.6	484.9
ON	4.0	235.5	3.9	229.6	5.4	319.4
MB	5.5	532.8	4.3	411.0	8.1	786.4
SK	8.8	487.6	6.7	368.9	12.3	681.3
AB	6.1	394.5	4.3	277.8	8.1	523.9
BC	5.6	238.2	6.1	257.1	7.9	334.5
YT	4.6	425.9	2.5	237.1	5.8	546.3
NT	2.2	185.7	2.1	173.0	3.8	313.6
NU	2.5	39.5	21.6	345.3	9.2	146.7

	Per 100,000 Population ¹		Per Billion Vehicle-Kilometres ²		Per 100,000 Licensed Drivers	
	Fatalities	Injuries	Fatalities	Injuries	Fatalities	Injuries

1 Statistics Canada, Annual Demographic Estimates: Canada, Provinces and Territories, 2023, Catalogue No. 91-215-X.

2 Transport Canada calculations and estimates using an econometric model.



Notes: Data for Ontario and Alberta are preliminary for 2022. Data for New Brunswick were estimated. Changes in how traffic collision reports are collected in Manitoba resulted in an increased number of injuries of a minimal nature being captured in 2022.

Newfoundland and Labrador data reflects information contained in the Vehicle Collision Reports received and processed as of June 1, 2023.

Rate-based data in smaller jurisdictions have a high level of fluctuation due to their small sample size.

Percentage of Fatalities and Serious Injuries by Road User Class - 2022

Road User Class	Fatalities	Serious Injuries
Drivers	49.3	47.3
Passengers	16.4	17.0
Pedestrians	15.2	14.8
Bicyclists	2.4	4.7
Motorcyclists *	13.4	13.4
Not Stated/Other	3.4	2.7
Total	100.0	100.0
<hr/> <p>* Includes moped riders.</p> <hr/>		

Percentage of Driver and Passenger Fatalities and Serious Injuries Where Victims Were Not Using Seat Belts 2018-2022

	2018	2019	2020	2021	2022
Drivers					
Fatalities	29.4	25.6	33.2	28.6	29.1
Serious Injuries	10.8	10.3	13.1	12.5	10.3
Passengers					
Fatalities	32.1	29.8	39.2	35.6	34.7
Serious Injuries	18.4	13.3	21.2	21.3	17.2



Note: "Serious Injuries" include victims admitted to hospital for treatment or observation.

Number of Collisions By Location - 2022

Location	Fatal	Personal Injury
Urban ¹	800	65,061
Rural ²	910	22,320
Not stated	36	2,406
Total	1,746	89,787

¹ Urban includes:
(a) metropolitan roads and streets and other urban areas, or
(b) a speed limit at the collision site of 60 km/h or less.

² Rural includes:
(a) primary or secondary highways, as well as local roads, or
(b) a speed limit at the collision site exceeding 60 km/h.



Note: In Alberta, New Brunswick, Manitoba, and Saskatchewan, "urban" includes any area within the corporate boundaries of a city, town, village or hamlet. "Rural" includes any area outside of what is defined as "Urban".

Percentage of Driver and Passenger Fatalities and Serious Injuries by Age Group - 2022

Age Group (yrs)	Fatalities		Serious Injuries	
	Drivers	Passengers	Drivers	Passengers
0 - 4	0.0	0.9	0.0	3.5
5 - 14	0.1	6.5	0.1	7.2
15 - 19	5.2	11.1	6.6	13.6
20 - 24	8.5	13.2	10.3	12.2
25 - 34	18.0	15.4	19.8	16.1
35 - 44	16.0	8.3	16.9	12.0
45 - 54	13.4	8.9	16.3	9.3
55 - 64	16.9	15.4	14.5	9.6
65 +	22.0	17.5	15.4	13.6
Not Stated	0.1	2.8	0.1	2.8
Total	100.0	100.0	100.0	100.0

Number of Licensed Drivers by Gender and by Age - 2022

Age Group (yrs)	Males	Females	Other Gender *	Total
< 16	33,012	27,991	23	61,027
16 - 19	622,977	568,450	98	1,191,525
20 - 24	1,083,220	948,268	210	2,031,698
25 - 34	2,556,441	2,363,975	525	4,920,941
35 - 44	2,481,740	2,397,912	187	4,879,839
45 - 54	2,271,100	2,195,064	73	4,466,237
55 - 64	2,411,470	2,306,572	26	4,718,067
65 +	2,964,051	2,789,090	15	5,753,157
Not Stated	2,876	1,860	17	4,753
Total	14,426,887	13,599,183	1,174	28,027,245

* - 2 of the jurisdictions reported this category

Licensed Drivers and Motor Vehicle Registrations by Type of Vehicle 2003-2022 (in thousands)

Year	Licensed Drivers	Light-Duty Vehicles	Commercial Vehicles	Motorcycles
2003	21,436	17,755	740	373
2004	21,673	17,920	752	409
2005	21,937	18,124	786	443
2006	22,278	18,739	841	485
2007	22,606	19,199	872	522
2008	22,972	19,613	907	567
2009	23,198	19,877	915	595
2010	23,541	20,268	964	616
2011	23,831	20,608	1,008	631
2012	24,147	20,652	1,053	661
2013	24,630	21,262	1,072	672
2014	24,914	21,730	1,121	688
2015	25,273	22,068	1,147	709
2016	25,580	22,410	1,144	716
2017	26,004	22,724	1,165	730
2018	26,583	23,099	1,205	739
2019	26,746	23,447	1,231	748

Source: the motor vehicle registration data are from Statistics Canada, CANSIM, Table 405-0004.

The licensed driver data were provided by each jurisdiction.

Year	Licensed Drivers	Light-Duty Vehicles	Commercial Vehicles	Motorcycles
2020	26,971	23,748	1,247	749
2021	27,498	24,097	1,310	816
2022	28,027	24,122	1,351	830

Source: the motor vehicle registration data are from Statistics Canada, CANSIM, Table 405-0004.

The licensed driver data were provided by each jurisdiction.

Fatalities In Commercial Vehicle Collisions by User Type - 2018 to 2022

Road User Class	2018	2019	2020	2021	2022
Straight Truck (> 4,536 kg) Occupants	24	16	17	16	25
Tractor-Trailer Occupants	30	31	30	30	31
School Bus Occupants	2	0	0	2	0
Urban Transit Bus (City/Local) Occupants	1	0	0	0	1
Inter-City Bus (Motorcoach) Occupants	17	0	0	1	5
Passenger Vehicles	218	234	179	226	174
Pedestrians	53	50	47	41	47
Bicyclists	10	10	11	10	8
Motorcyclists**	12	16	23	14	9
Other	7	7	10	7	86
Total Fatalities in CMV * Collisions	373	364	317	347	386
Fatalities In All Other Collisions	1,557	1,397	1,394	1,474	1,545
Total Fatalities in All Collisions	1,930	1,761	1,711	1,821	1,931

* Commercial Vehicles (CMV) include heavy trucks and all bus types

** Includes moped riders



Note: These data were estimated using submissions from a subset of Canada's provinces and territories.

Contributing Factors in Fatal Collisions - 2018 to 2022

Contributing Factor *	2018	2019	2020	2021	2022
Distraction	20.8%	20.6%	20.1%	22.2%	19.9%
Speed / Driving too Fast	24.0%	23.5%	25.1%	26.2%	21.9%
Impaired / Under the Influence	27.2%	23.2%	25.5%	24.7%	23.0%
Fatigue	3.4%	4.0%	2.5%	3.4%	2.8%
Other Human Factor	65.3%	66.4%	62.4%	68.3%	67.0%
Environmental Factor	23.4%	22.3%	20.0%	21.0%	21.9%
Vehicle Factor	3.2%	4.6%	4.1%	3.2%	3.5%
No Contributing Factors	24.2%	25.4%	22.4%	28.8%	25.2%

*
_ There will be double counting because there are multiple contributing factors reported for most collisions



Note: These data were estimated using submissions from a subset of Canada's provinces and territories.

To find out more about national road safety programs or initiatives, call Transport Canada toll free at 1-800-333-0371 or e-mail us at mvs-sa@tc.gc.ca.

You can also visit our web site at <https://tc.canada.ca/en/road-transportation> or the Canadian Council of Motor Transport Administrators' web site at www.ccmta.ca.

More detailed motor vehicle collision data can be queried using the National Collision Database (NCDB) On-Line tool located at <https://tc.canada.ca/vehicleCollisions>.