

Canadian Motor Vehicle Traffic Collision Statistics: 2021

From: Transport Canada

Collected in cooperation with the Canadian Council of Motor Transport Administrators

▼ Copyright

© His Majesty the King in Right of Canada, represented by the Minister of Transport, 2022

Cette publication est aussi disponible en français sous le titre Statistiques sur les collisions de la route au Canada 2021

Catalogue No. T45-3E-PDF
ISSN 1701-6223

▼ Permission to reproduce

To request permission to reproduce materials from this publication for commercial purposes, please complete the following web form:

<https://tc.canada.ca/en/corporate-services/application-crown-copyright-clearance>

Or contact TCcopyright-droitdauteurTC@tc.gc.ca.

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 2021 saw a small increase in the number of fatalities, serious injuries, and in the number of total injuries, yet each count is still among the lowest for all three of these casualty groups since these data were first collected by Transport Canada in the early 1970's.

- In 2021, the number of motor vehicle fatalities was 1,768; up 1.3% from 2020 (1,746).

- The number of serious injuries increased to 8,185 in 2021; up 4% from 2020 (7,868).
- The number of total injuries increased to 108,018 in 2021; up 3.6% from 2020 (104,286).
- The number of fatalities per 100,000 population increased to 4.7 in 2021 (from 4.6 in 2020), and is the second lowest on record.
- The number of fatalities per billion vehicle kilometres travelled increased to 4.8 in 2021 (from 4.7 in 2020).
- 2021 saw a decrease in the percentage of occupants that were killed or seriously injured who were not wearing seatbelts. For example, 28.6% of driver fatalities were not wearing seatbelts, compared to 33.2% in 2020, which equates to a 14% decrease.

Collisions and Casualties - 2002-2021

Year	Collisions		Victims		
	Fatal ¹	Personal Injury ²	Fatalities ³	Serious Injuries ⁴	Injuries ⁵ (Total)
2002	2,583	153,832	2,921	15,894	222,665
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	1,939	9,463	149,065
2019	1,620	103,020	1,756	8,917	139,084
2020	1,602	78,388	1,746	7,868	104,286

Year	Collisions		Victims		
	Fatal ¹	Personal Injury ²	Fatalities ³	Serious Injuries ⁴	Injuries ⁵ (Total)
2021	1,630	77,933	1,768	8,185	108,018

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 - 2021

Age Group (yrs)	Fatalities	Serious Injuries	Injuries (Total)
0 - 4	15	70	1,248
5 - 14	42	236	4,055
15 - 19	94	728	9,399
20 - 24	172	880	11,781
25 - 34	336	1,612	20,793
35 - 44	243	1,187	16,688
45 - 54	223	1,129	14,824
55 - 64	244	1,106	13,385
65 +	378	1,116	12,592
Not stated	21	121	3,253
Total	1,768	8,185	108,018

Fatalities by Road User Class 2017-2021

Road User Class		2017	2018	2019	2020	2021
Drivers	#	954	936	849	835	888
	%	51.3	48.3	48.3	47.8	50.2
Passengers	#	319	357	316	271	263
	%	17.1	18.4	18.0	15.5	14.9
Pedestrians	#	304	338	301	286	280
	%	16.3	17.4	17.1	16.4	15.8
Bicyclists	#	40	45	39	51	44
	%	2.1	2.3	2.2	2.9	2.5
Motorcyclists *	#	199	206	195	242	232
	%	10.7	10.6	11.1	13.9	13.1
Not stated/Other	#	45	57	56	61	61
	%	2.4	2.9	3.2	3.5	3.5
* Includes moped riders.						

Road User Class		2017	2018	2019	2020	2021
Total	#	1,861	1,939	1,756	1,746	1,768
	%	100.0	100.0	100.0	100.0	100.0
* - Includes moped riders.						

Fatalities 2002-2021

Year	Fatalities
2002	2,921
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

Year	Fatalities
2015	1,887
2016	1,900
2017	1,861
2018	1,939
2019	1,756
2020	1,746
2021	1,768

Fatality Rate (per 10,000 motor vehicles registered)

Year	Fatality Rate
2002	1.57
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	0.68
2021	0.67

Casualty Rates - 2021

	Per 100,000 Population ¹		Per Billion Vehicle-Kilometres ²		Per 100,000 Licensed Drivers	
	Fatalities	Injuries	Fatalities	Injuries	Fatalities	Injuries
Canada	4.7	284.0	4.8	290.0	6.5	392.8
NL	6.7	408.5	7.4	448.1	8.9	539.1
PE	10.5	287.0	12.0	325.8	13.9	378.4
NS	7.7	308.7	7.4	295.9	9.8	390.9
NB	8.6	342.7	8.5	340.7	12.1	484.3
QC	4.0	321.1	4.9	386.7	5.9	470.5
ON	3.8	216.4	4.2	241.2	5.1	293.3
MB	5.6	545.5	3.8	365.5	8.1	786.4
SK	7.2	388.2	6.4	345.6	10.4	557.7
AB	6.2	296.5	4.2	200.5	8.2	395.3
BC	5.7	269.9	6.7	314.3	7.9	370.8
YT	4.7	377.0	2.8	222.4	5.8	464.5
NT	4.4	185.1	4.6	193.1	7.5	315.1
NU	2.6	40.9	23.8	381.0	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, 2021, Catalogue No. 91-215-X.

2 Transport Canada calculations and estimates using an econometric model.



Notes: Data for Ontario and Alberta are preliminary for 2021. 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 2021.

Newfoundland and Labrador data reflects information contained in the Vehicle Collision Reports received and processed as of June 1, 2022.

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 - 2021

Road User Class	Fatalities	Serious Injuries
Drivers	50.2	47.5
Passengers	14.9	16.8
Pedestrians	15.8	14.0
Bicyclists	2.5	4.7
Motorcyclists *	13.1	13.9
Not Stated/Other	3.5	3.1
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 2017-2021

	2017	2018	2019	2020	2021
Drivers					
Fatalities	27.4	29.4	25.6	33.2	28.6
Serious Injuries	10.6	10.8	10.3	13.1	12.5
Passengers					
Fatalities	31.1	32.1	29.8	39.2	35.6
Serious Injuries	16.9	18.4	13.3	21.2	21.3



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

Number of Collisions By Location - 2021

Location	Fatal	Personal Injury
Urban ¹	728	56,507
Rural ²	881	19,576
Not stated	21	1,850
Total	1,630	77,933

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 - 2021

Age Group (yrs)	Fatalities		Serious Injuries	
	Drivers	Passengers	Drivers	Passengers
0 - 4	0.0	2.6	0.0	2.9
5 - 14	0.1	9.6	0.1	6.9
15 - 19	3.7	10.7	7.4	17.0
20 - 24	10.7	13.3	11.2	14.2
25 - 34	21.1	14.4	22.0	18.4
35 - 44	14.5	10.7	16.2	9.4
45 - 54	13.4	5.9	14.7	8.1
55 - 64	16.1	11.4	14.7	6.9
65 +	20.3	19.2	13.5	12.4
Not Stated	0.1	2.2	0.2	3.8
Total	100.0	100.0	100.0	100.0

Number of Licensed Drivers by Gender and by Age - 2021

Age Group (yrs)	Males	Females	Other Gender *	Total
< 16	31,310	27,295	26	58,631
16 - 19	595,991	554,707	108	1,150,806
20 - 24	1,055,762	937,351	206	1,993,319
25 - 34	2,462,407	2,314,039	500	4,776,946
35 - 44	2,418,196	2,354,138	165	4,772,499
45 - 54	2,256,692	2,183,548	56	4,440,296
55 - 64	2,429,077	2,322,797	26	4,751,899
65 +	2,868,362	2,685,428	14	5,553,805
Not Stated	0	0	3	3
Total	14,117,797	13,379,303	1,104	27,498,205

* 5 of the jurisdictions reported this category

Licensed Drivers and Motor Vehicle Registrations by Type of Vehicle 2002-2021 (in thousands)

Year	Licensed Drivers	Light-Duty Vehicles	Commercial Vehicles	Motorcycles
2002	21,163	17,543	724	350
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
2020	26,971	23,748	1,247	749

Year	Licensed Drivers	Light-Duty Vehicles	Commercial Vehicles	Motorcycles
2021	27,498	24,097	1,310	816

Source: the motor vehicle registration data are from Statistics Canada, CANSIM, Table 405-0004. The licensed driver data were provided by each jurisdiction.

The licensed driver data were provided by each jurisdiction.



Note: A reduced level of police reporting in British Columbia since 2008 has affected the British Columbia totals and, to a lesser extent, national totals reported in this publication.

Fatalities In Commercial Vehicle Collisions by User Type - 2017 to 2021

Road User Class	2017	2018	2019	2020	2021
Straight Truck (> 4,536 kg) Occupants	20	24	16	17	16
Tractor-Trailer Occupants	43	30	31	30	28
School Bus Occupants	1	2	0	0	2
Urban Transit Bus (City/Local) Occupants	0	1	0	0	0
Inter-City Bus (Motorcoach) Occupants	4	17	0	0	1
Passenger Vehicles	253	217	234	178	191
Pedestrians	48	53	50	47	52
Bicyclists	11	10	10	11	8
Motorcyclists**	13	12	16	23	12
Other	10	7	7	11	69
Total Fatalities in CMV * Collisions	403	373	364	317	379
Fatalities In All Other Collisions	1,458	1,566	1,392	1,429	1,389
Total Fatalities in All Collisions	1,861	1,939	1,756	1,746	1,768

* 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 - 2017 to 2021

Contributing Factor *	2017	2018	2019	2020	2021
Distraction	19.9%	18.9%	18.4%	19.2%	19.7%
Speed / Driving too Fast	22.9%	22.8%	21.5%	25.1%	24.7%
Impaired / Under the Influence	26.0%	26.1%	23.1%	18.0%	18.4%
Fatigue	3.7%	3.4%	3.4%	2.7%	3.4%
Other Human Factor	73.6%	71.2%	74.9%	79.7%	76.2%
Environmental Factor	20.7%	20.3%	20.1%	18.4%	18.0%
Vehicle Factor	3.6%	3.3%	4.5%	4.1%	4.1%
No Contributing Factors	30.6%	27.9%	31.0%	30.3%	32.1%

*
_ 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>.