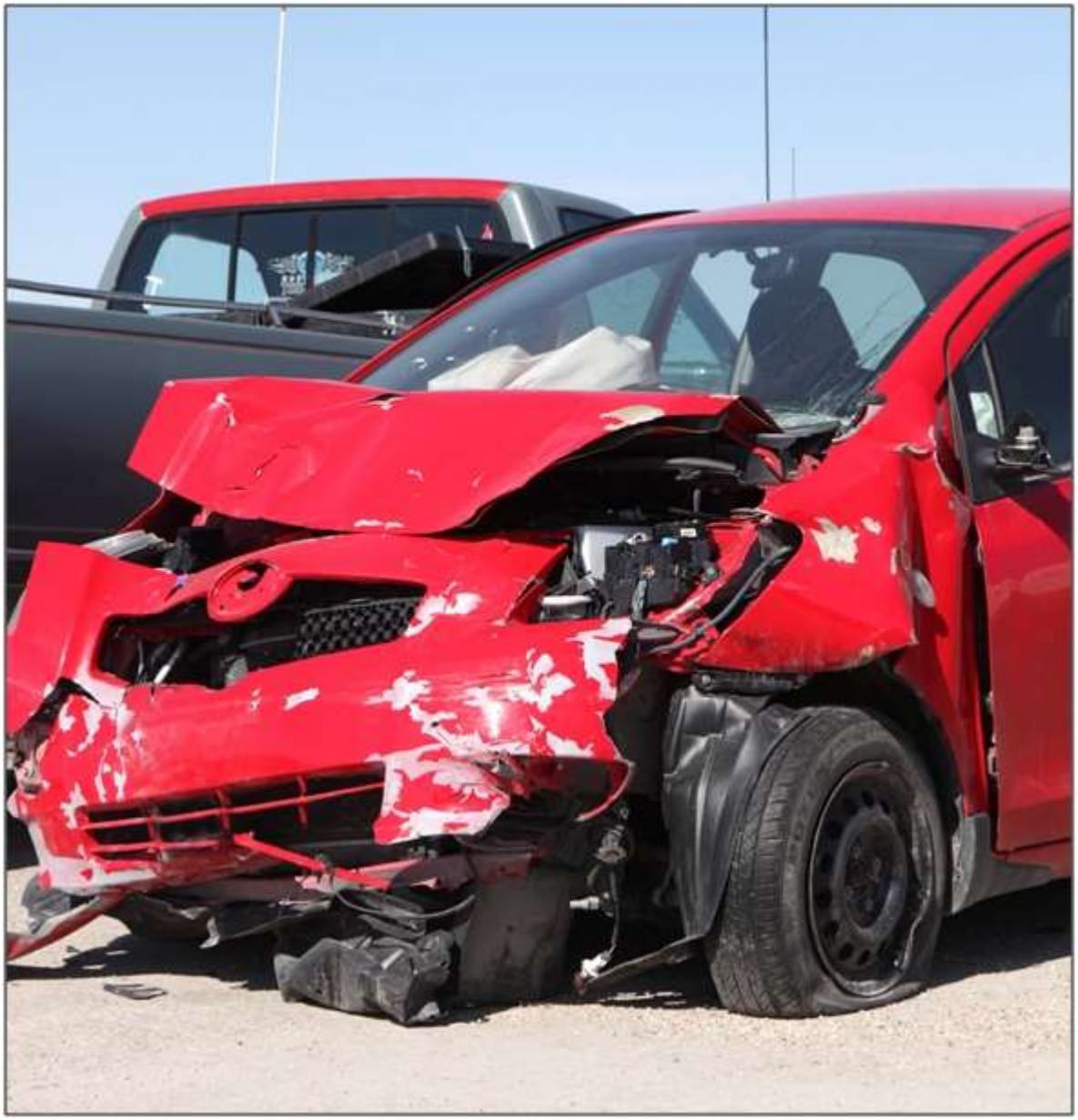
MANITOBA PUBLIC INSURANCE

2019

TRAFFIC COLLISION STATISTICS REPORT

Executive Summary



2019 Traffic Collision Statistics Report – Executive Summary

Motor vehicle collisions resulting in a fatality, injury or property damage only are required by law to be reported to either a law enforcement agency and/or to Manitoba Public Insurance. The collision incidents reported through the claim registration process with Manitoba Public Insurance form the basis for the overall population of collisions that Traffic Accident Reports (TARs) could be drawn from. To be consistent with jurisdictions across Canada and in compliance with reporting standards for the National Collision Database (NCDB) maintained by Transport Canada, a "reportable collision" definition is applied as a filter to these collision incidents. It is these TAR reportable collisions that are the primary focus of this Traffic Collision Statistics Report.

The TAR reportable collision definition, for inclusion in the NCDB, includes that the crash:

- Occurred on a public roadway in Manitoba,
    - Excluding crashes occurring parking lots, on private property, crashes occurring off road, and crashes on First Nation roadways
    - Including crashes involving non-Manitoba residents (due to the incident occurring in MB)
- Involved some injury (following the NCDB injury definitions) or fatality,
    - Excluding crashes where death was due to natural causes, homicide, or suicide
    - Excluding where the death occurred greater than 30 days after crash
- Has property damage in excess of $2,000 (combined for all parties involved), if no injury or fatality occurred.

The *Traffic Collision Statistics Report* is the official report of traffic collision statistics in Manitoba. It reports the details surrounding traffic collisions in Manitoba, allowing users to analyze the reasons why collisions occur. Knowing more about collisions helps policy makers, traffic safety experts, public safety programmers and legislators to pinpoint areas for review and create targeted approaches to preventing and reducing traffic collisions.

Due to amendments to the *Highway Traffic Act* that took effect in 2011, this report uses two sources for Traffic Accident Reports (TARs); TARs completed by a law enforcement agency and TARs completed when a collision claim is registered with Manitoba Public Insurance. This change resulted in an increase in minimal injury and property damage only (PDO) collisions in the Traffic Accident Report Database that had previously been underreported.

The following is a presentation of the key highlights of this report for 2019.

Licensed Drivers and Vehicle Registrations

There are 933,128 licensed drivers in Manitoba in 2019, an increase of 1% compared to 2018.

Overall, there are 1,114,903 vehicles registered in Manitoba (commercial and non-commercial, combined) in 2019, a 1% increase from 2018.

Traffic Collisions

In 2019, there are 89,102 collision incidents reported with Manitoba Public Insurance. After a "reportable collision" definition is applied as a filter to these collision incidents, there are a total of 54,755 traffic collisions that conform to the reportable collision requirement for Traffic Accident Reports. Of these:

- 68 involve a fatality (0.1% of all collisions);
- 8,992 involve an injury, but not a fatality (16% of all collisions); and,
- 45,695 involve property damage only (nearly 84% of all collisions).

Overall traffic collisions in Manitoba in 2019 increased by 6% compared to 2018 and by nearly 19% compared to the previous five year (2014 to 2018) annual average. There are 54,755 collisions in 2019, up from 51,732 collisions in 2018 and from 46,222 on average in the five year period 2014 to 2018. The increase in the total number of collisions in 2019 compared to 2018 is attributable to increases in fatal and PDO collisions. There are 3 more fatal collisions, 333 fewer injury collisions, and 3,353 more PDO collisions reported in 2019 than in 2018 (representing proportional changes of 5%, -4%, and 8%, respectively).

People Killed and Injured in Collisions

In 2019, there are 11,645 victims (or casualties) of traffic collisions. Of these:

- 76 are killed (4% fewer than in the previous five years);
- 368 are seriously injured (11% fewer than in the previous five years);
- 1,817 sustain minor injuries (9% fewer than in the previous five years);
- 9,354 sustain minimal injuries (1% fewer than in the previous five years); and,
- 30 sustain injuries that are undefined in terms of severity (nearly 90% fewer than in the previous five years).

The victim involvement rate (per 100,000 people in the general population) in traffic collisions in 2019 (848.3) has decreased by 4% compared to 2018 (886.2) and by 7% compared to the previous five years (2014 to 2018) annual average (913.6). Victim involvement rates in traffic collisions in 2019 where the person:

- Is killed (5.5 in 2019) is 8% higher than in 2018 but 7% lower than in the previous five years; and,
- Is injured, including all levels of severity (but excluding killed; 842.8 in 2019), is 4% lower than in 2018 and 7% lower than in the previous five years.

Traffic collisions in urban locations account for the majority of casualties overall while rural locations account for almost half of people killed. In 2019, 87% of all casualties result from traffic collisions in urban areas. Traffic collisions in rural locations, however, account for 47% of people killed. In the previous five year (2014 to 2018) annual average, 86% of all victims are from traffic collisions in urban locations, while 66% of people killed are from traffic collisions in rural locations.

Victims in 2019 appear to follow a fairly typical distribution compared to past years in terms of month of occurrence. The months of January, February, November and December combined account for a disproportionate number of traffic collision victims overall, both in 2019 (42% of all victims) and in the previous five year (2014 to 2018) annual average (42%). In 2019 (similar to the previous five years), the count of victims is lowest in the late spring and summer months (ranging from 5% to 8% of all victims in each month from April to August) and is highest in late fall, winter and early spring (ranging from 8% to 12% of all victims in each month from October to March).

Considering people killed and seriously injured in Manitoba traffic collisions in 2019:

- Drivers account for the largest proportion of people killed (47%) and seriously injured (59%);
- Passengers account for 20% of people killed and 23% of people seriously injured;
- Pedestrians account for 21% of people killed and 8% of people seriously injured;
- Motorcyclists (including motorcycle and moped riders, combined) account for nearly 11% of people killed and 6% of people seriously injured; and,
- Bicyclists account for 1% of people killed and 3% of people seriously injured.

In 2019, most victims in traffic collisions were using safety equipment at the time of the collision (99% of all victims where safety equipment use is known). However, 38% of the people killed in traffic collisions and 4% of the people seriously injured in traffic collisions are recorded as not wearing or using the available safety equipment at the time of the collision.

Drivers and Vehicles Involved in Collisions

In 2019, there are 69,564 drivers involved in traffic collisions. Of these:

- 97 are involved in fatal collisions;
- 15,095 are involved in injury collisions; and,
- 54,372 are involved in PDO collisions.

The driver involvement rate (per 10,000 licensed drivers) in traffic collisions in 2019 is 745.5, an increase of 3% compared to the rate in 2018 (723.7) and an increase of 4% from the previous five year (2014 to 2018) annual average (715.0). In 2019, driver involvement in:

- Fatal collisions (1.0) stayed relatively unchanged from 2018 but decreased by 9% compared to the previous five years;
- Injury collisions (161.8) decreased by nearly 6% from 2018 and by 11% compared to the previous five years; and,
- PDO collisions (582.7) increased by 6% from 2018 and by nearly 10% compared to the previous five years.

In 2019, there are 73,287 vehicles involved in traffic collisions. Of these:

- 99 are involved in fatal collisions;
- 15,276 are involved in injury collisions; and,
- 57,912 are involved in PDO collisions.

Vehicle involvement in traffic collisions per 10,000 registered vehicles (vehicle involvement rate) has increased in 2019 compared to 2018 and the previous five year (2014 to 2018) annual average. The vehicle involvement rate in collisions in 2019 for:

- Total collisions is 789.4 – increased by 4% from 2018 and by 6% from the previous five years;
- Fatal collisions is 1.1 – relatively unchanged from 2018 but decreased by 10% from the previous five years;
- Injury collisions is 164.6 – decreased by 5% from 2018 and by 10% from the previous five years; and,
- PDO collisions is 623.8 – increased by 6% from 2018 and by 12% from the previous five years.

The reader should note that neither the count of drivers or vehicles involved in collisions nor the calculated rate of involvement takes into account exposure to risk in terms of hours of driving, kilometres driven or driving situations.

Contributing Factors to Collisions

In 2019, 53% of all collisions have some at-fault contributing factor recorded (91% of fatal collisions; 71% of injury collisions). In 2019:

- A driver action is a contributing factor in 49% of all collisions (78% of fatal collisions; 69% of injury collisions; 45% of PDO collisions);
- A human condition is a contributing factor in 0.4% of all collisions (32% of fatal collisions; 1% of injury collisions; 0.2% of PDO collisions); and,
- Environmental conditions are contributing factors in 8% of all collisions (21% of fatal collisions; 8% of injury collisions; 8% of PDO collisions).

The most prevalent **contributing factors recorded for collisions** in 2019 include:

- Distracted driving – 25% of all collisions (47% fatal; 32% injury; 24% PDO);
- “Following too closely” – 8% of all collisions (no fatal; 16% injury; 6% PDO);
- “Backing unsafely” – nearly 6% of all collisions (no fatal; 3% injury; 6% PDO);
- Speed – 5% of all collisions (nearly 27% fatal; 7% injury; 5% PDO);
- “Turning improperly” – 4% of all collisions (4% fatal; 8% injury; 4% PDO);
- “Slippery road surface” – 4% of all collisions (4% fatal; 5% injury; 4% PDO);
- “Fail to yield right-of-way” – 4% of all collisions (10% fatal; nearly 9% injury; 3% PDO);
- “Changing lanes improperly” – 4% of all collisions (3% fatal; 4% injury; nearly 4% PDO);
- “Lost control/Drive off the road” – 3% of all collisions (7% fatal; 3% injury; 3% PDO); and,
- The actions of a wild animal – 2% of all collisions (3% fatal; 1% injury; 3% PDO).

The most prevalent contributing factors recorded for collisions where **people are killed or seriously injured** in 2019 include:

- Distracted driving – 43% of people killed and nearly 38% of people seriously injured;
- Speed – 29% of people killed and 13% of people seriously injured;
- Impaired – 29% of people killed and 5% of people seriously injured;
- “Disobey traffic control device/officer” – 12% of people killed and 5% of people seriously injured;
- Weather – nearly 11% of people killed and 2% of people seriously injured;
- “Fail to yield right-of-way” – 9% of people killed and 18% of people seriously injured;
- “Lost control/Drive off the road” – 8% of people killed and 10% of people seriously injured;
- “Slippery road surface” – 7% of people killed and 5% of people seriously injured;
- “Take avoiding action” – 5% of people killed and 2% of people seriously injured;
- “Pedestrian error/confusion” – 5% of people killed and 2% of people seriously injured;
- “Turning improperly” – 4% of people killed and 11% of people seriously injured;
- “Passing improperly” – 4% of people killed and 2% of people seriously injured;
- “Leave stop sign before safe to do so” – 4% of people killed and 4% of people seriously injured;
- “Loss of consciousness” – 4% of people killed and 1% of people seriously injured;
- “Animal action – Wild” – 4% of people killed and 1% of people seriously injured; and,
- “View obstructed/limited” – 4% of people killed and 2% of people seriously injured.

Off-Road Vehicle (ORV) Collisions

As ORV collisions occur primarily outside of roadways and road rights-of-way, most of them are not valid for inclusion in the public roadway Traffic Accident Database. However, some ORV collisions are included in the Traffic Accident Database (if they occur on a public roadway and involve a vehicle that normally operates on public roadways); therefore, statistics between ORV collisions and other traffic collisions of this report are not additive.

In 2019, there are 145 off-road vehicle collisions, involving 49 victims, 154 vehicles and 149 drivers. Of these:

- 8 are fatal collisions, involving 8 vehicles and drivers, resulting in 8 people killed and none injured;
- 34 are injury collisions, involving 38 vehicles and 37 drivers, resulting in 41 people injured; and,
- 103 are PDO collisions, involving 108 vehicles and 104 drivers.

Alcohol-related Criminal Code Convictions

In 2018[1], there are a total of 1,453 alcohol-related Criminal Code offence convictions, including:

- 852 convictions for driving with a blood alcohol concentration (BAC) over .08;
- 539 convictions for impaired driving; and,
- 62 convictions for refusing to provide a breath or blood sample.

In the 20-year period from 1999 to 2018, total alcohol-related Criminal Code convictions decreased by 55%, from 3,253 in 1999 to 1,453 in 2018. Total convictions in 2018 (1,453) decreased by 14% compared to 2017 (1,695) and by nearly 23% compared to the previous five year (2013 to 2017) annual average (1,874).

Licensed drivers up to the age of 44 are overrepresented in alcohol-related Criminal Code convictions.

- Drivers under age 25 represented 13% of the licensed drivers in 2018, but accounted for 22% of convictions.
- Drivers aged 25 to 44 represented 35% of the licensed drivers in 2018, but accounted for 56% of convictions.

Over the past 10 years, from 2008 to 2018, there was a 40% decrease in the rate of first offences. Rates of recidivism, indicated by second, and third and subsequent offences, decreased at a rate of 42% in second alcohol-related Criminal Code offences in 2018, and at a rate of 49% in third and subsequent offences in 2018 compared to 2008.

[1] There is a one-year lag in the statistics reported to allow for court processing time. Therefore, 2018 is the most current year for which these statistics are available.

Preface

Motor vehicle collisions resulting in a fatality, injury or property damage are required by law to be reported to either a law enforcement agency and/or to Manitoba Public Insurance. Subsequently, a Traffic Accident Report (TAR) for the collision is created. The *Traffic Collision Statistics Report* deals with these reportable collisions and the TARs arising from them.

The *Traffic Collision Statistics Report* is the official report of traffic collision statistics in Manitoba. It reports the details surrounding traffic collisions in Manitoba, allowing users to analyze the reasons why collisions occur. Knowing more about collisions helps policy makers, traffic safety experts, public safety programmers and legislators to pinpoint areas for review and create targeted approaches to preventing and reducing traffic collisions.

Annual collision statistics, such as those contained in the *Traffic Collision Statistics Report*, are used to:

- Indicate trends;
- Identify driver and vehicle factors in accidents;
- Evaluate current programs and new provincial road safety initiatives;
- Monitor commercial vehicle collisions in accordance with the National Safety Code; and,
- Guide development of new policies and programs to reduce the frequency and severity of traffic collisions in the province.

A brief Synopsis of each section of this Report can be found below.

Section 1 – Drivers, Vehicle and Collision Rates: Historical Trends
This section calculates involvement rates for total collisions as well as for fatal, injury, and property damage only (PDO) collisions using licensed drivers and vehicles registered for the years 2009 to 2019, inclusive. This section also deals with relative involvement rates of drivers by specific age groups.

Section 2 – Licensed Drivers
This section deals with Active and Suspended Drivers by specific Age Groups, Gender and Manitoba Licence Class.

Section 3 – Vehicle Registrations
This section deals with vehicle registrations and examines these by three major categories: Commercial; Non-commercial; and, Snowmobiles (Recreational).

Section 4 – Traffic Collisions
This section counts the number of collisions in Manitoba and provides detail for collisions of different severity; fatal, injury and property damage only (PDO). Historical information regarding the number of collisions, victims, vehicles and drivers involved in collisions over the ten year period 2009 to 2018 is presented and compared to 2019. Details are provided for 2019 traffic collisions in terms of the month of occurrence, day of the week, time of day, weather and road conditions, location and type of collision.

Section 5 – Collision Victims
This section counts the number of victims killed and injured in traffic collisions and examines the severity of the injury received by the victim. Month, time and day of occurrences are examined, as well as the age of the victim. Victim involvement rates in traffic collisions per 100,000 people in the general population are also calculated.

Section 6 – Pedestrian Victims
This section counts the number of pedestrian victims killed and injured in traffic collisions and examines the severity of the injury received by the pedestrian victim. Month, time and day of occurrence are examined and breaks are provided for the age of the pedestrian. The specific pedestrian actions taken immediately prior to the collision are also presented. Pedestrian involvement rates in traffic collisions per 100,000 people in the general population are also calculated.

Section 7 – Vehicle Involvement
This section counts the number of vehicles involved in traffic collisions. Vehicle involvement in a collision is calculated for each vehicle type (such as passenger vehicles, vans, pick-up trucks, types of emergency vehicles). Vehicle involvement rates in traffic collisions per 10,000 registered vehicles are also calculated.

Section 8 – Driver Involvement
This section counts the number of drivers involved in traffic collisions and breaks this down by age and gender of the driver. Driver involvement rates in traffic collisions per 10,000 licensed drivers are also detailed.

Section 9 – Contributing Factors
This section examines the contributing factors to traffic collisions as reported on the Traffic Accident Report (TAR). Detail is provided at the collision level and for collision severity, at the victim level and for victims of each casualty type, and at the driver level by collision severity. Driver involvement rates (per 10,000 licensed drivers) in collisions with specific contributing factors are calculated and discussed.

Section 10 – National Safety Code Monitoring Report
This section counts the number of commercial vehicles involved in collisions, the severity of those collisions and the victims killed and injured in those collisions.

Section 11 – Off-Road Vehicle Collisions
This section counts the number of off-road vehicle (ORV) collisions in Manitoba and provides detail for collisions of different severity: fatal, injury and property damage only (PDO). Information regarding the number of ORV collisions, victims, vehicles, and drivers involved over the six year period 2014 to 2019 is presented. Details are provided for 2019 ORV collisions in terms of the month of occurrence, day of the week, time of day, weather and road conditions, location, and type of collision.

Section 12 – Alcohol-Related Criminal Code Convictions
This section counts the number of drivers convicted of alcohol-related Criminal Code offences for the year 2018 by age at the time of the offence and includes historical statistics for the period 1999 to 2017. Details are provided for ‘first’, ‘second’ and ‘third and subsequent’ (i.e., third, fourth, fifth, etc. combined) offences and whether or not a youth was present in the vehicle at the time of the offence.

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SECTION 1 – Drivers, Vehicle and Collision Rates: Historical Trends

Introduction

This section calculates involvement rates for total collisions as well as for fatal, injury and property damage only (PDO) collisions using licensed drivers and vehicles registered for the years 2009 to 2019. This section also presents involvement rates for drivers by specific age groups.

Key Highlights

In 2019, there are 89,102 collision incidents reported through the claim registration process with Manitoba Public Insurance where some insurance related financial activity took place. This forms the basis for the overall population of collisions that Traffic Accident Reports (TARs) could be drawn from. To be consistent with jurisdictions across Canada and in compliance with reporting standards for the National Collision Database maintained by Transport Canada, a "reportable collision" definition is applied as a filter to these collision incidents, resulting in a total of 54,755 TAR reportable collisions. It is these TAR reportable collisions that are the primary focus of this Traffic Collision Statistics Report.

In 2019, there are a total of 54,755 traffic collisions reported to Manitoba Public Insurance and law enforcement agencies in Manitoba that conform to the reportable collision requirement for Traffic Accident Reports. Of these:

- 68 involve a fatality (0.1% of all collisions);
- 8,992 involve an injury, but not a fatality (16% of all collisions); and,
- 45,695 involve property damage only (nearly 84% of all collisions).

In 2019, overall traffic collisions in Manitoba increased compared to 2018 and the previous five year (2014 to 2018) annual average. There are:

- 54,755 collisions in 2019;
- 51,732 collisions in 2018; and,
- 46,222 collisions on average in the five year period 2014 to 2018.

Involvement in traffic collisions in Manitoba increased from 2018 and the previous five year (2014 to 2018) annual average. Involvement in collisions (per 10,000 licensed drivers) is:

- 586.8 in 2019;
- 562.1 in 2018; and,
- 516.8 on average in the five year period 2014 to 2018.

The increase in the total number of collisions in 2019 compared to 2018 is attributable to increases in fatal and PDO collisions. There are 3 more fatal collisions, 333 fewer injury collisions, and 3,353 more PDO collisions reported in 2019 than in 2018 (representing proportional changes of 5%, -4%, and 8%, respectively).

Major Elements Examined

Counts of collisions in Manitoba for 2019 and previous years are taken from Traffic Accident Reports (TARs) generated by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions. To be included in the Traffic Accident Database, these reportable collisions must occur on a public roadway.

Involvement in collisions is calculated for total collisions and for collisions of different severity (fatal, injury and PDO). It is calculated both for licensed drivers and for vehicles registered. Involvement per 10,000 licensed drivers by different age groups is also examined.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

Terms and Definitions

"Reportable Collision"

- Prior to a change in the Highway Traffic Act (which took effect in October of 2011), motor vehicle collisions resulting in a fatality, injury or property damage in excess of $1,000 were required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completed a Traffic Accident Report for the collision.
- Amendments to the Highway Traffic Act (which received Royal Ascent in June 2011 and took effect in October of 2011) changed the definition of a reportable collision to require a police report be made if the driver is aware, has reason to believe, or is later made aware, that a collision involves: a fatality; an injury requiring admittance to hospital for observation or treatment; another driver not having a valid driver's licence; another vehicle not validly registered; the driver of another vehicle not providing the required particulars; the driver of another vehicle not stopping at the scene of the accident; or, alcohol or another intoxicating substance as a factor in the accident.
- As of October 2011, all accidents occurring on a public roadway where the above conditions are not met are reported through the claim registration process with Manitoba Public Insurance.
- As of 2012 and consistent with other jurisdictions in Canada, it is a requirement that a minimum of $2,000 damage (all vehicles combined) is necessary for property damage only (PDO) collisions to be included in this report.
- This report deals with these reportable collisions and the TARs arising from them, regardless of whether the TAR is generated by law enforcement agencies or by Manitoba Public Insurance.

"Public Roadway"

- A public roadway in Manitoba is considered to be any provincial road (PR), provincial trunk highway (PTH) or municipal road, including the entrances to and exits from these roadways. This excludes all off-road areas, parking lots, private property, and First Nation Reserve roads (unless the road is a PR or PTH running through, across or on Reserve lands).

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence. Fatal collisions resulting from suicide, where the fatality occurs because of a medical condition and collisions that do not occur on public roadways are excluded.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Involvement"

- A calculation of the number of collisions per specific unit of licensed drivers or registered vehicles. For the purposes of this report, involvement is calculated per 10,000 licensed drivers or registered vehicles.

"Licensed drivers"

- A count of all Manitobans aged 16 and older who hold a valid licence within the licensing year including active and suspended drivers. (See *Section 2 Licensed Drivers* for more information)

Table 1-1 Fatal, Injury and Property Damage Collisions by Total Licensed Drivers

Table 1-1
Fatal, Injury, and Property Damage Collisions by Total Licensed Drivers: 2009 to 2019

Year	Licensed Drivers	Collision Incidents (Claims)	**Total TAR Reportable Collisions**	TAR Collisions /10,000 Drivers	Total Fatal	Fatal /10,000 Drivers	Total Injury	Injury /10,000 Drivers	Total PDO	PDO /10,000 Drivers
2009	776,209	88,954	**26,578**	342.4	83	1.1	5,396	69.5	21,099	271.8
2010	790,330	89,276	**27,172**	343.8	78	1.0	5,386	68.1	21,708	274.7
2011	813,691	94,939	**34,302**	421.6	94	1.2	6,309	77.5	27,899	342.9
2012	838,481	92,248	**38,972**	464.8	89	1.1	8,280	98.8	30,603	365.0
2013	855,791	99,642	**41,819**	488.7	69	0.8	8,729	102.0	33,021	385.9
2014	869,239	95,563	**40,672**	467.9	64	0.7	9,023	103.8	31,585	363.4
2015	881,338	89,445	**41,548**	471.4	69	0.8	9,127	103.6	32,352	367.1
2016	895,880	93,274	**45,316**	505.8	96	1.1	9,582	107.0	35,638	397.8
2017	905,365	95,151	**51,844**	572.6	65	0.7	9,691	107.0	42,088	464.9
2018	920,414	90,292	**51,732**	562.1	65	0.7	9,325	101.3	42,342	460.0
2019	**933,128**	**89,102**	**54,755**	**586.8**	**68**	**0.7**	**8,992**	**96.4**	**45,695**	**489.7**
2014-2018 Average	894,447	92,745	**46,222**	516.8	72	0.8	9,350	104.5	36,801	411.4

In 2019, there are 89,102 collision incidents reported through the claim registration process with Manitoba Public Insurance where some insurance related financial activity took place. This forms the basis for the overall population of collisions that Traffic Accident Reports (TARs) could be drawn from. To be consistent with jurisdictions across Canada and in compliance with reporting standards for the National Collision Database maintained by Transport Canada, a “reportable collision” definition is applied as a filter to these collision incidents, resulting in a total of 54,755 TAR reportable collisions. It is these TAR reportable collisions that are the primary focus of this Traffic Collision Statistics Report.

Relative to ten years ago, the total number of collisions in 2019 has doubled (54,755 in 2019 compared to 26,578 in 2009). Crash involvement per 10,000 licensed drivers has increased by 71% in the same time period (586.8 in 2019 compared to 342.4 in 2009). Compared to 2018, total collisions have increased by 6% (up from a total of 51,732) and involvement has increased by 4%. Compared to the previous five year (2014 to 2018) annual average, total collisions have increased nearly 19% and involvement has increased by nearly 14%.

Compared to recent historical figures, in 2019:

- Fatal collisions have decreased by 18% compared to 2009, increased by a count of 3 compared to 2018, and decreased by 5% compared to the previous five year (2014 to 2018) annual average.
- Injury collisions have increased by 67% compared to 2009, decreased by 4% compared to 2018 and by 4% compared to the previous five year (2014 to 2018) annual average.
- PDO collisions have doubled compared to 2009, increased by 8% compared to 2018 and by 24% compared to the previous five year (2014 to 2018) annual average.

Differences in the crash counts and rates in 2012 through 2019 compared to 2009 through 2011 are at least somewhat affected by the reporting change that took effect late in 2011. Please see the definition of “Reportable Collision” for detail regarding this change.

Table 1-2 Percentage Change Year-over-Year in Relative Involvement Rate (per 10,000 Licensed Drivers) in Fatal, Injury, and Property Damage Only Collisions

Table 1-2

Percentage Change Year-Over-Year in Relative Involvement Rate (per 10,000 Licensed Drivers) in Fatal, Injury, and PDO Collisions: 2009 to 2019

Year	Collisions /10,000 Drivers	% change to previous year	Fatal /10,000 Drivers	% change to previous year	Injury /10,000 Drivers	% change to previous year	PDO /10,000 Drivers	% change to previous year
2009	342.4	-	1.1	-	69.5	-	271.8	-
2010	343.8	0.4%	1.0	-7.7%	68.1	-2.0%	274.7	1.0%
2011	421.6	22.6%	1.2	17.1%	77.5	13.8%	342.9	24.8%
2012	464.8	10.3%	1.1	-8.1%	98.8	27.4%	365.0	6.4%
2013	488.7	5.1%	0.8	-24.0%	102.0	3.3%	385.9	5.7%
2014	467.9	-4.2%	0.7	-8.7%	103.8	1.8%	363.4	-5.8%
2015	471.4	0.8%	0.8	6.3%	103.6	-0.2%	367.1	1.0%
2016	505.8	7.3%	1.1	36.9%	107.0	3.3%	397.8	8.4%
2017	572.6	13.2%	0.7	-33.0%	107.0	0.1%	464.9	16.9%
2018	562.1	-1.8%	0.7	-1.6%	101.3	-5.3%	460.0	-1.0%
2019	**586.8**	**4.4%**	**0.7**	**3.2%**	**96.4**	**-4.9%**	**489.7**	**6.4%**
2014-2018 Average*	516.8	13.5%	0.8	-9.2%	104.5	-7.8%	411.4	19.0%

* "% change" in this line compares the current year to the 5-year average

Recognizing that collision counts could be impacted either positively or negatively by changing population demographics, involvement rates per 10,000 licensed drivers are examined to provide a standardized collision rate comparison. This eliminates the effect of changing population size and focuses on how many drivers are being involved in collisions instead of simply a raw count of collisions overall.

The involvement in collisions per 10,000 drivers in 2019 is:

- 586.8 for all collisions, up 4% from 2018 and by nearly 14% compared to the previous five year (2014 to 2018) annual average;
- 0.7 for fatal collisions, relatively the same as 2018 and down by 9% compared to the previous five year (2014 to 2018) annual average;
- 96.4 for injury collisions, down 5% from 2018 and by 8% from the previous five year (2014 to 2018) annual average; and,
- 489.7 for PDO collisions, up 6% from 2018 and by 19% compared to the previous five year (2014 to 2018) annual average.

Table 1-3 Fatal, Injury, and Property Damage Collisions by Vehicles Registered

Table 1-3
Fatal, Injury, and Property Damage Collisions by Vehicles Registered: 2009 to 2019

Year	Vehicles Registered*	Total Collisions	Collisions /10,000 Vehicles	Total Fatal	Fatal /10,000 Vehicles	Total Injury	Injury /10,000 Vehicles	Total PDO	PDO /10,000 Vehicles
2009	782,592	26,578	339.6	83	1.1	5,396	69.0	21,099	269.6
2010	798,473	27,172	340.3	78	1.0	5,386	67.5	21,708	271.9
2011	813,937	34,302	421.4	94	1.2	6,309	77.5	27,899	342.8
2012	837,669	38,972	465.2	89	1.1	8,280	98.8	30,603	365.3
2013	851,213	41,819	491.3	69	0.8	8,729	102.5	33,021	387.9
2014	866,432	40,672	469.4	64	0.7	9,023	104.1	31,585	364.5
2015	880,442	41,548	471.9	69	0.8	9,127	103.7	32,352	367.5
2016	896,416	45,316	505.5	96	1.1	9,582	106.9	35,638	397.6
2017	908,157	51,844	570.9	65	0.7	9,691	106.7	42,088	463.4
2018	922,295	51,732	560.9	65	0.7	9,325	101.1	42,342	459.1
2019	**928,336**	**54,755**	**589.8**	**68**	**0.7**	**8,992**	**96.9**	**45,695**	**492.2**
2014-2018 Average	894,748	46,222	516.6	72	0.8	9,350	104.5	36,801	411.3

*Vehicles registered exclude off-road vehicles, non-commercial snow vehicles, non-commercial trailers, non-farm tractors and PSV trailers.

Note: Legislative changes over the course of 2018 and 2019 have reduced the number and type of registration categories reported in this report. To reflect these changes in the historical summary, registration counts from 2009 to 2018 have been adjusted to match the methodology employed for 2019. As such, the historical summary reported here will slightly differ from previously published Traffic Collision Statistics Reports for these years.

Involvement in collisions per 10,000 vehicles registered is another way to view collision rates in a standardized format. It attempts to account for fluctuations in the total number of vehicles registered for use on Manitoba roadways.

In 2019, there are 589.8 collisions for every 10,000 vehicles registered in Manitoba, up 5% compared to the rate in 2018 (560.9) and up by 14% compared to the rate in the previous five year (2014 to 2018) annual average (516.6).

The changes in rate of involvement in collisions at each level of severity in 2019 vary compared to recent years. In 2019, there are 0.7 fatal collisions for every 10,000 vehicles, relatively unchanged compared to 2018 (rate of 0.7), and down by 9% from the previous five year (2014 to 2018) annual average (rate of 0.8). The involvement rate for injury collisions (96.9 in 2019) is down 4% from 2018 (rate of 101.1) and by 7% from the previous five year (2014 to 2018) annual average (rate of 104.5). Involvement in PDO collisions (492.2 in 2019) is up 7% compared to 2018 (rate of 459.1) and by 20% compared to the previous five year (2014 to 2018) annual average (rate of 411.3).

Involvement rates between 2009 and 2019 for collisions in Manitoba, both per 10,000 licensed drivers and per 10,000 registered vehicles, are noted in Figures 1-1, 1-2, 1-3 and 1-4 on the following pages. The spike in rates for overall collisions, injury collisions, and PDO collisions in 2011 and 2012 is attributable to a change in the reporting requirements, discussed under the “Reportable Collisions” definition. Year over year changes in the 2019 collision rates, however, cannot be attributed to changes in what constitutes a reportable collision.

Figure 1-1 Involvement in Total Collisions by Licensed Drivers and Vehicles Registered

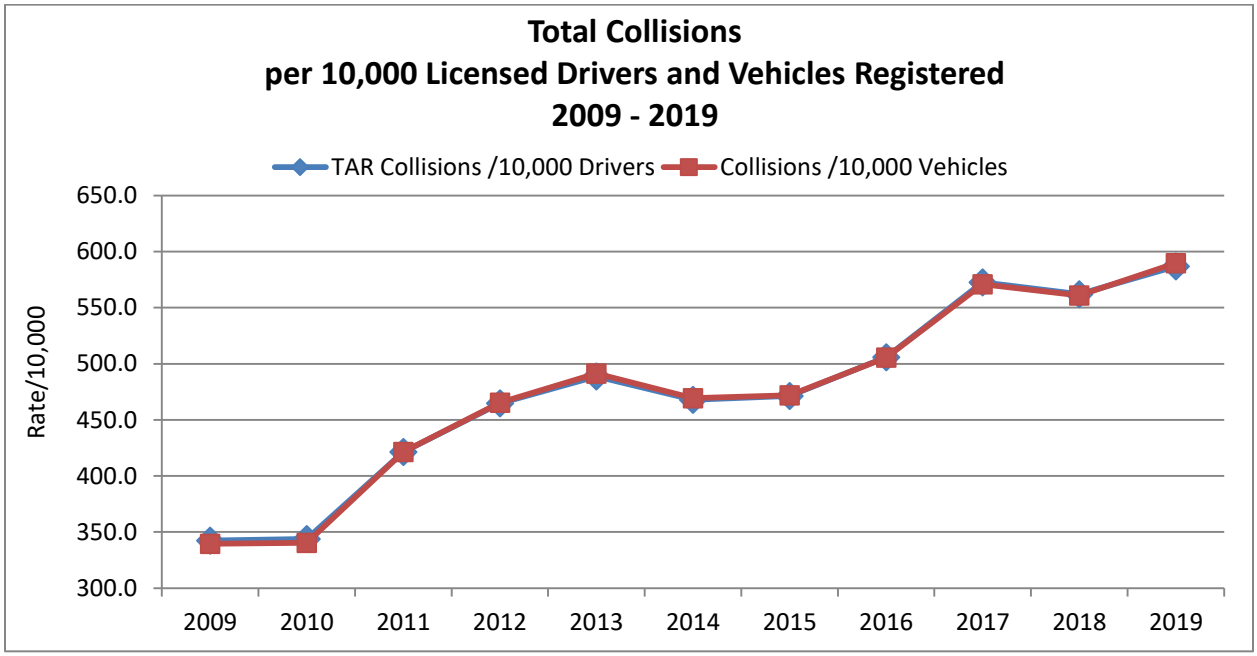


Figure 1-2 Involvement in Fatal Collisions by Licensed Drivers and Vehicles Registered

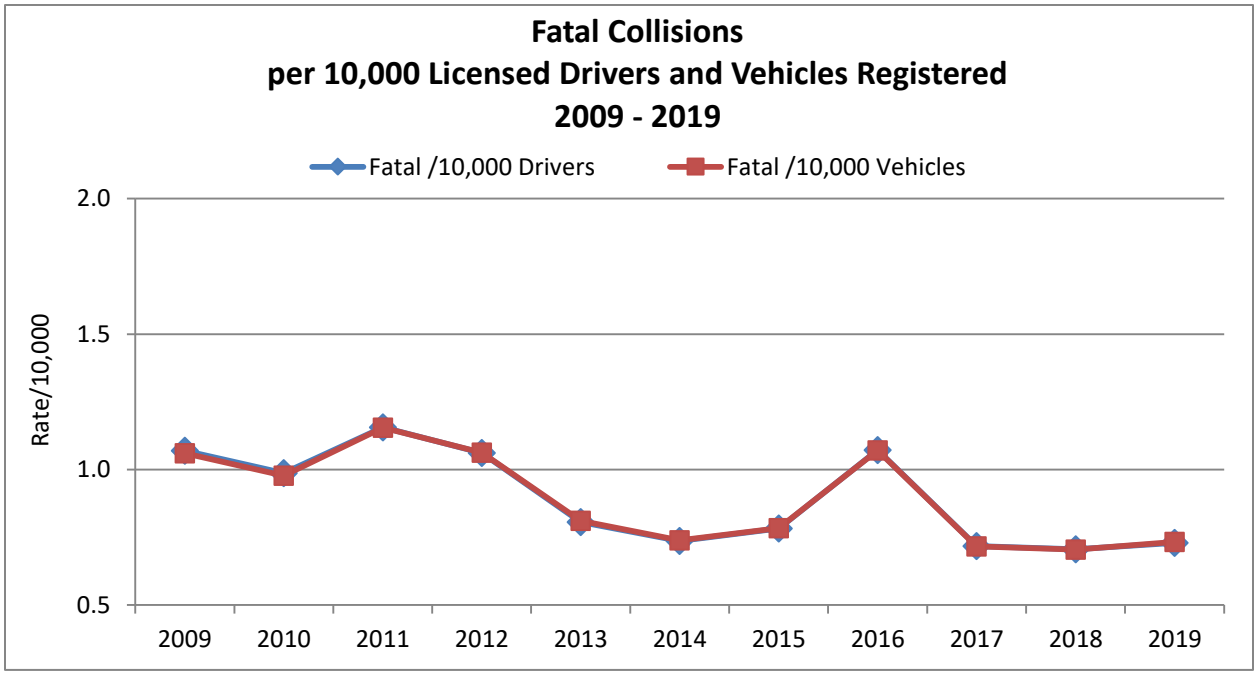


Figure 1-3 Involvement in Injury Collisions by Licensed Drivers and Vehicles Registered

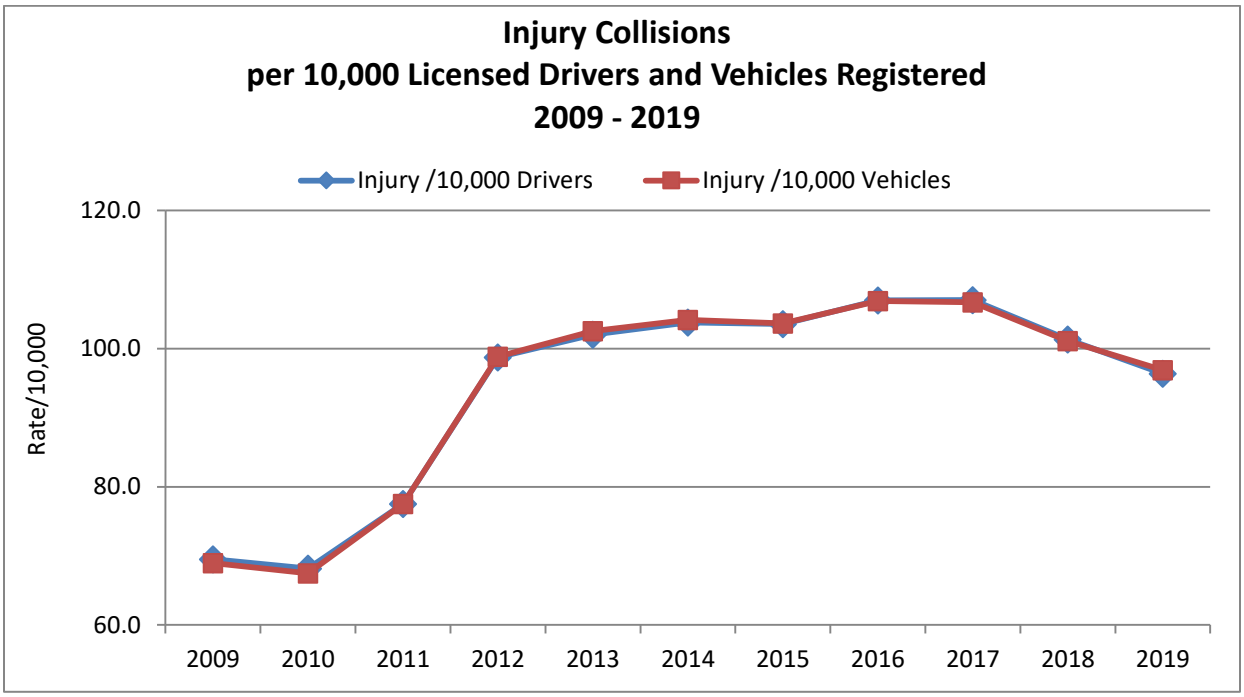


Figure 1-4 Involvement in Property Damage Only (PDO) Collisions by Licensed Drivers and Vehicles Registered

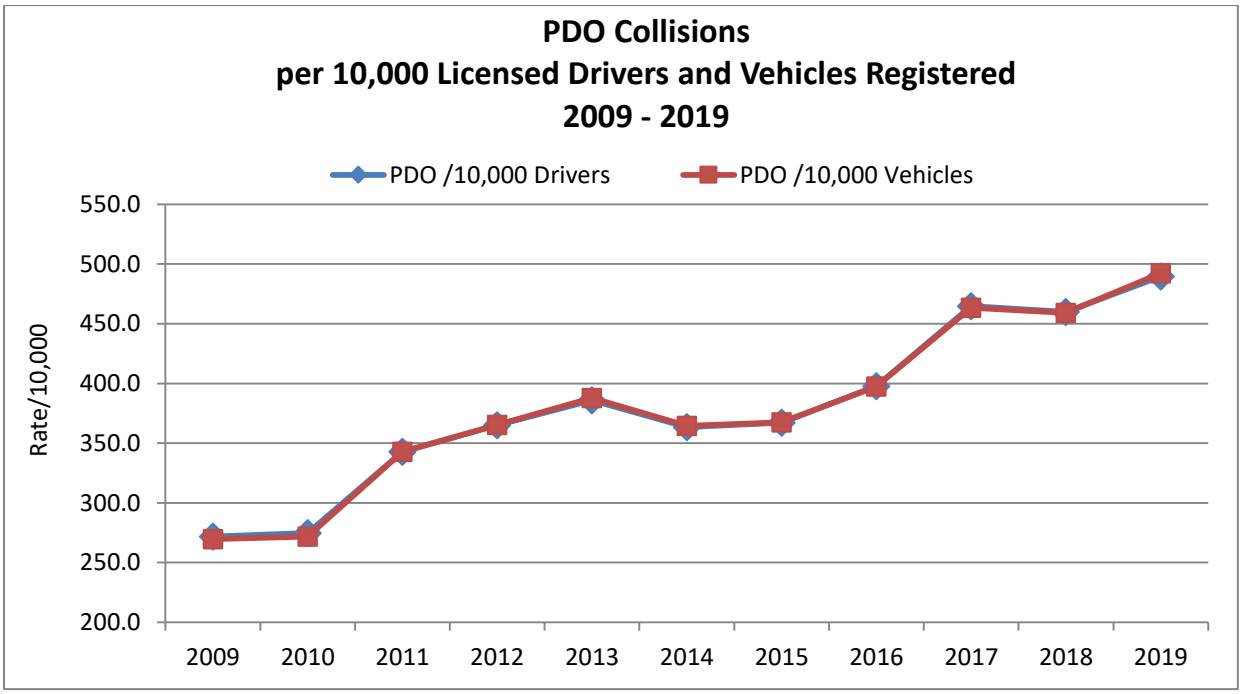


Table 1-4 Involvement (Total Collisions) per 10,000 Licensed Drivers by Age Group

Table 1-4
Involvement (Total Collisions) /10,000 Licensed Drivers by Age Group: 2009 to 2019

Age Group	Year											2014-2018 Average
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	**2019**	
16-19	756.1	737.3	890.8	1,095.7	1,068.3	982.5	969.1	993.0	1,051.9	931.2	**911.9**	980.2
20-24	648.8	630.4	851.6	1,114.4	1,121.0	1,059.8	1,035.3	1,079.7	1,135.5	1,058.0	**1,065.1**	1,080.8
25-34	460.6	470.5	671.8	860.0	920.8	871.5	826.0	867.5	914.3	865.9	**884.1**	891.8
35-44	444.0	432.1	586.9	741.6	811.3	777.2	736.8	779.1	842.5	803.2	**840.9**	801.3
45-54	393.0	397.9	524.2	645.0	698.4	668.6	652.7	696.0	742.8	726.9	**779.1**	687.7
55-64	340.4	353.0	441.6	529.8	554.4	540.4	519.3	551.0	575.4	582.3	**609.8**	566.0
65-74	289.8	285.0	366.9	416.9	458.1	441.2	414.2	447.5	479.7	467.1	**482.6**	469.9
75+	235.2	254.9	292.5	342.7	353.4	331.7	332.2	333.9	355.7	357.6	**362.2**	349.6

In 2019, the youngest driver age groups in Manitoba (16 to 19 and 20 to 24) continue to have the highest rates of involvement in collisions. At 911.9, the involvement rate of drivers aged 16 to 19 is:

- 14% lower than the rate of those aged 20 to 24;
- 3% higher than those aged 25 to 34;
- 8% higher than those aged 35 to 44;
- 17% higher than those aged 45 to 54;
- Nearly 50% higher than those aged 55 to 64; and,
- More than double the rate of those aged 65 and older.

Manitobans aged 20 to 24 have the highest rate of involvement in collisions in 2019. At 1,065.1, the involvement rate of drivers aged 20 to 24 is:

- Nearly 21% higher than those aged 25 to 34;
- 27% higher than those aged 35 to 44;
- 37% higher than those aged 45 to 54;
- 75% higher than those aged 55 to 64; and,
- Two and a half times the rate of those aged 65 and older.

Manitobans aged 25 to 34, while having a lower involvement rate than younger drivers, have a higher involvement rate than drivers in older age groups. At 884.1 in 2019, the involvement rate of drivers aged 25 to 34 is:

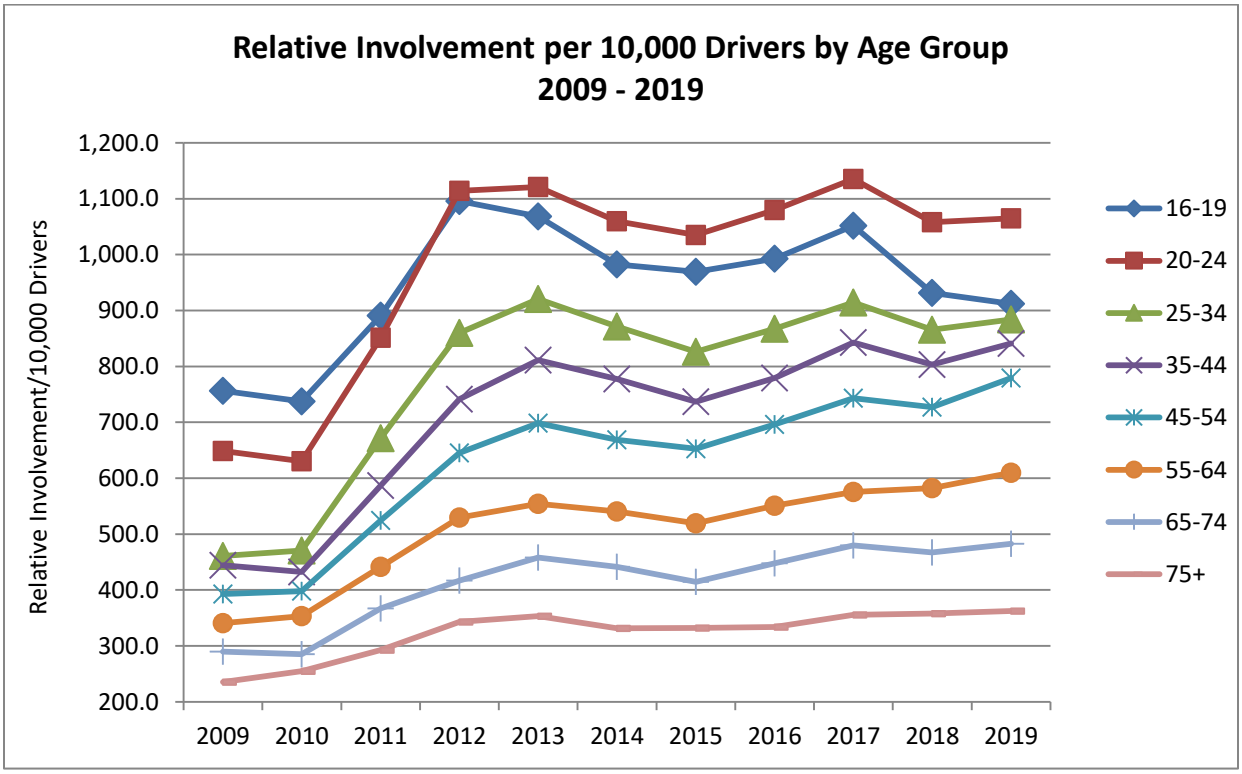
- 5% higher than those aged 35 to 44;
- Nearly 14% higher than those aged 45 to 54;
- 45% higher than those aged 55 to 64; and,
- More than double those aged 65 and older.

The involvement rate for drivers in each successive age group beginning at age 35 drops off consistently.

Collision involvement rates for drivers in most age groups have increased in 2019 compared to 2018 and to the previous five year (2014 to 2018) annual average. Involvement per 10,000 licensed drivers in 2019 by age group:

- Age 16 to 19 – 911.9 in 2019, down 2% compared to 2018 and by 7% compared to the previous five year annual average.
- Age 20 to 24 – 1,065.1 in 2019, up 1% compared to 2018 but down nearly 2% compared to the previous five year annual average.
- Age 25 to 34 – 884.1 in 2019, up 2% compared to 2018 but down 1% compared to the previous five year annual average.
- Age 35 to 44 – 840.9 in 2019, up 5% compared to 2018 and the previous five year annual average.
- Age 45 to 54 – 779.1 in 2019, up 7% compared to 2018 and by 13% compared to the previous five year annual average.
- Age 55 to 64 – 609.8 in 2019, up 5% compared to 2018 and by 8% compared to the previous five year annual average.
- Age 65 to 74 – 482.6 in 2019, up 3% compared to 2018 and the previous five year annual average.
- Age 75 and over – 362.2 in 2019, up 1% compared to 2018 and by 4% compared to the previous five year annual average.

Figure 1-5 Involvement (per 10,000 Licensed Drivers) in Total Collisions by Age Group



SECTION 2 – Licensed Drivers

Introduction

This section deals with Active and Suspended Drivers by specific Age Groups, Gender and Manitoba Licence Class.

Key Highlights
There is an average of 933,128 licensed drivers in Manitoba in 2019, an increase of 1% compared to 2018. Of these:

- 95% are Active drivers, 5% are Suspended drivers;
- 52% are Male, 48% are Female;
- 68% are between the ages of 25 and 64; and
- Men account for 65% of all Suspended drivers in Manitoba.

There is an average of 74,993 licensed motorcycle drivers in Manitoba in 2019, an increase of 2% compared to 2018.

Major Elements Examined
Counts of licensed drivers in Manitoba for 2019 represent an average for the 2019 calendar year. That is, "point-in-time" observations (licensed drivers by age, licence class and gender) are recorded as of the first of each month and then an average for the year is calculated and reported. Due to rounding in this process, some columns and rows may not add to the total.

At the beginning of this section, there is a quick reference chart of Manitoba's Driver Licence and Vehicle Class descriptions. A review of these charts will indicate which Driver Licence Class is required to operate specific Vehicle Classes.

As it is a requirement for Class 6 licence holders to first possess a Class 1-5 licence prior to obtaining a Class 6 licence, Class 1 to 5 licence holders are discussed separately from Class 6 licence holders to avoid duplication of licence counts. Tables 2-6, 2-7, 2-8, 2-9 and 2-10 present the number of Class 6 active motorcycle licensed drivers by Gender, Age Group and Driver Licence Class.

Terms and Definitions
"Licence Class"

- A Manitoba Driver's Licence of a specific level which permits the holder to operate vehicles within a specific Vehicle Class.

"Vehicle Class"

- Category of vehicles meeting specific designations and specifications.

"Active drivers"

- Drivers holding an active Manitoba Driver's Licence of any specific Licence Class.

"Suspended drivers"

- Drivers holding a Manitoba Driver's Licence of any specific Licence Class who have been disqualified from driving for some reason. Although the list is extensive, some possible suspensions could be for driving violations, medical conditions, administrative suspensions and criminal code convictions.

"Graduated Driver Licensing (GDL)"

- A three-stage program designed to help new drivers, regardless of age, acquire the knowledge and skill needed to safely operate a motor vehicle. Each licence stage has specific rules and restrictions governing when and under what circumstances the holder is allowed to operate a motor vehicle, enabling novice drivers to gain more experience under a greater variety of driving conditions. Both Class 5 and Class 6 licences have a GDL stage associated with them.
- Three stages of GDL: Learner (5/L or 6/L); Intermediate (5/I or 6/I); and, Full (5/F or 6/F).
- To view a full discussion of the GDL program in Manitoba, please visit:
    - https://www.mpi.mb.ca/Pages/graduated-driver-licensing.aspx; ou en Français,
    - https://www.mpi.mb.ca/Pages/graduated-driver-licensing-fr.aspx

Chart 2-1 Class Licence System Quick Reference Chart

The Class Licence System

Manitoba Licence Class		Allows the Licence Holder to Operate	Minimum Age	Medical Requirements	Requirements
1		• Semi-trailer trucks[1]. • Includes all vehicles in Classes 2, 3, 4 and 5.	18	• Must meet medical and vision standards. • Medical report required on initial application and periodically thereafter based on the age of the driver. Medical report valid for six months from the date completed by physician. Must obtain Authorized Instruction within this six-month time frame.	• Must hold a minimum Class 5I (Intermediate Stage) licence or Class 5A (Authorized Instruction Stage) licence to obtain authorized instruction in Classes 1–4. • Must pass knowledge test. • Requires supervising driver for Authorized Instruction. • Must pass road test. For Classes 1, 2, 3 or 4 (buses and trucks only), the test includes a pre-trip inspection of vehicle (and air brake system if applicable) by the applicant.
2		• Buses[2] having a seating capacity of over 24 passengers (while carrying passengers). • School buses[3] having a seating capacity over 36 passengers (while carrying passengers). • Includes all vehicles in Classes 3, 4 and 5.			
3		• A truck with more than two axles. • A combination of vehicles that includes a truck with more than two axles (not including a semi-trailer truck[1]). • A combination of vehicles consisting of a truck with two axles or Class 5 passenger vehicle, and a towed vehicle with a registered gross vehicle weight of **more than** 4,540 kg. • Includes all vehicles in Classes 4 and 5.			
4		• Ambulances and other emergency vehicles. • Buses[2] with a seating capacity between 10 and 24 passengers (while carrying passengers). • School buses[3] with a seating capacity between 10 and 36 passengers (while carrying passengers). • Includes all vehicles in Class 5. *Note: Individual municipalities may require a Class 4 licence to operate a vehicle for hire – contact your municipality for information.*			
5		• A passenger car (other than Class 4 vehicles). • A bus[2] while not carrying passengers. • A truck with two axles. • A combination of vehicles consisting of a passenger car or a truck with two axles, and a towed vehicle with a registered gross vehicle weight of **up to** 4,540 kg. • May operate Class 3 vehicles registered as a farm truck and the driver holds a Class 5I (Intermediate stage) licence or 5F (Full stage) licence. • May operate a moped[4], if 16 years of age or older. • May operate a special mobile machine, implement of husbandry or tractor on a provincial highway, or a highway within the municipal boundaries of a city, town or urban municipality, subject to supervising driver requirements.	16 or 15½ if enrolled in a high school driver education course currently in progress	• Medical report required when requested. • Must meet vision standards.	• Must pass knowledge test for Class 5L (Learner Stage) licence (must wait seven days for re-test.) • Requires supervising driver for Class 5L (Learner Stage) or Class 5A (Authorized Instruction) licence. • Requires supervising driver for a Class 5I (Intermediate Stage) licence if carrying more than one passenger between the hours of midnight and 5 a.m. • Must pass road test to advance to the Intermediate Stage (Minimum 15 months). (Must wait 14 days for re-test. Professional instruction required if five or more tests are needed.)
6		• Motorcycles.	16	• Medical report required when requested. • Must meet vision standards.	• Driver must hold a valid licence of any class and stage. • Must pass knowledge test (must wait seven days for re-test). • Must obtain Class 6M (Motorcycle Training Course Stage) licence in order to complete motorcycle training course. The course is required before Class 6L (Learner Stage) licence is issued. (Contact Safety Services Manitoba for motorcycle course scheduling and fees.) • Minimum nine-month Learner Stage. • Must pass road test to advance to the Intermediate Stage (Minimum 15 months). (Must wait 14 days for re-test.)
Air Brake Endorsement		• Air brake endorsement permits the holder to drive vehicles equipped with air brakes in the class of vehicle for which the person is licensed. *Note: Drivers of a Class 3 truck registered as a farm truck equipped with air brakes are exempt from this requirement.*			• Must pass knowledge test. • Must pass Air Brake practical test for A (Authorized) endorsement. • Must pass adjustment of the manual slack adjusters for S (Slack Adjuster) endorsement. • No additional charge for the Air Brake practical test if it is completed at the same time you are road-tested for a higher class of licence.

1. A semi-trailer truck is a truck tractor and a semi-trailer combined.
2. A bus is any vehicle with a seating capacity of at least 11 persons (including the driver) used primarily to carry passengers. It excludes vehicles used for personal transportation by the owner or with the owner's permission.
3. School bus certificate is required. For further information, contact the Pupil Transportation Unit, Manitoba Education and Training at 204-945-6900.
4. Mopeds are not allowed to be driven on highways with a speed limit exceeding 80 km/h but may cross these highways.

Table 2-1 Class 1-5 Licensed Drivers by Year and Driver Status

Table 2-1
Class 1-5 Licensed Drivers by Year and Driver Status: 2009-2019

Licensing Year	Active Drivers	Suspended Drivers	Total Drivers	% Change to Previous Year
2009	754,485	21,724	776,209	-
2010	767,222	23,108	790,330	1.8%
2011	788,046	25,645	813,691	3.0%
2012	805,519	32,962	838,481	3.0%
2013	818,303	37,487	855,791	2.1%
2014	828,928	40,311	869,239	1.6%
2015	839,036	42,302	881,338	1.4%
2016	852,067	43,813	895,880	1.7%
2017	864,695	40,670	905,365	1.1%
2018	876,350	44,064	920,414	1.7%
2019	**885,918**	**47,210**	**933,128**	1.4%
Average 2014-2018	852,215	42,232	894,447	4.3%

Compared to 2018, the total number of licensed drivers in Manitoba in 2019 increased by 1% to 933,128. This is in line with historical increases seen in recent years; the rate of change over the past five years (2014-2018) was a nearly 2% increase on average each year. The total number of licensed drivers increased by 4% in 2019 compared to the previous five year (2014-2018) annual average.

The proportion of suspended drivers increased by 7% in 2019 compared to 2018, up to 47,210 from 44,064, respectively. The count of suspended drivers in 2019 is 12% higher than the previous five year (2014-2018) annual average.

Table 2-2 Class 1-5 Licensed Drivers by Age Group, Gender and Driver Status

Table 2-2
Class 1-5 Licensed Drivers by Age Group, Gender and Driver Status: 2019

Age Group	Gender	Active Drivers	Suspended Drivers	Total Drivers	% of "All Ages"	% Suspended in Category
16-17	Male	10,740	263	11,003	2.3	2.4
	Female	10,198	136	10,333	2.3	1.3
	Total	20,938	399	21,337	2.3	1.9
18-19	Male	13,247	668	13,915	2.9	4.8
	Female	12,294	418	12,712	2.8	3.3
	Total	25,541	1,086	26,627	2.9	4.1
20-24	Male	37,245	2,614	39,859	8.3	6.6
	Female	33,920	1,635	35,555	7.9	4.6
	Total	71,165	4,248	75,414	8.1	5.6
25-34	Male	79,770	6,308	86,078	17.9	7.3
	Female	77,006	4,078	81,083	18.0	5.0
	Total	156,776	10,386	167,162	17.9	6.2
35-44	Male	76,014	4,980	80,994	16.8	6.1
	Female	74,787	2,776	77,563	17.2	3.6
	Total	150,801	7,756	158,557	17.0	4.9
45-54	Male	72,603	4,087	76,690	15.9	5.3
	Female	69,958	1,823	71,781	15.9	2.5
	Total	142,561	5,910	148,471	15.9	4.0
55-64	Male	77,456	3,789	81,245	16.9	4.7
	Female	74,111	1,392	75,503	16.7	1.8
	Total	151,567	5,181	156,748	16.8	3.3
65-74	Male	53,486	2,493	55,979	11.6	4.5
	Female	52,794	1,191	53,985	12.0	2.2
	Total	106,280	3,684	109,964	11.8	3.4
75-84	Male	24,028	2,296	26,324	5.5	8.7
	Female	23,922	1,384	25,306	5.6	5.5
	Total	47,950	3,680	51,630	5.5	7.1
85+	Male	6,345	3,040	9,385	1.9	32.4
	Female	5,994	1,840	7,834	1.7	23.5
	Total	12,340	4,880	17,220	1.8	28.3
All Ages	Male	450,935	30,538	481,472	100.0	6.3
	Female	434,983	16,673	451,656	100.0	3.7
	Total	885,918	47,210	933,128	100.0	5.1

In 2019, the proportion of suspended drivers aged 75 or older is almost three times the proportion of suspended drivers under age 75 (12% of drivers aged 75 or older are suspended; nearly 5% of drivers aged 16 to 74 are suspended).

Table 2-3 Class 1-5 Licensed Drivers by Licence Class, Driver Status and Gender

Table 2-3
Class 1-5 Licensed Drivers by License Class, Driver Status and Gender: 2019

License Class	Active Drivers				Suspended Drivers				Total	%
	Male	Female	Subtotal	%	Male	Female	Subtotal	%		
1	41,373	1,546	42,920	4.8	1,218	46	1,264	2.7	44,184	4.7
2	4,668	1,660	6,328	0.7	105	17	122	0.3	6,450	0.7
3	12,009	473	12,482	1.4	304	5	309	0.7	12,791	1.4
4	12,402	4,222	16,623	1.9	453	71	524	1.1	17,147	1.8
5/F	350,331	382,634	732,965	82.7	22,731	11,306	34,037	72.1	767,002	82.2
5/I	8,552	8,655	17,207	1.9	706	305	1,011	2.1	18,218	2.0
5/L	17,157	28,072	45,229	5.1	3,366	3,790	7,156	15.2	52,385	5.6
5/A	4,413	7,717	12,131	1.4	1,058	890	1,947	4.1	14,078	1.5
Other	28	4	32	<0.1	597	242	840	1.8	872	<0.1
Total	450,935	434,983	885,918	100.0	30,538	16,673	47,210	100.0	933,128	100.0

Manitoba Class 5 Driver's Licence Stages:

- 5/F Full Class 5 licence (including Full Stage Class 5 under Graduated Driver Licensing)
- 5/I Intermediate Stage under Graduated Driver Licensing
- 5/L Learner Stage under Graduated Driver Licensing
- 5/A Learner drivers who are not in Graduated Driver Licensing
- Other Unlicensed drivers assigned a licence number

The vast majority of Manitobans with a licence hold a Full Class 5 (82%). Novice drivers, holding either Learner (5/L) or an Intermediate (5/I) Stage licence, account for the next largest group (8% of all licensed drivers in Manitoba), followed by Class 1 licensed drivers (5%).

Very little has changed in the proportion of licence holders by class when comparing 2019 to 2018.

Table 2-4 Class 1-5 Male Drivers by Age Group, Driver Status and Licence Class

Table 2-4
Class 1-5 Male Drivers by Age Group, Driver Status and License Class: 2019

Age Group	Status	Licence Class										Total
		1	2	3	4	1-4/A	5/F	5/I	5/L	5/A	5 Other	
16-17	Active	0	0	0	0	0	677	4,335	5,726	3	0	10,740
	Suspended	0	0	0	0	0	132	49	81	0	1	263
	Subtotal	0	0	0	0	0	808	4,384	5,808	3	1	11,003
18-19	Active	88	1	17	48	2	8,123	1,818	2,980	172	0	13,247
	Suspended	2	0	0	0	0	343	77	239	5	2	668
	Subtotal	90	1	17	48	2	8,465	1,894	3,219	177	2	13,915
20-24	Active	1,647	39	481	724	7	28,438	1,318	3,918	675	0	37,245
	Suspended	35	2	10	8	1	1,355	203	952	48	0	2,614
	Subtotal	1,682	40	491	732	8	29,793	1,521	4,870	723	0	39,859
25-34	Active	7,008	352	2,259	2,917	11	62,135	763	3,118	1,209	0	79,770
	Suspended	156	7	47	60	2	3,943	302	1,579	211	1	6,308
	Subtotal	7,164	358	2,307	2,976	13	66,078	1,064	4,697	1,420	1	86,078
35-44	Active	8,132	685	2,206	3,193	6	59,587	245	817	1,144	0	76,014
	Suspended	251	8	58	74	0	3,636	62	360	346	184	4,980
	Subtotal	8,383	693	2,263	3,267	6	63,223	307	1,176	1,490	184	80,994
45-54	Active	9,312	1,071	2,247	2,778	3	56,184	63	347	598	0	72,603
	Suspended	307	29	52	100	0	3,105	11	94	201	188	4,087
	Subtotal	9,619	1,100	2,300	2,878	3	59,289	74	441	799	188	76,690
55-64	Active	9,992	1,587	3,105	2,058	1	60,129	9	190	384	0	77,456
	Suspended	237	31	55	105	0	3,050	2	46	115	147	3,789
	Subtotal	10,229	1,618	3,161	2,163	1	63,178	12	236	499	147	81,245
65-74	Active	4,469	799	1,451	622	0	45,921	3	55	168	0	53,486
	Suspended	133	19	41	72	0	2,130	0	13	43	41	2,493
	Subtotal	4,602	818	1,492	693	1	48,051	3	68	211	41	55,979
75-84	Active	704	131	231	60	0	22,845	0	7	49	0	24,028
	Suspended	73	5	28	24	0	2,116	0	1	39	10	2,296
	Subtotal	777	136	259	85	0	24,961	0	8	88	10	26,324
85+	Active	22	4	11	3	0	6,294	0	0	11	0	6,345
	Suspended	24	5	12	9	0	2,922	0	0	49	19	3,040
	Subtotal	46	9	24	12	0	9,215	0	0	61	19	9,385
Total	Active	41,373	4,668	12,009	12,402	28	350,331	8,552	17,157	4,413	0	450,935
	Suspended	1,218	105	304	453	3	22,731	706	3,366	1,058	594	30,538
	Total	42,592	4,774	12,313	12,855	32	373,062	9,258	20,523	5,471	594	481,472

Men aged 25 to 34 make up the largest number of licensed drivers in Manitoba (9% of all drivers; 18% of all male drivers), closely followed by men aged 55 to 64 (9% of all drivers; 17% of all male drivers).

Men aged 25 to 34 account for the largest proportion of suspended drivers under the age of 75 (16% of all suspended drivers; 25% of suspended male drivers).

Table 2-5 Class 1-5 Female Drivers by Age Group, Driver Status and Licence Class

Table 2-5
Class 1-5 Female Drivers by Age Group, Driver Status and License Class: 2019

Age Group	Status	License Class										Total
		1	2	3	4	1-4/A	5/F	5/I	5/L	5/A	5 Other	
16-17	Active	0	0	0	0	0	673	3,846	5,677	1	0	10,198
	Suspended	0	0	0	0	0	32	22	82	0	0	136
	Subtotal	0	0	0	0	0	704	3,868	5,760	1	0	10,333
18-19	Active	1	0	1	18	0	7,333	1,499	3,390	52	0	12,294
	Suspended	0	0	0	0	0	123	41	254	0	0	418
	Subtotal	1	0	1	18	0	7,456	1,540	3,645	52	0	12,712
20-24	Active	42	8	54	328	0	25,952	1,383	5,693	460	0	33,920
	Suspended	0	0	0	2	0	595	69	948	22	0	1,635
	Subtotal	42	8	54	330	0	26,547	1,452	6,640	482	0	35,555
25-34	Active	187	118	142	1,085	2	65,112	1,282	6,645	2,433	0	77,006
	Suspended	6	0	0	11	0	2,038	139	1,701	182	0	4,078
	Subtotal	193	118	142	1,096	2	67,151	1,421	8,346	2,615	0	81,083
35-44	Active	285	284	78	1,078	2	66,397	500	3,689	2,474	0	74,787
	Suspended	12	3	2	19	0	1,782	28	542	327	61	2,776
	Subtotal	297	286	80	1,096	2	68,180	527	4,232	2,801	61	77,563
45-54	Active	499	499	77	994	0	64,305	120	2,064	1,401	0	69,958
	Suspended	11	5	0	12	0	1,340	7	197	183	68	1,823
	Subtotal	510	504	77	1,006	0	65,645	127	2,261	1,583	68	71,781
55-64	Active	422	580	79	616	0	70,951	21	773	670	0	74,111
	Suspended	11	6	1	14	0	1,164	0	49	79	68	1,392
	Subtotal	433	586	80	630	0	72,115	21	822	748	68	75,503
65-74	Active	104	156	35	99	0	52,076	3	129	192	0	52,794
	Suspended	6	1	1	7	0	1,100	0	15	38	25	1,191
	Subtotal	109	157	36	106	0	53,176	3	143	230	25	53,985
75-84	Active	8	16	5	4	0	23,850	0	12	27	0	23,922
	Suspended	0	1	1	2	0	1,346	0	2	23	10	1,384
	Subtotal	8	17	6	6	0	25,196	0	13	50	10	25,306
85+	Active	0	0	1	0	0	5,985	0	1	8	0	5,994
	Suspended	0	1	0	4	0	1,787	0	1	37	10	1,840
	Subtotal	0	1	1	4	0	7,772	0	2	45	10	7,834
Total	Active	1,546	1,660	473	4,222	4	382,634	8,655	28,072	7,717	0	434,983
	Suspended	46	17	5	71	0	11,306	305	3,790	890	242	16,673
	Total	1,592	1,677	479	4,292	4	393,940	8,960	31,863	8,607	242	451,656

Women aged 25 to 34 make up the largest number of licensed female drivers in Manitoba (9% of all drivers; 18% of all female drivers), closely followed by women aged 35 to 44 (8% of all drivers; 17% of all female drivers).

Even though women account for almost half (48%) of all licensed drivers, they only account for 35% of suspended drivers in Manitoba. Women aged 25 to 34 account for the highest proportion of suspended female drivers under the age of 75 (30%).

Table 2-6 Total Class 6 Active Licensed Drivers by Year

Table 2-6
Total Class 6 Active Licensed Drivers by Year: 2009 to 2019

Licensing Year	Active Drivers	% Change to Previous Year
2009	60,105	-
2010	61,572	2.4%
2011	63,385	2.9%
2012	65,305	3.0%
2013	66,908	2.5%
2014	68,180	1.9%
2015	69,506	1.9%
2016	71,135	2.3%
2017	72,551	2.0%
2018	73,822	1.8%
2019	**74,993**	**1.6%**
Average 2014-2018	71,039	5.6%

In 2019, the number of motorcycle licence holders increased by 2% compared to 2018, in line with the annual average rate of change in the previous five years (2014-2018 – 2%). The total number of motorcycle licence holders increased by 6% in 2019 compared to the previous five year (2014-2018) annual average.

As discussed in the introduction of this section, Class 6 Motorcycle licence holders in Manitoba also hold a Class 1-5 licence due to a requirement for those wishing to obtain a Class 6 licence to first obtain a licence in any other class (1-5). Because of this, Class 6 licence holders cannot be added to Class 1-5 licence holders.

Also, a licence suspension is applicable to all licence classes held by a suspended driver. Therefore, suspended Class 6 licences are not counted or addressed in the following discussion; they have been covered in the previous discussions of suspended Class 1-5 licence holders.

Table 2-7 Class 6 Active Licensed Drivers by Age Group and Gender

Table 2-7
Class 6 Active Licensed Drivers by Age Group and Gender: 2019

Age Group	Gender	Active Drivers	%
16-17	Male	105	
	Female	14	
	Total	118	0.2
18-19	Male	312	
	Female	47	
	Total	359	0.5
20-24	Male	2,319	
	Female	299	
	Total	2,617	3.5
25-34	Male	8,209	
	Female	1,380	
	Total	9,589	12.8
35-44	Male	8,741	
	Female	1,664	
	Total	10,405	13.9
45-54	Male	12,237	
	Female	2,279	
	Total	14,516	19.4
55-64	Male	19,448	
	Female	2,923	
	Total	22,371	29.8
65-74	Male	11,430	
	Female	1,311	
	Total	12,741	17.0
75-84	Male	1,799	
	Female	163	
	Total	1,962	2.6
85+	Male	283	
	Female	31	
	Total	314	0.4
All Ages	Male	64,881	
	Female	10,112	
	Total	74,993	100.0

Men account for the majority of Class 6 licence holders (87% overall). Most Class 6 licence holders are between the ages 35 and 64 (63%). Men aged 35 to 64 make up 54% of all Class 6 licence holders. Women in the same age group (aged 35 to 64) make up 9% of all Class 6 licence holders.

Table 2-8 Class 6 Active Licensed Drivers by Licence Class and Gender

Table 2-8
Class 6 Active Licensed Drivers by License Class and Gender: 2019

License Class	Active Drivers			
	Male	Female	Total	%
6/F	47,603	5,271	52,875	70.5
6/I	7	0	7	<0.1
6/L	10,471	3,054	13,525	18.0
6/A	3,107	399	3,506	4.7
6/M	3,694	1,387	5,081	6.8
Total	64,881	10,112	74,993	100.0

Manitoba Class 6 Driver's Licence Stages

6/F Full Class 6 licence (including Full Stage Class 6 under Graduated Driver Licensing)
6/I Intermediate Stage under Graduated Driver Licensing
6/L Learner Stage under Graduated Driver Licensing
6/A Learner drivers who are not in Graduated Driver Licensing
6/M Licence received after passing written test, entitling holder to take the Motorcycle Training Course

Under Manitoba's Graduated Driver Licensing (GDL) program, novice drivers are only required to complete the Intermediate Stage once. Credit for time served in the Intermediate Stage in Class 5 is given for the Intermediate Stage in Class 6. That is, if a novice driver completes the Intermediate stage of the GDL program for a Class 5 licence, they do not need to repeat the Intermediate Stage in order to obtain a Class 6 licence.

In 2019, Full Class 6 licence holders account for nearly 71% of all Manitoba Class 6 licence holders and Learners account for 18%. This distribution is similar to 2018.

Table 2-9 Active Class 6 Male Drivers by Age Group and Licence Class

Table 2-9
Active Class 6 Male Drivers by Age Group and License Class: 2019

Age Group	License Class					Total	% of Total
	6/F	6/I	6/L	6/A	6/M		
16-17	4	5	58	0	38	105	0.2
18-19	45	1	167	2	96	312	0.5
20-24	491	0	1,214	80	533	2,319	3.6
25-34	2,590	1	3,831	328	1,460	8,209	12.7
35-44	4,364	0	2,582	973	822	8,741	13.5
45-54	9,387	0	1,423	1,027	400	12,237	18.9
55-64	17,830	0	862	536	220	19,448	30.0
65-74	10,921	0	287	129	93	11,430	17.6
75-84	1,696	0	44	30	30	1,799	2.8
85+	276	0	3	3	2	283	0.4
Total	47,603	7	10,471	3,107	3,694	64,881	

Table 2-10 Active Class 6 Female Drivers by Age Group and Licence Class

Table 2-10
Active Class 6 Female Drivers by Age Group and License Class: 2019

Age Group	License Class					Total	% of Total
	6/F	6/I	6/L	6/A	6/M		
16-17	0	0	8	0	5	14	0.1
18-19	3	0	24	0	20	47	0.5
20-24	31	0	162	0	106	299	3.0
25-34	235	0	738	12	395	1,380	13.7
35-44	487	0	768	105	305	1,664	16.5
45-54	1,095	0	788	135	261	2,279	22.5
55-64	2,088	0	502	112	221	2,923	28.9
65-74	1,146	0	64	32	69	1,311	13.0
75-84	155	0	1	3	4	163	1.6
85+	31	0	0	0	0	31	0.3
Total	5,271	0	3,054	399	1,387	10,112	

SECTION 3 – Vehicle Registrations

Introduction

This section deals with vehicle registrations and examines these by three major categories: Commercial; Non-Commercial; and, Snowmobiles (Recreational).

Key Highlights

There are a total of 983,010 Non-Commercial vehicles registered in Manitoba in 2019.

- This is a 1% increase over 2018 and a 19% increase from 2009.
- This is a 3% increase over the average registrations for the period 2014-2018.

There are a total of 131,893 Commercial vehicles registered in Manitoba in 2019.

- This is a 1% increase over 2018 and a 55% increase from 2009.
- This is an 11% increase over the average registrations for the period 2014-2018.

Overall, there is a 1% increase in the total vehicle registrations (commercial and non-commercial, combined) in Manitoba from 1,105,548 in 2018 to 1,114,903 in 2019.

There are a total of 35,117 Snowmobiles registered in Manitoba in 2019.

- There are 174 more registered snowmobiles in 2019 than in 2018 (a nearly 1% increase); a 27% increase from 2009.
- This is a nearly 3% increase over the average registrations for the period 2014-2018.

Major Elements Examined

Counts for each Commercial and Non-Commercial registration types represent an average registration over the twelve-month period January through December 2019. That is, active vehicle registrations as of the first of each month are recorded for each vehicle category and then an average for the year is calculated and reported. Counts for Snowmobiles use a similar “point-in-time” average calculation, but include December 2018 through to and including April 2019 to cover the snowmobile riding season.

Terms and Definitions

“Vehicle Class”

- Category of vehicles meeting specific designations and specifications
- Non-Commercial vehicle classes are vehicles registered for private use and include:
    - Passenger
    - Antique
    - Motorcycle/Moped
    - Truck
    - Farm Truck
    - Trailer
- Commercial vehicle classes are those involving vehicles registered to or for the use of a business and include:
    - Truck
    - Public Service Vehicles (PSV) Truck
    - Dealer/Repairer
    - PSV Bus
    - Trailers
    - PSV Trailers
    - Regulated Passenger
- A detailed description of each class noted above can be found in the “Glossary” of the Report

Table 3-1 Non Commercial Vehicle Class

Table 3-1
Non-Commercial Vehicle Class: 2019

Vehicle Class*	Total	%
Passenger	584,432	59.5
Antique	163	<0.1
Motorcycle/Moped	15,682	1.6
Truck	152,645	15.5
Farm Truck	43,612	4.4
Trailer	186,476	19.0
Total Non-Commercial Vehicles Registered	**983,010**	**100**
Snowmobiles (Recreational)		
Snowmobiles	35,117	

*For definition of these motor vehicle classes refer to the “Terms and Definitions” of this Section and “Glossary” of this Report.

Table 3-2 Commercial Vehicle Class

Table 3-2
Commercial Vehicle Class: 2019

Vehicle Class*	Total	%
Commercial Truck	49,001	37.2
Public Service Vehicle (PSV) Truck	10,731	8.1
Dealer and Repairer	6,513	4.9
Public Service Vehicle (PSV) Bus	170	0.1
Commercial Trailer	61,109	46.3
Public Service Vehicle (PSV) Trailer	91	<0.1
Regulated Passenger	4,277	3.2
Total Commercial Vehicles Registered	**131,893**	**100**

*For definition of these motor vehicle classes refer to the “Terms and Definitions” of this Section and “Glossary” of this Report.

Table 3-3 Vehicle Registration Summary

Table 3-3
Vehicle Registrations Summary: 2009 to 2019

Registration Class	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	5-year (2014-2018) Average	**2019**	% Change 2019 vs. 2018	% Change (2019 vs. 2014-2018 average)
Non-Commercial Vehicle Class														
Passenger	516,185	521,894	529,406	539,384	545,723	551,113	559,606	565,348	571,719	579,212	565,400	**584,432**	0.9	3.4
Antique**	77	95	103	131	134	133	136	145	145	152	142	**163**	7.2	14.5
Motorcycle/Moped	10,413	10,732	11,229	12,329	12,658	13,042	13,732	14,634	15,356	15,761	14,505	**15,682**	-0.5	8.1
Truck	127,154	133,057	139,530	145,405	149,295	153,077	156,302	150,401	151,143	152,615	152,707	**152,645**	<0.1	<0.1
Farm Truck	43,746	43,517	42,942	43,384	43,361	43,517	43,749	43,908	43,702	43,563	43,688	**43,612**	0.1	-0.2
Trailer	127,080	134,358	143,249	154,603	160,451	165,492	170,778	175,160	179,244	183,121	174,759	**186,476**	1.8	6.7
Subtotal	824,653	843,653	866,459	895,236	911,622	926,374	944,303	949,597	961,309	974,424	951,201	**983,010**	0.9	3.3
Commercial Vehicle Class														
Truck	26,851	27,690	28,928	30,391	31,407	32,227	33,521	40,161	42,160	43,037	38,221	**49,001**	13.9	28.2
PSV Truck	9,818	9,849	10,244	10,934	11,337	11,813	12,447	14,647	15,130	15,558	13,919	**10,731**	-31.0	-22.9
Dealer/Repairer	6,347	6,229	6,185	6,178	6,210	6,354	6,439	6,551	6,598	6,548	6,498	**6,513**	-0.5	0.2
PSV Bus**	155	161	150	143	153	156	168	188	196	217	185	**170**	-21.8	-8.1
Trailers*	41,846	45,249	45,221	49,389	50,936	55,000	54,342	57,824	58,054	61,538	57,351	**61,109**	-0.7	6.6
PSV Trailers**	57	57	57	71	78	82	87	101	104	132	101	**91**	-30.5	-9.5
Regulated Passenger****	-	-	-	-	-	-	-	2,609	3,955	4,095	-	**4,277**	4.4	-
Subtotal	85,075	89,235	90,784	97,106	100,120	105,632	107,004	122,081	126,196	131,124	118,407	**131,893**	0.6	11.4
Total Registrations - Non-Commercial and Commercial Vehicle Classes														
Total Registrations	909,728	932,888	957,243	992,342	1,011,742	1,032,006	1,051,307	1,071,677	1,087,504	1,105,548	1,069,608	**1,114,903**	0.8	4.2
Snowmobiles* **														
Total	27,664	28,064	30,421	30,650	32,851	34,280	33,735	34,061	34,344	34,943	34,273	**35,117**	0.5	2.5
Off-Road Vehicle Dealer Plates														
Total	464	454	471	469	505	518	529	562	568	552	546	**538**	-2.5	-1.5

*Commercial trailers include semi-trailers.
**Due to small numbers, percentage change figures are expected to be somewhat erratic year-over-year and should be interpreted with extreme caution.
***Snowmobile registration count reflects the average number of active policies at a point in time during the riding season, from December to April (e.g., for 2019, December 2018 through April 2019, inclusive).
****Regulated Passenger has been added to more accurately reflect current regulations.

Note: Legislative changes over the course of 2018 and 2019 have reduced the number and type of registration categories reported in this report. To reflect these changes in the historical summary, registration counts from 2009 to 2018 have been adjusted to match the methodology employed for 2019. As such, the historical summary reported here will slightly differ from previously published Traffic Collision Statistics Reports for these years.

The total count of vehicles registered in Manitoba in 2019 (1,114,903) has increased by 1% compared to 2018. This increase is in line with year-over-year increases seen in previous years. The count of registered vehicles in 2019 is 4% higher than the five year (2014-2018) annual average.

The total increase in overall vehicle registrations in 2019 comes from an increase in both non-commercial and commercial vehicle registrations. Non-Commercial vehicle registrations increased by 1% in 2019 compared to 2018. Commercial vehicle registrations also increased by 1% in 2019 compared to 2018.

Snowmobile registrations increased by nearly 1% in 2019 over 2018, and by nearly 3% compared to the five year (2014-2018) annual average.

SECTION 4 – Traffic Collisions

Introduction

This section counts the number of collisions in Manitoba and provides detail for collisions of different severity: fatal, injury and property damage only (PDO). Historical information regarding the number of collisions, the number of victims, the number of vehicles and the number of drivers involved in collisions over the ten year period 2009 to 2018 is presented and compared to 2019. Details are provided for 2019 traffic collisions in terms of the month of occurrence, day of the week, time of day, weather and road conditions, location and type of collision.

Key Highlights

In 2019, there are 89,102 collision incidents reported through the claim registration process with Manitoba Public Insurance where some insurance related financial activity took place. This forms the basis for the overall population of collisions that Traffic Accident Reports (TARs) could be drawn from. To be consistent with jurisdictions across Canada and in compliance with reporting standards for the National Collision Database maintained by Transport Canada, a "reportable collision" definition is applied as a filter to these collision incidents, resulting in a total of 54,755 TAR reportable collisions. It is these TAR reportable collisions that are the primary focus of this Traffic Collision Statistics Report.

In 2019, there are 11,645 victims from 54,755 collisions involving 73,287 vehicles and 69,564 drivers. Of the 54,755 collisions:

- 68 are fatal collisions involving 99 vehicles and 97 drivers, resulting in 76 people killed and 47 people injured;
- 8,992 are injury collisions involving 15,276 vehicles and 15,095 drivers, resulting in 11,522 people injured; and,
- 45,695 are PDO collisions involving 57,912 vehicles and 54,372 drivers.

Collisions on public roadways in Manitoba in 2019 most frequently occur:

- In Winnipeg (60% of all collisions; 22% of fatal, 78% of injury and 57% of PDO collisions) and in rural locations (24% of all collisions, 47% of fatal, 12% of injury and 27% of PDO collisions);
- In the months of January, February and December – 33% of all collisions; 19% of fatal, 34% of injury and 32% of PDO collisions;
- On Fridays - Friday accounts for 18% of all collisions; 18% of fatal, 17% of injury and 18% of PDO collisions; and,
- Between the hours of 3 and 6 p.m. (15:00 to 17:59) – 24% of all collisions; nearly 27% of fatal, 28% of injury and 23% of PDO collisions.

Collisions on public roadways in Manitoba in 2019 are most frequently:

- "Motor vehicle to motor vehicle" in nature – 60% of all collisions; 53% of fatal, 83% of injury and 56% of PDO collisions; and,
- "Rear end" collisions (37% of all collisions), collisions occurring at 90° intersections (15% of all collisions), collisions involving a fixed object (15% of all collisions) and side-swipe collisions (13% of all collisions).

Major Elements Examined

Counts of collisions in Manitoba for 2019 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

Collisions, victims, vehicles and drivers are presented separately at the beginning of this section with counts provided for the years 2009 through 2019. Following that, the majority of this section explores traffic collisions occurring in 2019 and provides comparisons to annual average counts of collisions for the time period 2014 to 2018.

It is important to note that the number of collisions is not equal to the number of victims as each collision can result in multiple victims. Likewise, the number of vehicles involved is not equal to the number of drivers involved as a driverless vehicle (e.g., a parked car; vehicles that do not have a licensed driver) could be involved in a collision.

"Drivers" in this section refers to the number of drivers involved in collisions. It excludes pedestrians, bicyclists, snowmobiles, off-road vehicles, farm and construction equipment, trains and parked vehicles.

The terms 'crash', 'collision', and 'accident' are used interchangeably in this report.

The terms 'fatally injured' and 'killed' are used interchangeably in this report.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2014 to 2018. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions can have a significant effect on statistics such as percentage change to previous years and involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

Terms and Definitions

"Collision Severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Collision Type"

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

"Urban Location"

- Collisions occurring within the municipal boundaries of urban locations, including Winnipeg, Brandon, Portage la Prairie, Flin Flon, Dauphin, Thompson, The Pas, Selkirk and others.

"Rural Location"

- Collisions occurring on primary highways, secondary highways and local roadways, including the Trans Canada Highway and excluding those that occur within the municipal boundaries of an urban area.

"Accident Configuration"

- Briefly describes the action taken by a vehicle immediately prior to or at the start of the collision, including such events as rear-ending another vehicle, side-swiping another vehicle, turning into (the path of) another vehicle, parking, meeting another vehicle at an intersection and/or leaving the roadway.
- "Other" in terms of accident configuration includes collisions involving more than one configuration or sequence of events.

Table 4-1 Historical Summary of Traffic Collisions

Table 4-1
Historical Summary of Traffic Collisions: 2009 to 2019

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	**2019**	2014-2018 Average
Collision Incidents (Claims)	88,954	89,276	94,939	92,248	99,642	95,563	89,445	93,274	95,151	90,292	**89,102**	92,745
Total TAR Reportable Collisions	26,578	27,172	34,302	38,972	41,819	40,672	41,548	45,316	51,844	51,732	**54,755**	46,222
Fatal	83	78	94	89	69	64	69	96	65	65	**68**	72
Injury	5,396	5,386	6,309	8,280	8,729	9,023	9,127	9,582	9,691	9,325	**8,992**	9,350
PDO	21,099	21,708	27,899	30,603	33,021	31,585	32,352	35,638	42,088	42,342	**45,695**	36,801
Total Victims	7,302	7,130	8,337	10,623	11,234	11,676	12,017	12,653	12,659	12,057	**11,645**	12,212
Killed	86	87	110	96	85	68	78	107	73	70	**76**	79
Injured	7,216	7,043	8,227	10,527	11,149	11,608	11,939	12,546	12,586	11,987	**11,569**	12,133
Total Vehicles Involved	43,610	44,979	53,516	59,556	64,316	62,277	61,711	66,063	72,055	70,244	**73,287**	66,470
Fatal	126	110	141	126	111	95	106	143	88	98	**99**	106
Injury	9,268	9,358	10,956	14,802	15,663	16,233	16,184	16,927	16,748	15,975	**15,276**	16,413
PDO	34,216	35,511	42,419	44,628	48,542	45,949	45,421	48,993	55,219	54,171	**57,912**	49,951
Total Drivers Involved	41,097	42,310	51,279	58,877	63,501	61,294	59,716	63,839	68,447	66,606	**69,564**	63,980
Fatal	120	105	130	119	106	90	103	138	85	95	**97**	102
Injury	8,938	8,969	10,644	14,696	15,539	16,120	16,088	16,753	16,531	15,752	**15,095**	16,249
PDO	32,039	33,236	40,505	44,062	47,856	45,084	43,525	46,948	51,831	50,759	**54,372**	47,629

In 2019, there are 11,645 victims from 54,755 collisions involving 73,287 vehicles and 69,564 drivers. Of the 54,755 collisions:

- 68 are fatal collisions involving 99 vehicles and 97 drivers, resulting in 76 people killed and 47 people injured;
- 8,992 are injury collisions involving 15,276 vehicles and 15,095 drivers, resulting in 11,522 people injured; and,
- 45,695 are PDO collisions involving 57,912 vehicles and 54,372 drivers.

Total collisions in 2019 increased by 6% compared to 2018 and by nearly 19% compared to the number of collisions in the previous five year (2014 to 2018) annual average.

- Fatal collisions increased by 5% compared to 2018 but decreased by 5% compared to the previous five years.
- Injury collisions decreased by 4% compared to 2018 and the previous five years.
- PDO collisions increased by 8% compared to 2018 and by 24% compared to the previous five years.

The total number of collision victims in 2019 is down 3% compared to 2018 and down by 5% compared to the previous five year (2014 to 2018) annual average. The number of people killed in collisions in 2019 increased by 9% (a count of 6) compared to 2018 but decreased by 4% compared to the previous five years. For the fifth time in the last six years, the count of people killed in 2019 is below 80.

The total number of drivers involved in collisions in 2019 is up 4% compared to 2018 and up by 9% compared to the previous five year (2014 to 2018) annual average. The number of vehicles involved in collisions in 2019 is up 4% from 2018 and up by 10% compared to the previous five years.

Figure 4-1 Historical Summary – Count of Traffic Collisions, Victims, Vehicles and Drivers

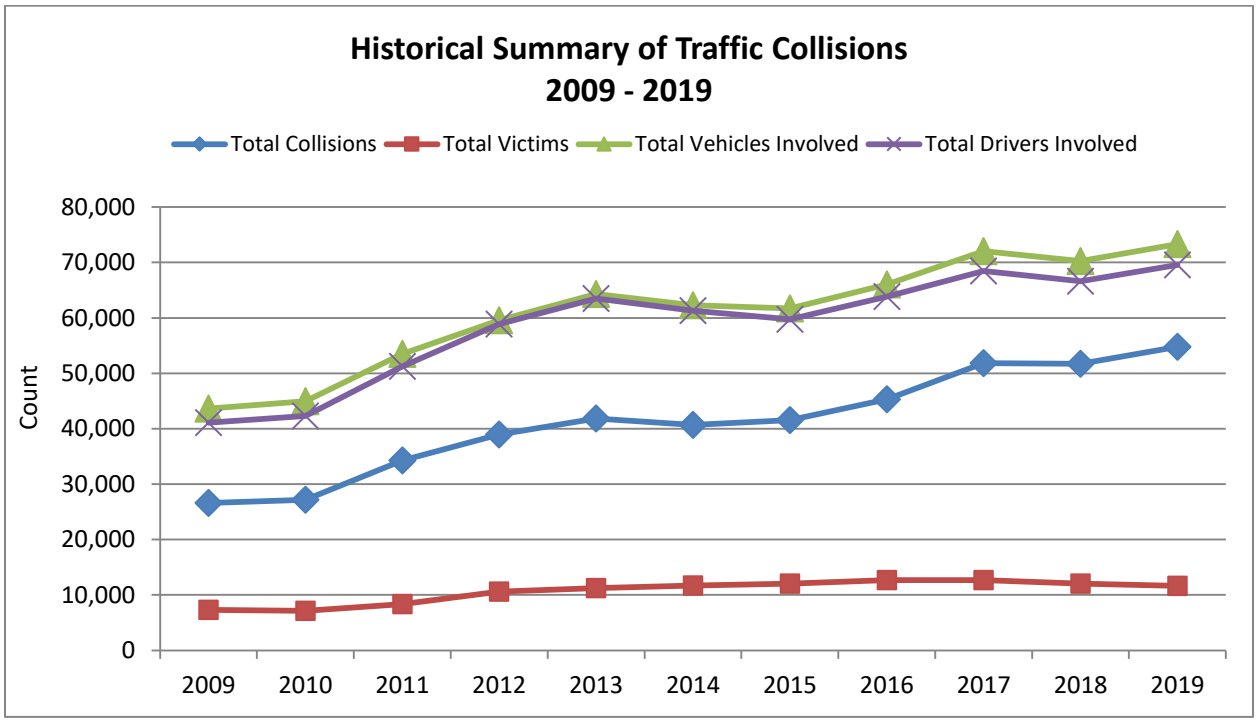


Table 4-2 Traffic Collisions by Month of Occurrence and Collision Severity

Table 4-2
Traffic Collisions by Month of Occurrence and Collision Severity: 2019, 2014-2018 Average

Month	2019 Collision Severity						**2019 Total**	% of 2019 Total	2014-2018 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
January	4	5.9%	1,031	11.5%	4,914	10.8%	**5,949**	10.9%	3	1,135	4,218	5,356	11.6%
February	1	1.5%	1,104	12.3%	5,161	11.3%	**6,266**	11.4%	4	917	3,348	4,268	9.2%
March	5	7.4%	687	7.6%	3,317	7.3%	**4,009**	7.3%	4	728	2,950	3,681	8.0%
April	4	5.9%	513	5.7%	2,590	5.7%	**3,107**	5.7%	6	560	2,321	2,886	6.2%
May	4	5.9%	587	6.5%	2,787	6.1%	**3,378**	6.2%	6	650	2,372	3,028	6.6%
June	8	11.8%	636	7.1%	2,982	6.5%	**3,626**	6.6%	7	657	2,566	3,230	7.0%
July	8	11.8%	631	7.0%	2,987	6.5%	**3,626**	6.6%	9	617	2,539	3,166	6.8%
August	11	16.2%	653	7.3%	3,102	6.8%	**3,766**	6.9%	8	666	2,486	3,159	6.8%
September	4	5.9%	662	7.4%	3,317	7.3%	**3,983**	7.3%	7	704	2,702	3,412	7.4%
October	5	7.4%	794	8.8%	4,844	10.6%	**5,643**	10.3%	7	783	3,115	3,905	8.4%
November	6	8.8%	787	8.8%	4,961	10.9%	**5,754**	10.5%	7	906	4,000	4,914	10.6%
December	8	11.8%	907	10.1%	4,733	10.4%	**5,648**	10.3%	4	1,028	4,185	5,217	11.3%
Total	68	100%	8,992	100%	45,695	100%	**54,755**	100%	72	9,350	36,801	46,222	100%

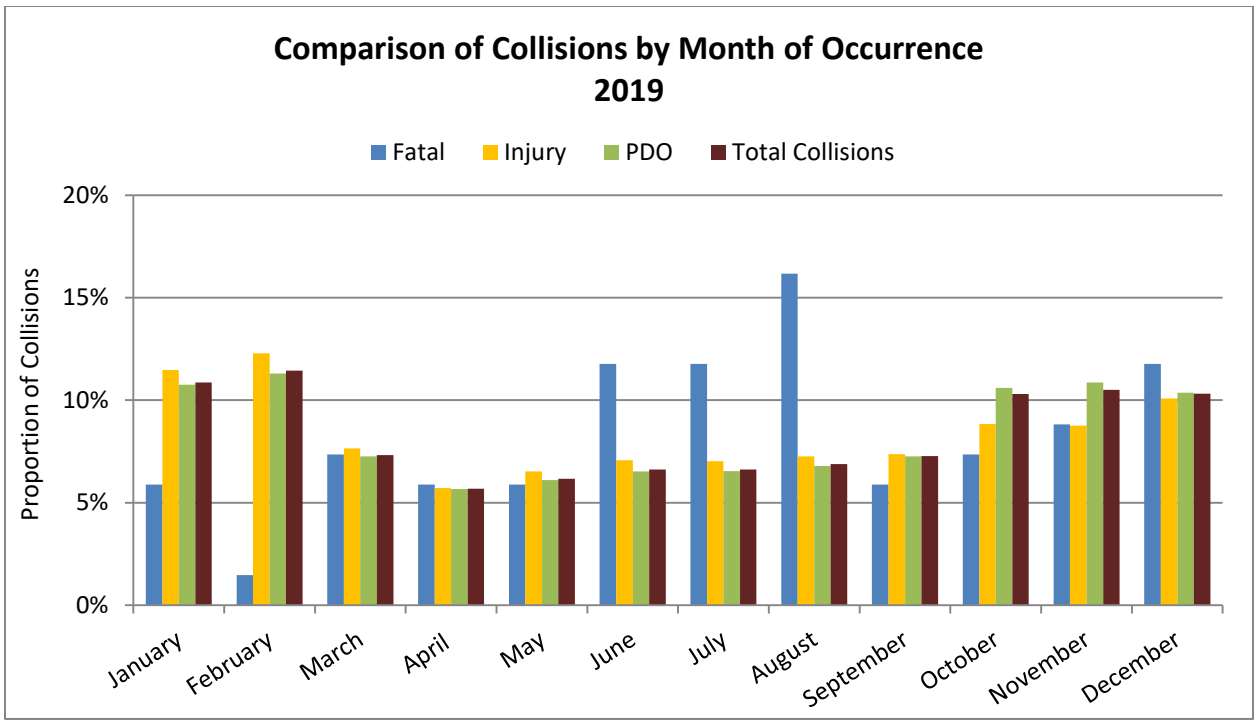
Note: Counts of collisions in the 2014-2018 average may not add to the total due to rounding.

In 2019, one-third (33%) of all collisions in Manitoba happened in the winter months of January, February and December. In the previous five year period (2014 to 2018), these months accounted for an average of 32% of all collisions. In 2019, January, February and December (combined), account for:

- 19% of all fatal collisions;
- 34% of all injury collisions; and,
- 32% of all PDO collisions.

Fatal collisions in 2019 occur most often in June, July, August and December (nearly 52% of fatal crashes combined). Comparatively, 39% of fatal collisions occur in these months during the previous five years.

Figure 4-2 Traffic Collisions by Month of Occurrence and Collision Severity



In 2019, injury collisions and PDO collisions occur most frequently in the months of October through February (51% of injury and 54% of PDO collisions). In the previous five year period (2014 to 2018), these months account for 51% of injury and PDO collisions.

Table 4-3 Traffic Collisions by Day of Occurrence and Collision Severity

Table 4-3
Traffic Collisions by Day of Occurrence and Collision Severity: 2019, 2014-2018 Average

Day of Week	2019 Collision Severity						**2019 Total**	% of 2019 Total	2014-2018 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Sunday	7	10.3%	753	8.4%	4,656	10.2%	**5,416**	9.9%	13	850	3,908	4,771	10.3%
Monday	9	13.2%	1,299	14.4%	6,483	14.2%	**7,791**	14.2%	8	1,325	5,104	6,437	13.9%
Tuesday	11	16.2%	1,403	15.6%	6,739	14.7%	**8,153**	14.9%	8	1,472	5,376	6,857	14.8%
Wednesday	10	14.7%	1,496	16.6%	6,949	15.2%	**8,455**	15.4%	9	1,450	5,555	7,014	15.2%
Thursday	10	14.7%	1,515	16.8%	7,169	15.7%	**8,694**	15.9%	8	1,519	5,694	7,221	15.6%
Friday	12	17.6%	1,539	17.1%	8,098	17.7%	**9,649**	17.6%	12	1,606	6,322	7,941	17.2%
Saturday	9	13.2%	987	11.0%	5,601	12.3%	**6,597**	12.0%	12	1,128	4,843	5,982	12.9%
Total	68	100%	8,992	100%	45,695	100%	**54,755**	100%	72	9,350	36,801	46,222	100%

Note: Counts of collisions in the 2014-2018 average may not add to the total due to rounding.

Collisions in 2019 most frequently occur on weekdays. Monday through Friday combined account for 78% of all collisions, nearly 77% of fatal collisions, 81% of injury collisions and 78% of PDO collisions. In the previous five year (2014 to 2018) annual average, weekdays account for the similar proportions (77% of all collisions; 65% fatal; 79% injury; 76% PDO).

Overall, Friday accounts for the single largest proportion of collisions in 2019; this is also the case in the previous five year (2014 to 2018) annual average. Friday accounts for:

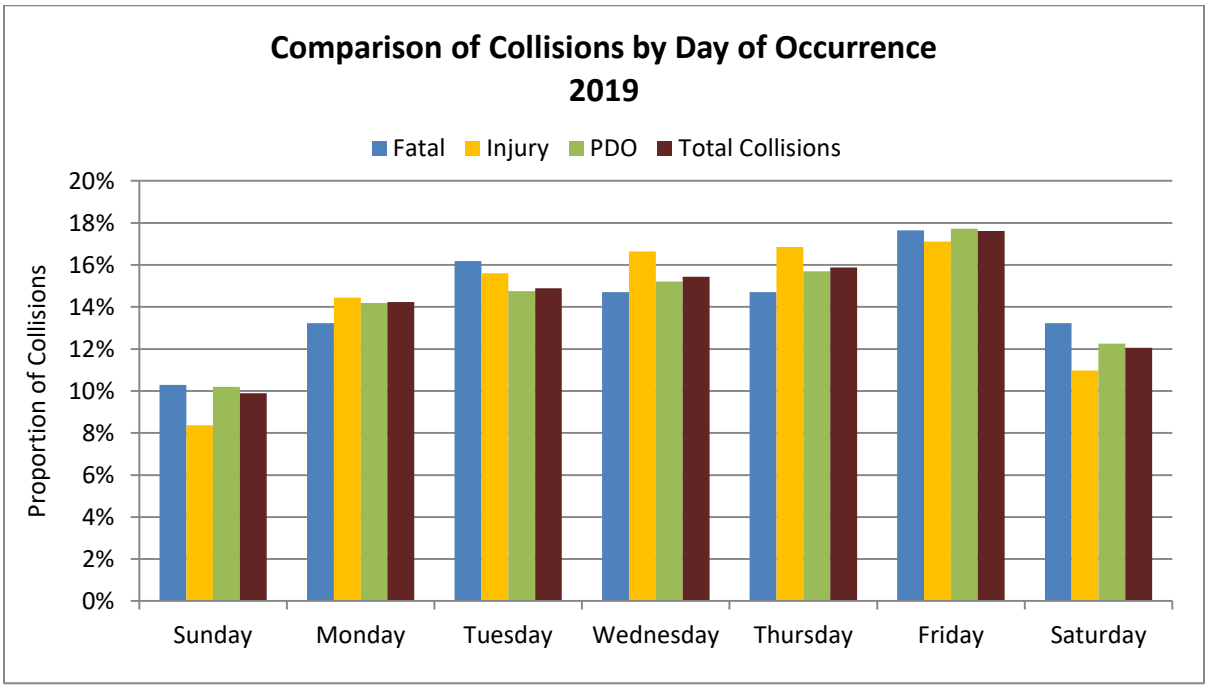
- 18% of all collisions in 2019 and 17% in the previous five years;
- 18% of fatal collisions in 2019 and 17% in the previous five years;
- 17% of injury collisions in 2019 and in the previous five years; and,
- 18% of PDO collisions in 2019 and 17% in the previous five years.

Weekends, including Friday, Saturday and Sunday combined, account for:

- 40% of all collisions in 2019 and in the previous five years (2014 to 2018);
- 41% of fatal collisions in 2019 and 52% in the previous five years;
- Nearly 37% of injury collisions in 2019 and 38% in the previous five years; and,
- 40% of PDO collisions in 2019 and 41% in the previous five years.

Fridays are unique, accounting for the highest proportion of overall, fatal, injury, and PDO collisions by day of the week (18% of all collisions; 18% of fatal, 17% of injury and 18% of PDO collisions in 2019). Friday can be included as a weekday and as a weekend, and will affect any interpretation of crash prevalence depending on where it is grouped.

Figure 4-3 Traffic Collisions by Day of Occurrence and Collision Severity



In 2019, fatal collisions occur most often on Friday (count of 12 or 18% of fatal collisions). In the previous five year (2014 to 2018) annual average, Sundays account for the highest number of fatal crashes (count of 13; 18% of fatal collisions), closely followed by Fridays (count of 12; 17%).

Table 4-4 Traffic Collisions by Time of Occurrence and Collision Severity

Table 4-4
Traffic Collisions by Time of Occurrence and Collision Severity: 2019, 2014-2018 Average

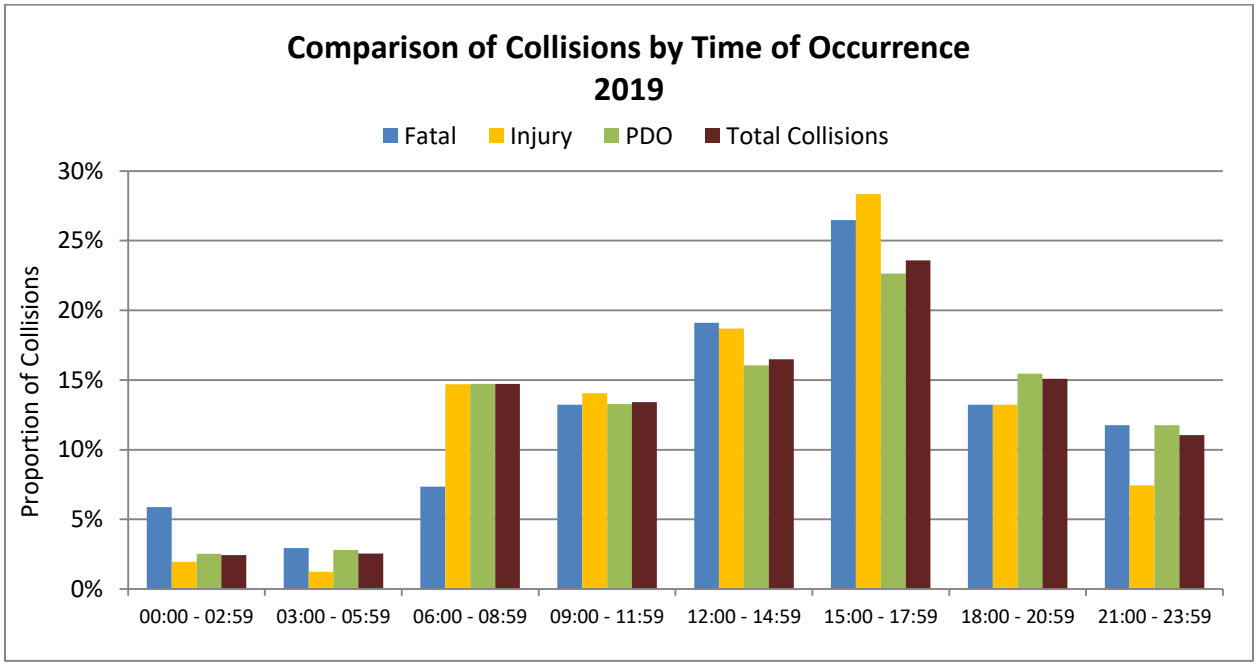
Time	2019 Collision Severity						**2019 Total**	% of 2019 Total	2014-2018 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
00:00 - 02:59	4	5.9%	175	1.9%	1159	2.5%	**1,338**	2.4%	7	202	1,120	1,328	2.9%
03:00 - 05:59	2	2.9%	111	1.2%	1,281	2.8%	**1,394**	2.5%	4	117	916	1,038	2.2%
06:00 - 08:59	5	7.4%	1,321	14.7%	6,731	14.7%	**8,057**	14.7%	8	1,264	5,014	6,286	13.6%
09:00 - 11:59	9	13.2%	1,264	14.1%	6,068	13.3%	**7,341**	13.4%	10	1,310	4,868	6,188	13.4%
12:00 - 14:59	13	19.1%	1,682	18.7%	7,331	16.0%	**9,026**	16.5%	9	1,832	6,188	8,029	17.4%
15:00 - 17:59	18	26.5%	2,549	28.3%	10,349	22.6%	**12,916**	23.6%	11	2,684	8,430	11,124	24.1%
18:00 - 20:59	9	13.2%	1,189	13.2%	7,062	15.5%	**8,260**	15.1%	11	1,250	5,702	6,963	15.1%
21:00 - 23:59	8	11.8%	670	7.5%	5,371	11.8%	**6,049**	11.0%	10	664	4,304	4,979	10.8%
Not Stated	0	-	31	0.3%	343	0.8%	**374**	0.7%	2	27	258	287	0.6%
Total	68	100%	8,992	100%	45,695	100%	**54,755**	100%	72	9,350	36,801	46,222	100%

Note: Counts of collisions in the 2014-2018 average may not add to the total due to rounding.

Four in ten collisions in 2019 occur between noon and 6 p.m. (40% of all collisions, 46% of fatal collisions, 47% of injury collisions, and 39% of PDO collisions). This is mostly consistent with the proportion of collisions occurring during these hours in the previous five year (2014 to 2018) annual average (41% of all collisions, 27% of fatal collisions, 48% of injury collisions, and 40% of PDO collisions).

The largest proportion of total traffic collisions in 2019 occur between 3 and 6 p.m. (15:00 – 17:59), what is often considered the "afternoon rush". Almost one in four (24%) collisions occur during these hours (nearly 27% of fatal collisions, 28% of injury collisions and 23% of PDO collisions). This is consistent with the proportion of collisions occurring during these hours in the previous five year (2014 to 2018) annual average except fatal collisions.

Figure 4-4 Traffic Collisions by Time of Occurrence and Collision Severity



In 2019, nearly 52% of fatal crashes occur between 3 p.m. and midnight, while another 32% of fatal crashes occur between 9 a.m. and 3 p.m.

Table 4-5 Traffic Collisions by Provincial Location and Collision Severity

Table 4-5
Traffic Collisions by Provincial Location and Collision Severity: 2019, 2014-2018 Average

Location	2019 Collision Severity						**2019 Total**	% of 2019 Total	2014-2018 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Winnipeg	15	22.1%	6,978	77.6%	25,867	56.6%	**32,860**	60.0%	13	7,170	21,584	28,766	62.2%
Brandon	1	1.5%	200	2.2%	1,258	2.8%	**1,459**	2.7%	<1	222	1,099	1,321	2.9%
Portage	0	-	51	0.6%	299	0.7%	**350**	0.6%	1	53	266	320	0.7%
Flin Flon	1	1.5%	4	<0.1%	88	0.2%	**93**	0.2%	<1	3	74	78	0.2%
Dauphin	0	-	13	0.1%	161	0.4%	**174**	0.3%	<1	30	171	202	0.4%
Thompson	1	1.5%	40	0.4%	233	0.5%	**274**	0.5%	<1	32	228	260	0.6%
The Pas	0	-	8	<0.1%	157	0.3%	**165**	0.3%	-	14	146	160	0.3%
Selkirk	0	-	64	0.7%	296	0.6%	**360**	0.7%	<1	69	267	337	0.7%
Other Urban	18	26.5%	571	6.4%	5,145	11.3%	**5,734**	10.5%	8	590	4,352	4,950	10.7%
All Rural	32	47.1%	1,063	11.8%	12,191	26.7%	**13,286**	24.3%	47	1,167	8,614	9,829	21.3%
Total	68	100%	8,992	100%	45,695	100%	**54,755**	100%	72	9,350	36,801	46,222	100%

Note: Counts of collisions in the 2014-2018 average may not add to the total due to rounding.

Urban locations account for 76% of collisions in Manitoba, but only 53% of fatal collisions in 2019 (88% of injury collisions; 73% of PDO collisions). Rural locations account for 24% of all collisions, but 47% of fatal collisions. This is consistent with historical results. In the previous five year period (2014 to 2018), urban locations accounted for an average of 79% of all collisions, 34% of fatal collisions, nearly 88% of injury collisions, and 77% of PDO collisions.

In 2019, 60% of traffic collisions occur in Winnipeg while other urban locations (including Brandon, Portage, Flin Flon, Dauphin, Thompson, The Pas, Selkirk and "Other urban") account for 16% of all collisions. In the previous five year (2014 to 2018) annual average, 62% of all collisions occur in Winnipeg and nearly 17% occur in other urban locations.

This pattern holds when we consider both injury and PDO collisions. In 2019:

- 78% of injury collisions occur in Winnipeg, 10% occur in other urban locations and 12% occur in rural locations.
- 57% of PDO collisions occur in Winnipeg, 17% occur in other urban locations and 27% occur in rural locations.

Fatal collisions are different from the distribution of total crashes when it comes to the urban-rural split. In 2019, 47% of fatal collisions occur in rural locations, while 22% occur in Winnipeg and 31% occur in other urban locations. The over-representation of rural locations for fatal collisions in 2019 is fairly consistent with the previous five year (2014 to 2018) annual average, where 66% of fatal collisions occur in rural locations, 18% occur in Winnipeg and 16% occur in other urban locations.

Table 4-6 Collision Type by Urban/Rural Location

Table 4-6
Collision Type by Urban/Rural Location: 2019, 2014-2018 Average

Collision Type	Location													2014-2018 Average Count of Collisions				
	2019 Urban				2019 Rural				2019 Provincial Total				2019 Provincial Total as % of Total					
	Fatal	Injury	PDO	Total	Fatal	Injury	PDO	Total	Fatal	Injury	PDO	**Total**		Fatal	Injury	PDO	Total	% of Total
Collision with pedestrian	3	86	77	166	1	2	7	10	4	88	84	**176**	0.3%	3	61	67	131	0.3%
Collision with other motor vehicle	17	7,028	24,428	31,473	19	407	1,006	1,432	36	7,435	25,434	**32,905**	60.1%	36	7,598	21,282	28,916	62.6%
Collisions with train	0	1	3	4	0	1	3	4	0	2	6	**8**	<0.1%	<1	2	3	6	<0.1%
Collision with motorcycle	0	7	4	11	0	2	1	3	0	9	5	**14**	<0.1%	1	8	6	15	<0.1%
Collision with animal drawn vehicle	0	0	0	0	0	0	0	0	0	0	0	**0**	-	-	-	-	-	<0.1%
Collision with bicycle	1	45	85	131	0	0	1	1	1	45	86	**132**	0.2%	1	40	73	115	0.2%
Collision with animal	1	70	1,933	2,004	1	284	9,194	9,479	2	354	11,127	**11,483**	21.0%	<1	319	7,240	7,559	16.4%
Collision with fixed object	6	433	4,509	4,948	7	303	1,280	1,590	13	736	5,789	**6,538**	11.9%	17	795	4,986	5,798	12.5%
Collision with other object	8	219	2,121	2,348	3	39	597	639	11	258	2,718	**2,987**	5.5%	7	414	2,811	3,233	7.0%
Overturned in roadway	0	6	9	15	0	7	6	13	0	13	15	**28**	<0.1%	1	11	13	25	<0.1%
Ran off roadway	0	1	2	3	1	2	4	7	1	3	6	**10**	<0.1%	3	18	18	39	<0.1%
Collision with moped	0	1	0	1	0	0	0	0	0	1	0	**1**	<0.1%	-	<1	1	2	<0.1%
Other non-collision	0	32	333	365	0	16	92	108	0	48	425	**473**	0.9%	1	63	299	364	0.8%
Total	36	7,929	33,504	41,469	32	1,063	12,191	13,286	68	8,992	45,695	**54,755**	100%	72	9,328	36,801	46,201	100%

Note: Counts of collisions in the 2014-2018 average may not add to the total due to rounding.

The majority of crashes on public roadways in Manitoba are “motor vehicle to motor vehicle” collisions, both in 2019 and in the previous five year (2014 to 2018) annual average. In 2019, “motor vehicle to motor vehicle” collisions account for:

- 60% of all collisions;
- 53% of fatal collisions;
- 83% of injury collisions; and,
- 56% of PDO collisions.

Collisions occurring in urban locations are also predominantly “motor vehicle to motor vehicle” in nature. In urban locations in 2019, “motor vehicle to motor vehicle” collisions account for:

- 76% of all collisions;
- 47% of fatal collisions;
- 89% of injury collisions; and,
- 73% of PDO collisions.

Collisions occurring in rural locations are predominantly “motor vehicle to animal” in nature, with “motor vehicle to fixed object” the second most common configuration, and “motor vehicle to motor vehicle” as the third most common. In rural locations in 2019:

- 71% of all collisions are “motor vehicle to animal” in nature (3% of fatal collisions; 27% of injury collisions; and 75% of PDO collisions);
- 12% of all collisions are “motor vehicle to fixed object” in nature (22% of fatal collisions; nearly 29% of injury collisions; and nearly 11% of PDO collisions); and,
- 11% of all collisions are “motor vehicle to motor vehicle” in nature (59% of fatal collisions; 38% of injury collisions; and 8% of PDO collisions).

Table 4-7 Traffic Collisions by Road Surface Condition and Collision Severity

Table 4-7
Traffic Collisions by Road Surface Condition and Collision Severity: 2019, 2014-2018 Average

Road Surface Condition	2019 Collision Severity						**2019 Total**	% of 2019 Total	2014-2018 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Dry	31	45.6%	4,775	53.1%	23,525	51.5%	**28,331**	51.7%	45	5,207	20,215	25,467	55.1%
Wet	2	2.9%	917	10.2%	3,956	8.7%	**4,875**	8.9%	4	1,004	3,343	4,351	9.4%
Mud	0	-	11	0.1%	102	0.2%	**113**	0.2%	<1	7	85	93	0.2%
Snow	1	1.5%	836	9.3%	5,487	12.0%	**6,324**	11.5%	4	748	3,971	4,723	10.2%
Ice	6	8.8%	1,935	21.5%	8,301	18.2%	**10,242**	18.7%	5	1,792	6,375	8,171	17.7%
Slush	0	-	186	2.1%	818	1.8%	**1,004**	1.8%	1	202	639	841	1.8%
Loose Sand/ Gravel/ Dirt	0	-	52	0.6%	346	0.8%	**398**	0.7%	2	66	249	317	0.7%
Fresh Oil	0	-	2	<0.1%	14	<0.1%	**16**	<0.1%	-	5	17	22	<0.1%
Other	0	-	15	0.2%	189	0.4%	**204**	0.4%	<1	23	137	160	0.3%
Not Applicable	1	1.5%	27	0.3%	434	0.9%	**462**	0.8%	<1	92	344	437	0.9%
Unknown	27	39.7%	236	2.6%	2,523	5.5%	**2,786**	5.1%	10	200	1,425	1,635	3.5%
Total	68	100%	8,992	100%	45,695	100%	**54,755**	100%	72	9,347	36,801	46,219	100%

Note: Counts of collisions in the 2014-2018 average may not add to the total due to rounding.

Collisions in Manitoba occur most often under “dry” road conditions. More than half (52%) of all collisions in 2019 and 55% in the previous five year (2014 to 2018) annual average occur on “dry” roads.

In 2019, 46% of fatal collisions occur on “dry” roads. This is lower than the previous five year (2014 to 2018) annual average (63%).

Icy road conditions account for 19% of all collisions in 2019, including 9% of fatal collisions, nearly 22% of injury collisions and 18% of PDO collisions. This is similar to the previous five year (2014 to 2018) annual average where icy roads account for 18% of all collisions, 6% of fatal collisions, 19% of injury collisions and 17% of PDO collisions.

“Snow” covered and “wet” roads account for the next highest proportions of all collisions in 2019, at nearly 12% and 9% respectively. These proportions are similar to the previous five year (2014 to 2018) annual average (10% and 9% respectively).

Figure 4-5 Traffic Collisions by Road Surface Condition and Collision Severity

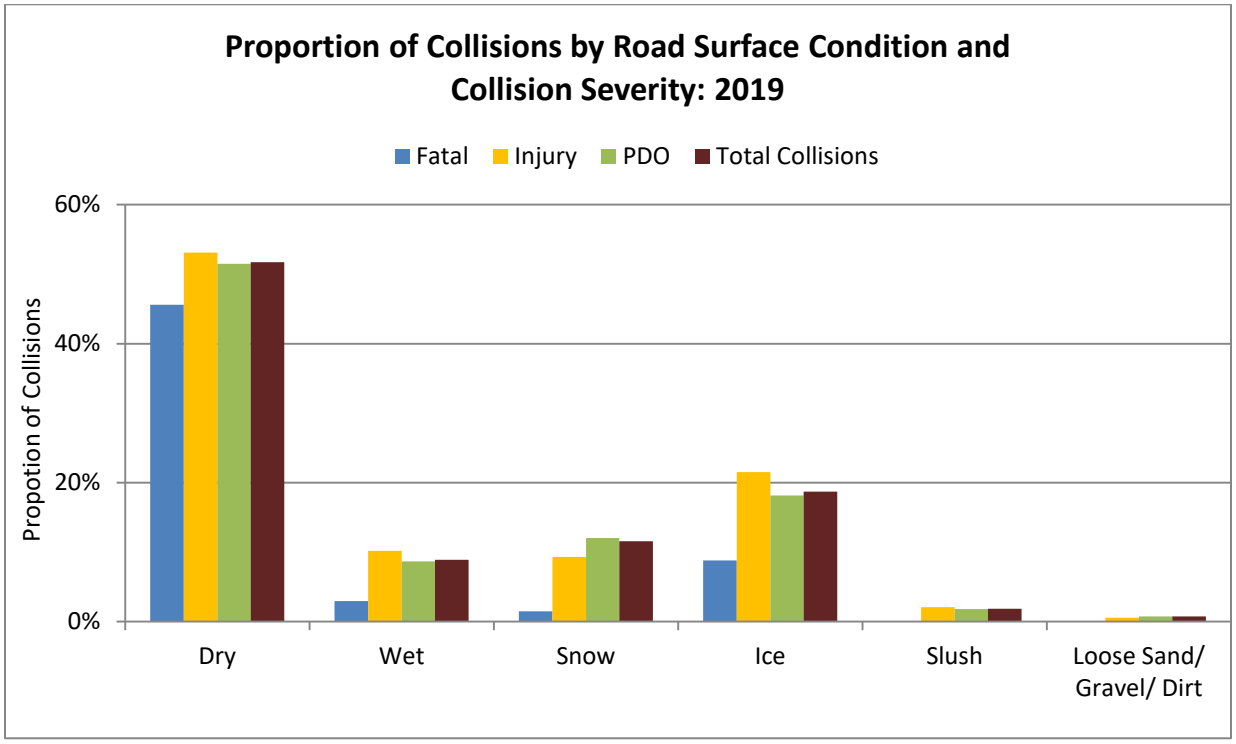


Table 4-8 Traffic Collisions by Weather Condition and Collision Severity

Table 4-8
Traffic Collisions by Weather Condition and Collision Severity: 2019, 2014-2018 Average

Weather Condition	2019 Collision Severity						**2019 Total**	% of 2019 Total	2014-2018 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Clear	32	47.1%	5,961	66.3%	28,329	62.0%	**34,322**	62.7%	45	6,318	24,017	30,381	65.7%
Cloudy	5	7.4%	1,302	14.5%	6,382	14.0%	**7,689**	14.0%	8	1,362	4,949	6,319	13.7%
Raining	0	-	368	4.1%	1,755	3.8%	**2,123**	3.9%	2	403	1,428	1,833	4.0%
Snowing	3	4.4%	694	7.7%	3,444	7.5%	**4,141**	7.6%	1	531	2,156	2,688	5.8%
Fog or Mist	1	1.5%	63	0.7%	468	1.0%	**532**	1.0%	1	99	537	637	1.4%
Smoke or Dust	0	-	11	0.1%	31	<0.1%	**42**	<0.1%	<1	14	57	72	0.2%
Freezing Rain/ Sleet/ Hail	0	-	37	0.4%	131	0.3%	**168**	0.3%	<1	42	146	188	0.4%
Drifting Snow	0	-	99	1.1%	563	1.2%	**662**	1.2%	2	95	444	540	1.2%
Strong Winds	0	-	59	0.7%	274	0.6%	**333**	0.6%	<1	71	304	375	0.8%
Other	1	1.5%	18	0.2%	145	0.3%	**164**	0.3%	<1	13	92	106	0.2%
Not Applicable	0	-	30	0.3%	496	1.1%	**526**	1.0%	1	108	480	589	1.3%
Unknown	26	38.2%	350	3.9%	3,677	8.0%	**4,053**	7.4%	11	288	2,193	2,492	5.4%
Total	68	100%	8,992	100%	45,695	100%	**54,755**	100%	72	9,347	36,801	46,219	100%

Note: Counts of collisions in the 2014-2018 average may not add to the total due to rounding.

Most collisions in Manitoba occur during “clear” weather conditions. Nearly two-thirds (63%) of all collisions (47% of fatal collisions; 66% of injury collisions; 62% of PDO collisions) in 2019 and 66% of all collisions (62% of fatal collisions; 68% of injury collisions; 65% of PDO collisions) in the previous five year (2014 to 2018) annual average occur in “clear” weather. Other weather conditions when collisions occur in 2019 include:

- “Cloudy” – 14% of all collisions (7% of fatal collisions; nearly 15% of injury collisions; 14% of PDO collisions);
- “Snowing” – 8% of all collisions (4% of fatal collisions; 8% of injury collisions; nearly 8% of PDO collisions); and,
- “Raining” – 4% of all collisions (no fatal collision; 4% of injury collisions; 4% of PDO collisions).

Figure 4-6 Traffic Collisions by Weather Condition and Collision Severity

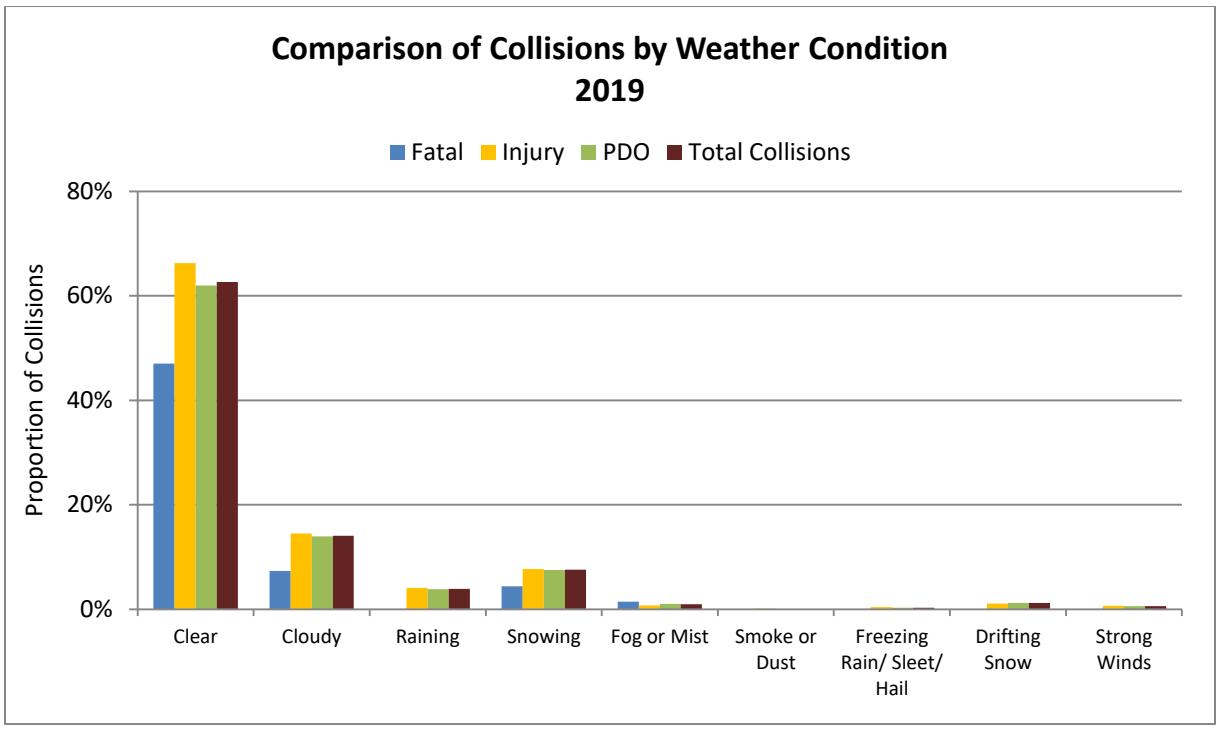


Table 4-9 Accident Configuration and Collision Severity

Table 4-9

Accident Configuration and Collision Severity: 2019, 2014-2018 Average

Accident Configuration	2019 Collision Severity						**2019 Total**	% of 2019 Total	2014-2018 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Rear End	1	3.8%	3,686	48.2%	8,996	33.4%	**12,683**	36.6%	3	3,961	7,185	11,149	36.5%
Head On	7	26.9%	110	1.4%	570	2.1%	**687**	2.0%	13	124	556	693	2.3%
Side Swipe Opposing	0	-	72	0.9%	405	1.5%	**477**	1.4%	<1	66	310	376	1.2%
Side Swipe Same Direction	0	-	473	6.2%	3,612	13.4%	**4,085**	11.8%	<1	441	3,066	3,508	11.5%
Overtaking	0	-	33	0.4%	166	0.6%	**199**	0.6%	<1	28	148	176	0.6%
Right Turn - Same direction	0	-	25	0.3%	195	0.7%	**220**	0.6%	<1	28	191	220	0.7%
Right Turn - Opposing	0	-	6	<0.1%	76	0.3%	**82**	0.2%	-	12	53	64	0.2%
Left Turn - Opposing	1	3.8%	240	3.1%	322	1.2%	**563**	1.6%	1.0	219	363	583	1.9%
Left Turn - Same direction	0	-	28	0.4%	163	0.6%	**191**	0.6%	-	30	161	191	0.6%
Left Turn - Across	0	-	225	2.9%	410	1.5%	**635**	1.8%	<1	185	351	536	1.8%
Intersection 90°	5	19.2%	1,726	22.6%	3,454	12.8%	**5,185**	15.0%	8	1,831	3,148	4,986	16.3%
Off Road Right	2	7.7%	208	2.7%	773	2.9%	**983**	2.8%	6	248	805	1,059	3.5%
Off Road Left	0	-	137	1.8%	473	1.8%	**610**	1.8%	3	175	555	733	2.4%
Fixed Object	4	15.4%	384	5.0%	4,813	17.9%	**5,201**	15.0%	3	345	3,627	3,975	13.0%
Parking	0	-	144	1.9%	2,404	8.9%	**2,548**	7.4%	<1	133	1,975	2,109	6.9%
Pedestrian	6	23.1%	144	1.9%	119	0.4%	**269**	0.8%	6	99	110	216	0.7%
Other	42	-	1,351	-	18,744	-	**20,137**	-	27	1,419	14,198	15,645	-
Total	68	100%	8,992	100%	45,695	100%	**54,755**	100%	72	9,346	36,801	46,219	100%

Note: Counts of collisions in the 2014-2018 average may not add to the total due to rounding.
Note: 'Other' accident configurations consist primarily of collisions involving more than one configuration or sequence of events. Calculations in '% of Total' exclude the 'Other' category.

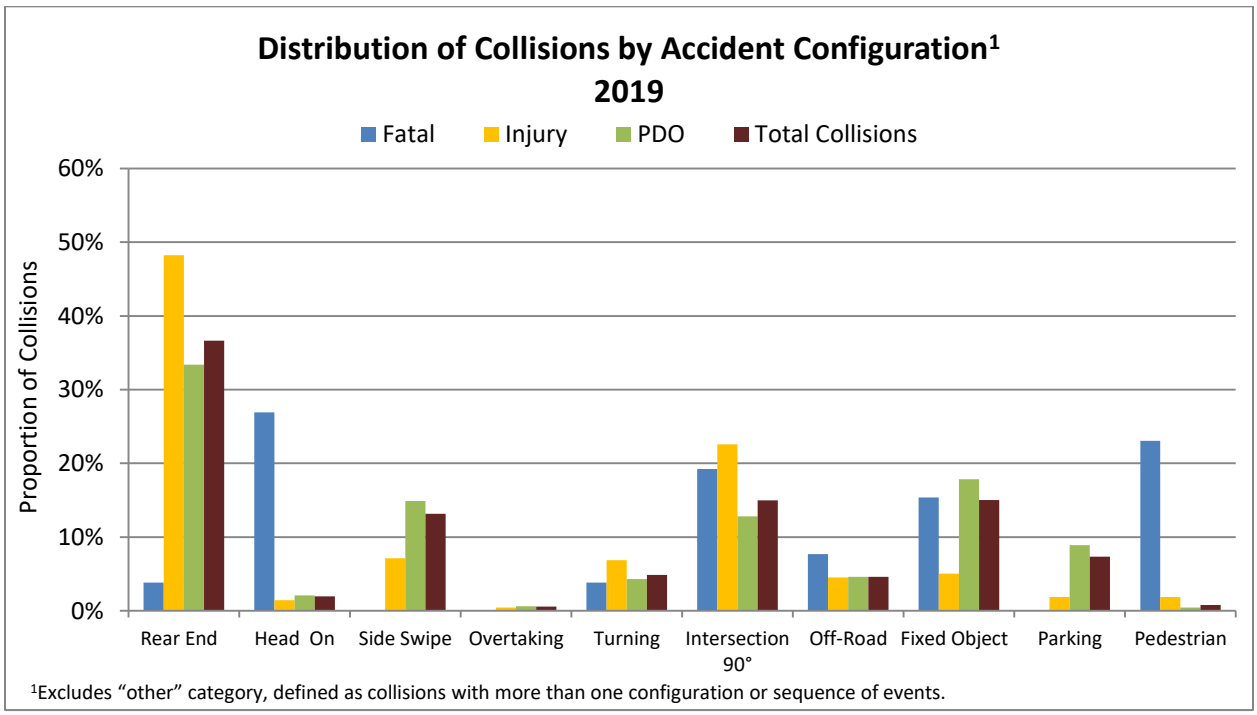
The most common accident configuration (or sequence of events immediately prior to or at the start of a collision) for collisions occurring in Manitoba (excluding "other") is a "rear end" type. "Rear end" crashes account for 37% of all collisions in 2019 (1 fatal collision; 48% of injury collisions; 33% of PDO collisions) and nearly 37% of all collisions in the previous five year (2014 to 2018) annual average.

Following "rear end" collisions, the next most common accident configurations in 2019 (excluding "other") are:

- Collisions occurring at "intersection 90°" – 15% of all collisions, 19% of fatal collisions, 23% of injury collisions, and 13% of PDO collisions;
- "Fixed object" collisions – 15% of all collisions, 15% fatal collisions, 5% of injury collisions, and 18% of PDO collisions; and,
- "Side-swipe" collisions, including in the same or opposing direction – 13% of all collisions, no fatal collisions, 7% of injury collisions, and 15% of PDO collisions.

A large proportion of collisions cannot be assigned a single accident configuration or sequence of events. That is, they involve more than one of the possible configuration types. These collisions fall into the "other" category. In 2019, 37% of all collisions (62% fatal; 15% injury; 41% PDO) are recorded as "other". In the previous five year (2014 to 2018) annual average, 34% of all collisions (38% fatal; 15% injury; 39% PDO) are recorded as "other".

Figure 4-7 Distribution of Collisions by Accident Configuration and Collision Severity



"Head on" collisions are the highest proportion of fatal collisions in 2019 (27%), followed by collisions where a pedestrian is involved (23%), collisions occurring at intersections ("intersection 90°" – 19%), and collisions with fix objects (15%).

SECTION 5 – Collision Victims

Introduction

This section counts the number of people killed and injured in traffic collisions and examines the severity of the injury received by the victim. Month, time and day of occurrences are examined, as well as the age of the victim. Other characteristics of the collision are presented as well. Relative involvement of victims in traffic collisions per 100,000 people in the general population is also calculated.

Key Highlights

In 2019, there are 11,645 victims (or casualties) of traffic collisions. Of these:

- 76 are killed;
- 368 are seriously injured;
- 1,817 sustain minor injuries;
- 9,354 sustain minimal injuries; and,
- 30 sustain injuries that are undefined in terms of severity.

The victim involvement rate (per 100,000 people in the general population) in traffic collisions in 2019 (848.3) has decreased by 4% compared to 2018 (886.2), and by 7% compared to the previous five years (2014 to 2018) annual average (913.6). Victim involvement rates in traffic collisions in 2019 where the person:

- Is killed (5.5 in 2019) is 8% higher than 2018 but 7% lower than in the previous five years;
- Is injured, including all levels of severity (but excluding killed; 842.8 in 2019), is 4% lower than 2018 and 7% lower than in the previous five years.

People aged 20 to 24 and 35 to 44 have the highest victim involvement rates (per 100,000 people) overall in 2019.

- Children under age 15 – rate of 196.2
- People aged 15 to 19 – rate of 836.9
- People aged 20 to 24 – rate of 1,246.6
- People aged 25 to 34 – rate of 1,192.8
- People aged 35 to 44 – rate of 1,256.2
- People aged 45 to 54 – rate of 1,144.5
- People aged 55 and older – rate of 635.3

While women account for more than half of all casualties in traffic collisions (58%), men account for the higher proportion of people killed (nearly 61%) and seriously injured (53%).

“Drivers” account for nearly 76% of all casualties and motor vehicle “Passengers” for 21%. “Motorcyclists” and “Moped” riders combined account for 1% of all casualties while “Bicyclists” account for 1% and “Pedestrians” account for 2%. In 2019, “Pedestrians” account for 21% of people killed in traffic collisions.

In 2019, casualties in traffic collisions most frequently result from crashes occurring:

- In Winnipeg – 76% of all victims in Manitoba;
- In the late fall, winter and early spring months (including October through March) – 58% of all victims; 42% of people killed and nearly 59% of people injured;
- On Friday (17% of all victims; 17% of people killed and 17% of people injured); and,
- Between noon and 6 p.m. (12:00-14:59 – 19% of all victims; 15:00 to 17:59 – 29% of all victims).

Major Elements Examined

Counts of collisions in Manitoba for 2019 and previous years are taken from Traffic Accident Reports (TARs) generated by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance.

It is important to note that the number of victims involved in traffic collisions is not equal to the number of collisions that occurred, as each collision can result in multiple victims while some collisions result in property damage only (PDO). PDO collisions are not included in this section.

The terms ‘crash’, ‘collision’ and ‘accident’ are used interchangeably in this report. As well, the terms ‘victim’ and ‘casualty’, and the terms ‘fatality’ and ‘killed’ are used interchangeably in this report.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and relative involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2014 to 2018. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Terms and Definitions

“Casualty Type”

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal injury sustained (i.e., victims sustaining a serious/major, minor or minimal injury).

“Killed”

- The casualty type “killed” indicates where the victim involved in the traffic collision died as a result of their injuries within thirty (30) days of the collision occurrence.

“Injured”

- The casualty type “injured” indicates where the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: ‘serious’ or ‘major’ (admitted to hospital); ‘minor’ (treated and released from hospital); and, ‘minimal’ (no hospital treatment required). ‘Other’ injury is noted when the severity of the victim’s injury is not known or recorded in the TAR.

“Road User Class”

- A classification based on how a person involved in a collision was using the road at the time of the collision. It includes: Drivers (of motor vehicles), Passengers (in motor vehicles), those Riding/Hanging On (to a motor vehicle), Motorcyclist (drivers and passengers), Moped (drivers and passengers), Bicyclist (drivers and passengers), and Pedestrians.

“Vehicle Occupant”

- All those in the “Road User Class” recorded as “Drivers” and “Passengers”. It excludes “Motorcyclist”, “Bicyclist”, “Moped”, those “Riding/Hanging On” to a vehicle, and “Pedestrians”.

“Victim Involvement Rate”

- A calculation of the number of victims or casualties involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address: https://www.gov.mb.ca/health/annstats/index.html

“Collision Type”

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

“Accident Configuration”

- Briefly describes the action taken by a vehicle immediately prior to or at the start of the collision, including such events as rear-ending another vehicle, side-swiping another vehicle, turning into (the path of) another vehicle, parking, meeting another vehicle at an intersection and/or leaving the roadway.
- “Other” in terms of accident configuration includes, primarily, collisions involving more than one configuration or sequence of events.

Table 5-1 Historical Summary of Victims in Traffic Collisions

Table 5-1
Historical Summary of Victims in Traffic Collisions: 2009 to 2019

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
2009	86	-	384	-	2,853	-	3,288	-	691	-	7,216	-	7,302	-
2010	87	1.2%	312	-18.8%	2,458	-13.8%	3,170	-3.6%	1,103	59.6%	7,043	-2.4%	7,130	-2.4%
2011	110	26.4%	337	8.0%	2,465	0.3%	4,306	35.8%	1,119	1.5%	8,227	16.8%	8,337	16.9%
2012	96	-12.7%	339	0.6%	2,237	-9.2%	7,864	82.6%	87	-92.2%	10,527	28.0%	10,623	27.4%
2013	85	-11.5%	307	-9.4%	2,242	0.2%	8,488	7.9%	112	28.7%	11,149	5.9%	11,234	5.8%
2014	68	-20.0%	303	-1.3%	2,009	-10.4%	9,201	8.4%	95	-15.2%	11,608	4.1%	11,676	3.9%
2015	78	14.7%	415	37.0%	1,947	-3.1%	9,014	-2.0%	563	492.6%	11,939	2.9%	12,017	2.9%
2016	107	37.2%	478	15.2%	2,174	11.7%	9,710	7.7%	184	-67.3%	12,546	5.1%	12,653	5.3%
2017	73	-31.8%	442	-7.5%	2,026	-6.8%	9,836	1.3%	282	53.3%	12,586	0.3%	12,659	0.0%
2018	70	-4.1%	437	-1.1%	1,818	-10.3%	9,422	-4.2%	310	9.9%	11,987	-4.8%	12,057	-4.8%
2019	**76**	**8.6%**	**368**	**-15.8%**	**1,817**	**-0.1%**	**9,354**	**-0.7%**	**30**	**-90.3%**	**11,569**	**-3.5%**	**11,645**	**-3.4%**
2014-2018 Average*	79	-4.0%	415	-11.3%	1,995	-8.9%	9,437	-0.9%	287	-89.5%	12,133	-4.7%	12,212	-4.6%

* "% change" in this line compares the current year to the 5-year average

In 2019, there are 11,645 victims (or casualties) of traffic collisions. Of these:

- 76 are killed;
- 368 are seriously injured;
- 1,817 sustain minor injuries;
- 9,354 sustain minimal injuries; and,
- 30 sustain injuries that are undefined in terms of severity.

Overall, the total number of casualties in 2019 (11,645) decreased by 3% compared to 2018 (12,057). In 2019, there are 6 more people killed than in 2018, 69 fewer people seriously injured, 1 fewer people with minor injuries, 68 fewer people with minimal injuries, and 280 fewer people with other or undefined injuries.

Compared to the previous five year (2014 to 2018) annual average, in 2019:

- The number of people killed is down 4%;
- The number of people seriously injured is down 11%;
- The number of people sustaining minor injuries is down 9%;
- The number of people sustaining minimal injuries is down 1%; and,
- The number of people sustaining “other” injuries is down nearly 90%.

Table 5-2 Historical Summary of Victim Involvement Rate (per 100,000 People) in Traffic Collisions

Table 5-2
Historical Summary of Victim Involvement Rate (per 100,000 People) in Traffic Collisions: 2009 to 2019

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
2009	7.1	-	31.6	-	234.9	-	270.8	-	56.9	-	594.2	-	601.3	-
2010	7.1	-0.1%	25.4	-19.8%	199.8	-15.0%	257.7	-4.8%	89.7	57.6%	572.5	-3.7%	579.5	-3.6%
2011	8.8	24.4%	26.9	6.3%	197.1	-1.3%	344.3	33.6%	89.5	-0.2%	657.9	14.9%	666.7	15.0%
2012	7.6	-14.2%	26.7	-1.1%	175.9	-10.7%	618.5	79.6%	6.8	-92.4%	828.0	25.9%	835.5	25.3%
2013	6.6	-12.7%	23.8	-10.7%	173.9	-1.2%	658.4	6.4%	8.7	27.0%	864.8	4.4%	871.3	4.3%
2014	5.2	-21.0%	23.2	-2.6%	153.8	-11.6%	704.4	7.0%	7.3	-16.3%	888.6	2.8%	893.8	2.6%
2015	5.9	13.5%	31.4	35.5%	147.5	-4.1%	682.7	-3.1%	42.6	486.3%	904.2	1.8%	910.1	1.8%
2016	8.0	35.2%	35.7	13.5%	162.3	10.1%	725.0	6.2%	13.7	-67.8%	936.8	3.6%	944.7	3.8%
2017	5.4	-32.7%	32.6	-8.7%	149.3	-8.0%	724.9	0.0%	20.8	51.3%	927.5	-1.0%	932.9	-1.3%
2018	5.1	-4.4%	32.1	-1.4%	133.6	-10.5%	692.5	-4.5%	22.8	9.6%	881.1	-5.0%	886.2	-5.0%
2019	**5.5**	**7.6%**	**26.8**	**-16.5%**	**132.4**	**-0.9%**	**681.4**	**-1.6%**	**2.2**	**-90.4%**	**842.8**	**-4.3%**	**848.3**	**-4.3%**
2014-2018 Average*	5.9	-6.6%	31.0	-13.5%	149.3	-11.3%	705.9	-3.5%	21.4	-89.8%	907.6	-7.1%	913.6	-7.1%

* "% change" in this line compares the current year to the 5-year average

Recognizing that counts of victims of collisions could be impacted either positively or negatively by changing population statistics, involvement rates per 100,000 people in the general population in Manitoba is examined (see Table 5-2) to provide a standardized rate comparison. This accounts for changing population size instead of simply a raw count of the number of victims involved overall.

The victim involvement rate (per 100,000 people in the general population) in traffic collisions in 2019 (848.3) has decreased by 4% compared to 2018 (886.2), and by 7% compared to the previous five year average (2014 to 2018 – 913.6).

Casualty involvement rates in traffic collisions in 2019 where a person:

- Is killed (5.5 in 2019) increased by 8% compared to 2018 but decreased by 7% compared to the previous five years;
- Is injured, including all levels of severity (but excluding killed; 842.8 in 2019), decreased by 4% compared to 2018 and by 7% compared to the previous five years;
- Is seriously injured (26.8 in 2019) decreased by nearly 17% compared to 2018 and by nearly 14% compared to the previous five years;
- Sustains minor injuries (132.4 in 2019) decreased by 1% compared to 2018 and by 11% compared to the previous five years;
- Sustains minimal injuries (681.4 in 2019) deceased by 2% compared to 2018 and by nearly 4% compared to the previous five years; and,
- Sustains injuries that are unspecified in severity (“other injury”; 2.2 in 2019) decreased by 90% compared to 2018 and the previous five years.

Figure 5-1 Historical Summary of Victim Involvement Rate in Traffic Collisions

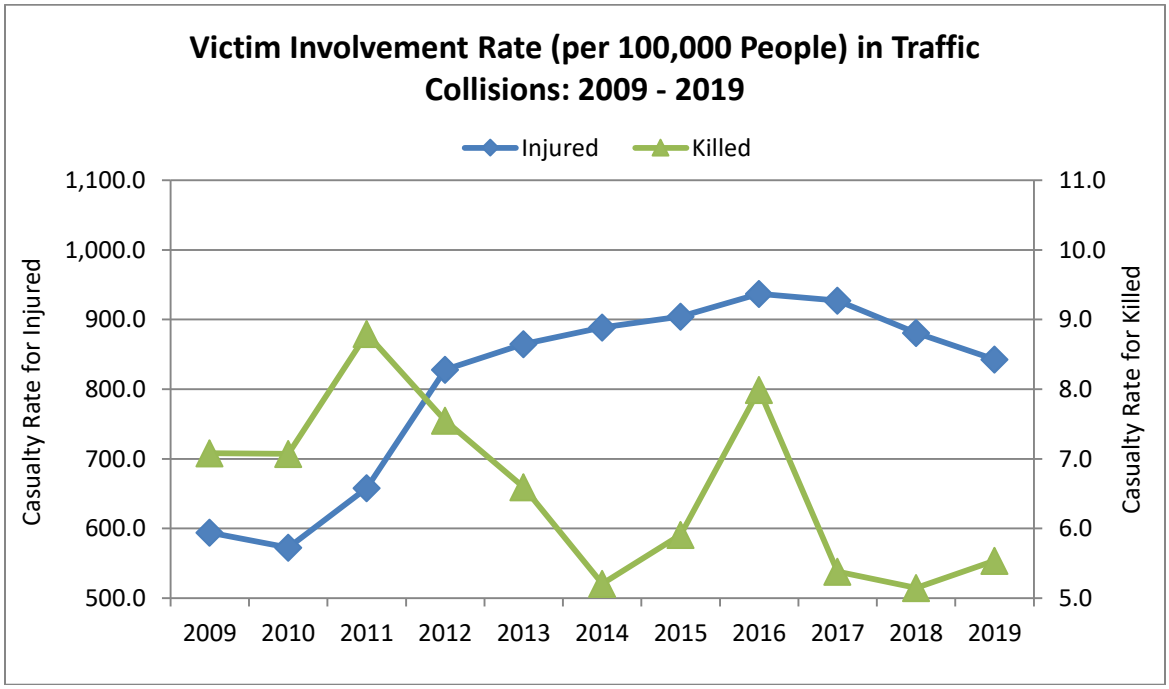


Table 5-3 Collision Victims by Month of Occurrence and Casualty Type

Table 5-3
Collision Victims by Month of Occurrence and Casualty Type: 2019

Month of Occurrence	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
January	4	5.3%	31	8.4%	180	9.9%	1,072	11.5%	4	13.3%	1,287	11.1%	**1,291**	11.1%
February	1	1.3%	27	7.3%	176	9.7%	1,196	12.8%	1	3.3%	1,400	12.1%	**1,401**	12.0%
March	5	6.6%	27	7.3%	142	7.8%	718	7.7%	4	13.3%	891	7.7%	**896**	7.7%
April	4	5.3%	25	6.8%	87	4.8%	511	5.5%	3	10.0%	626	5.4%	**630**	5.4%
May	5	6.6%	29	7.9%	132	7.3%	611	6.5%	4	13.3%	776	6.7%	**781**	6.7%
June	9	11.8%	41	11.1%	145	8.0%	645	6.9%	2	6.7%	833	7.2%	**842**	7.2%
July	9	11.8%	25	6.8%	148	8.1%	647	6.9%	0	-	820	7.1%	**829**	7.1%
August	13	17.1%	31	8.4%	156	8.6%	679	7.3%	1	3.3%	867	7.5%	**880**	7.6%
September	4	5.3%	31	8.4%	167	9.2%	675	7.2%	4	13.3%	877	7.6%	**881**	7.6%
October	6	7.9%	36	9.8%	175	9.6%	826	8.8%	3	10.0%	1,040	9.0%	**1,046**	9.0%
November	6	7.9%	27	7.3%	140	7.7%	821	8.8%	2	6.7%	990	8.6%	**996**	8.6%
December	10	13.2%	38	10.3%	169	9.3%	953	10.2%	2	6.7%	1,162	10.0%	**1,172**	10.1%
Total	76	100%	368	100%	1,817	100%	9,354	100%	30	100%	11,569	100%	**11,645**	100%

Table 5-3a Collision Victims by Month of Occurrence and Casualty Type for Previous Five Years

Table 5-3a

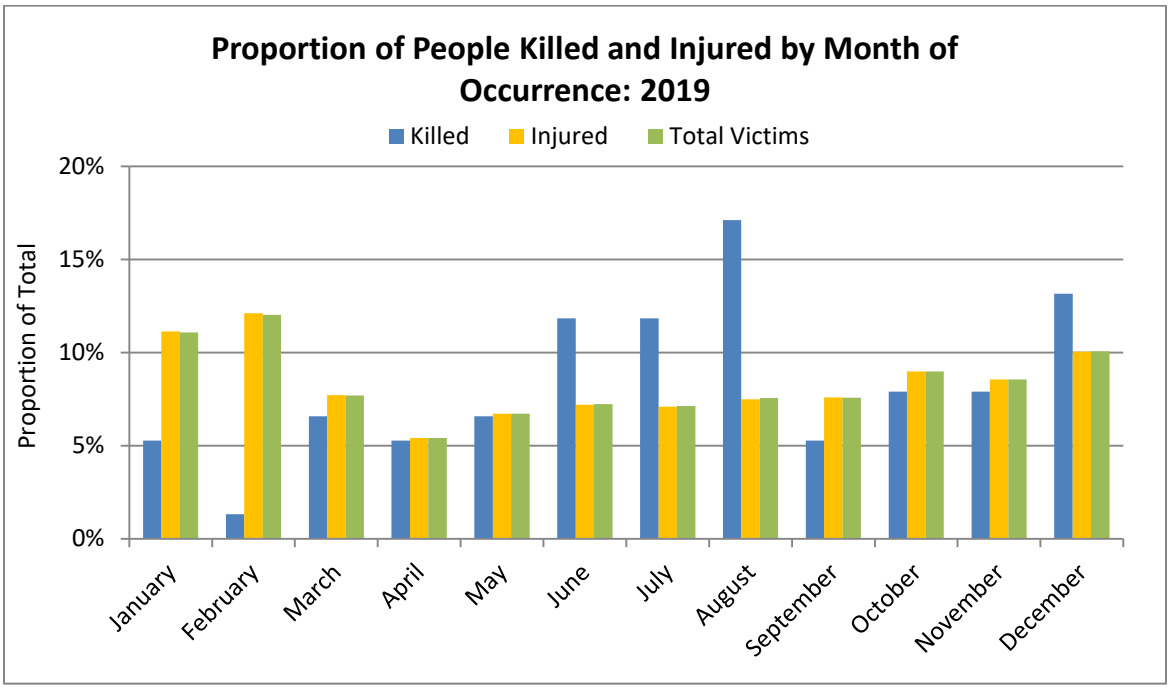
Collision Victims by Month of Occurrence and Casualty Type: 2014-2018 Average

Month of Occurrence	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
January	4	31	191	1,201	17	1,440	1,444	11.8%
February	4	27	159	960	25	1,172	1,176	9.6%
March	4	28	149	718	29	924	928	7.6%
April	6	29	116	567	15	727	734	6.0%
May	7	38	166	630	17	851	858	7.0%
June	7	35	165	647	22	868	876	7.2%
July	10	34	167	609	20	830	840	6.9%
August	8	36	168	661	25	889	898	7.4%
September	8	41	157	691	23	911	918	7.5%
October	9	45	187	781	21	1,035	1,043	8.5%
November	8	36	183	902	36	1,156	1,164	9.5%
December	4	35	189	1,069	36	1,330	1,334	10.9%
Total	79	415	1,995	9,437	287	12,133	12,212	100%

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.

Victims in 2019 appear to follow a fairly typical distribution compared to past years in terms of month of occurrence. The months of January, February, November and December combined account for a disproportionate number of traffic collision victims overall, both in 2019 (42% of all victims) and in the previous five year (2014 to 2018) annual average (42%). In 2019 (similar to the previous five years), the count of victims is lowest in the late spring and summer months (ranging from 5% to 8% of all victims in each month from April to August) and is highest in late fall, winter and early spring (ranging from 8% to 12% of all victims in each month from October to March).

Figure 5-2 Proportion of People Killed and Injured by Month of Occurrence



In 2019, June, July, August and December account for the highest proportions of people killed (12%, 12%, 17% and 13% of people killed, respectively) by month. This is somewhat different from the previous five year (2014 to 2018) annual average, where the months of July, August and October account for the highest proportions of deaths.

Table 5-4 Collision Victims by Day of Occurrence and Casualty Type

Table 5-4
Collision Victims by Day of Occurrence and Casualty Type: 2019

Day of the Week	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Sunday	8	10.5%	40	10.9%	186	10.2%	850	9.1%	2	6.7%	1,078	9.3%	**1,086**	9.3%
Monday	11	14.5%	63	17.1%	249	13.7%	1,321	14.1%	6	20.0%	1,639	14.2%	**1,650**	14.2%
Tuesday	12	15.8%	48	13.0%	247	13.6%	1,480	15.8%	5	16.7%	1,780	15.4%	**1,792**	15.4%
Wednesday	11	14.5%	47	12.8%	288	15.9%	1,531	16.4%	6	20.0%	1,872	16.2%	**1,883**	16.2%
Thursday	11	14.5%	42	11.4%	270	14.9%	1,558	16.7%	4	13.3%	1,874	16.2%	**1,885**	16.2%
Friday	13	17.1%	71	19.3%	312	17.2%	1,600	17.1%	2	6.7%	1,985	17.2%	**1,998**	17.2%
Saturday	10	13.2%	57	15.5%	265	14.6%	1,014	10.8%	5	16.7%	1,341	11.6%	**1,351**	11.6%
Total	76	100%	368	100%	1,817	100%	9,354	100%	30	100%	11,569	100%	**11,645**	100%

Table 5-4a Collision Victims by Day of Occurrence and Casualty Type for Previous Five Years

Table 5-4a

Collision Victims by Day of Occurrence and Casualty Type: 2014-2018 Average

Day of the Week	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Sunday	15	60	235	870	31	1,196	1,211	9.9%
Monday	10	54	274	1,323	42	1,693	1,703	13.9%
Tuesday	9	52	282	1,476	38	1,848	1,857	15.2%
Wednesday	10	58	287	1,467	45	1,856	1,867	15.3%
Thursday	8	61	302	1,528	43	1,934	1,943	15.9%
Friday	14	64	329	1,606	49	2,049	2,062	16.9%
Saturday	14	67	286	1,166	38	1,557	1,571	12.9%
Total	79	415	1,995	9,437	287	12,133	12,212	100%

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.

In 2019, the victims involved in traffic collisions are fairly evenly distributed throughout the week, with lowest on Sunday (9%) and highest on Friday (17%). This is very similar to the previous five year (2014 to 2018) annual average.

Four in ten (41%) people were killed on the weekend (17% Friday; 13% Saturday; nearly 11% Sunday) in 2019. This is lower than the previous five year (2014 to 2018) annual average, where the weekend (Friday, Saturday, and Sunday) is when more people are killed (53% cumulatively).

Figure 5-3 Proportion of People Killed and Injured by Day of Occurrence

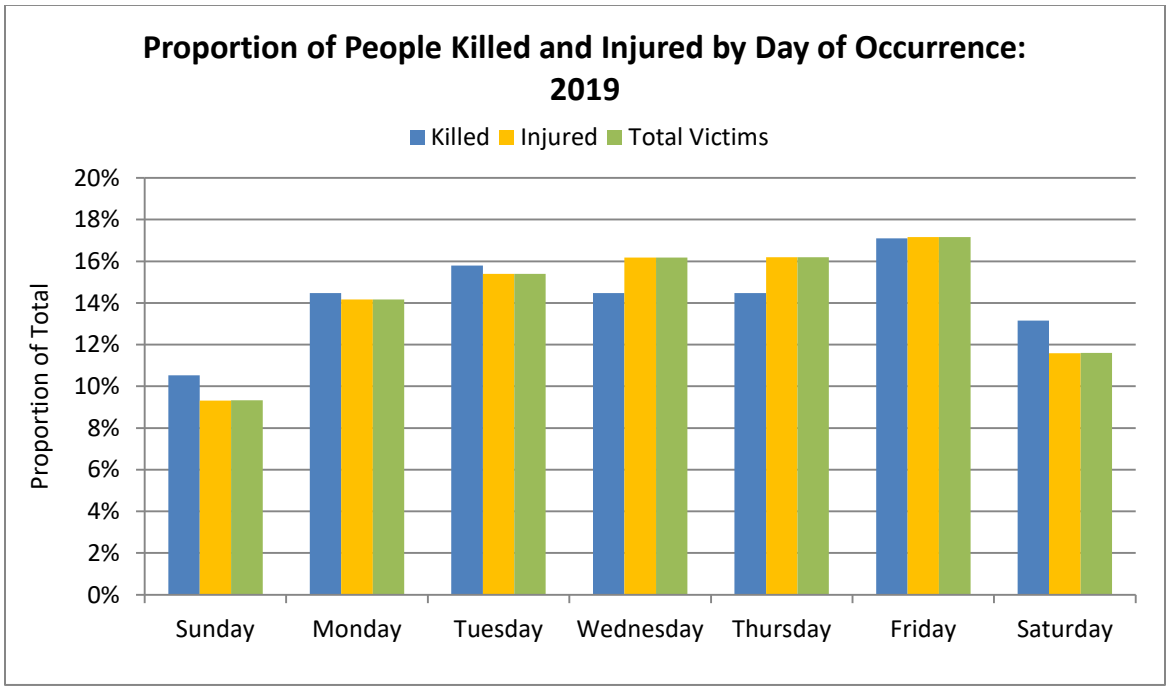


Table 5-5 Collision Victims by Time of Occurrence and Casualty Type

Table 5-5

Collision Victims by Time of Occurrence and Casualty Type: 2019

Time of the Day	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
00:00 - 02:59	5	6.6%	15	4.1%	48	2.6%	163	1.7%	2	6.7%	228	2.0%	**233**	2.0%
03:00 - 05:59	2	2.6%	13	3.5%	29	1.6%	88	0.9%	3	10.0%	133	1.1%	**135**	1.2%
06:00 - 08:59	5	6.6%	44	12.0%	255	14.0%	1,327	14.2%	6	20.0%	1,632	14.1%	**1,637**	14.1%
09:00 - 11:59	11	14.5%	42	11.4%	244	13.4%	1,323	14.1%	4	13.3%	1,613	13.9%	**1,624**	13.9%
12:00 - 14:59	15	19.7%	71	19.3%	328	18.1%	1,797	19.2%	3	10.0%	2,199	19.0%	**2,214**	19.0%
15:00 - 17:59	19	25.0%	90	24.5%	481	26.5%	2,737	29.3%	9	30.0%	3,317	28.7%	**3,336**	28.6%
18:00 - 20:59	11	14.5%	53	14.4%	265	14.6%	1,234	13.2%	1	3.3%	1,553	13.4%	**1,564**	13.4%
21:00 - 23:59	8	10.5%	36	9.8%	158	8.7%	665	7.1%	2	6.7%	861	7.4%	**869**	7.5%
Not Stated	0	-	4	1.1%	9	0.5%	20	0.2%	0	-	33	0.3%	**33**	0.3%
Total	76	100%	368	100%	1,817	100%	9,354	100%	30	100%	11,569	100%	**11,645**	100%

Table 5-5a Collision Victims by Time of Occurrence and Casualty Type for Previous Five Years

Table 5-5a

Collision Victims by Time of Occurrence and Casualty Type: 2014-2018 Average

Time of the Day	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
00:00 - 02:59	8	22	63	170	6	261	269	2.2%
03:00 - 05:59	4	12	37	91	2	142	146	1.2%
06:00 - 08:59	9	40	247	1,230	38	1,555	1,565	12.8%
09:00 - 11:59	11	61	268	1,305	45	1,679	1,691	13.8%
12:00 - 14:59	11	73	385	1,895	57	2,410	2,421	19.8%
15:00 - 17:59	11	97	505	2,803	75	3,480	3,491	28.6%
18:00 - 20:59	12	66	301	1,280	44	1,692	1,704	14.0%
21:00 - 23:59	11	40	178	642	20	881	892	7.3%
Not Stated	0	2	10	20	1	33	33	0.3%
Total	79	415	1,995	9,437	287	12,133	12,212	100%

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.

People are most often killed and injured in traffic collisions between noon and 6 p.m. In 2019, 48% of all victims are involved in traffic collisions between 12:00 and 14:59 (19%) and between 15:00 to 17:59 (29%). This is consistent with the previous five year (2014 to 2018) annual average (12:00-14:59 – 20% of all victims; 15:00 to 17:59 – 29% of all victims).

In 2019, most people are killed between noon and midnight (12:00-14:59 – 20% of people killed, 15:00-17:59 – 25% killed, 18:00-23:59 – 25% killed). This is similar to the previous five year (2014 to 2018) annual average (12:00-17:59 – 28% killed, 18:00-23:59 – 30% killed).

Comparing 2019 to the previous five year (2014 to 2018) annual average, the proportional distribution of people killed by time of the day is somewhat different. In 2019:

- 21% of people are killed between 6 a.m. and noon (06:00-08:59 – 7%; 09:00-11:59 – nearly 15%), compared to 26% in the previous five years;
- 45% of people are killed between noon and 6 p.m. (12:00-14:59 – 20%; 15:00 to 17:59 – 25%), compared to 28% in the previous five years;
- 25% of people are killed between 6 p.m. and midnight (18:00-20:59 – nearly 15%; 21:00 to 23:59 – nearly 11%), compared to 30% in the previous five years; and,
- 9% of people are killed between midnight to 6 a.m. (00:00-02:59 – 7%; 03:00-05:59 – 3%), compared to 16% in the previous five years.

Figure 5-4 Proportion of People Killed and Injured by Time of Occurrence

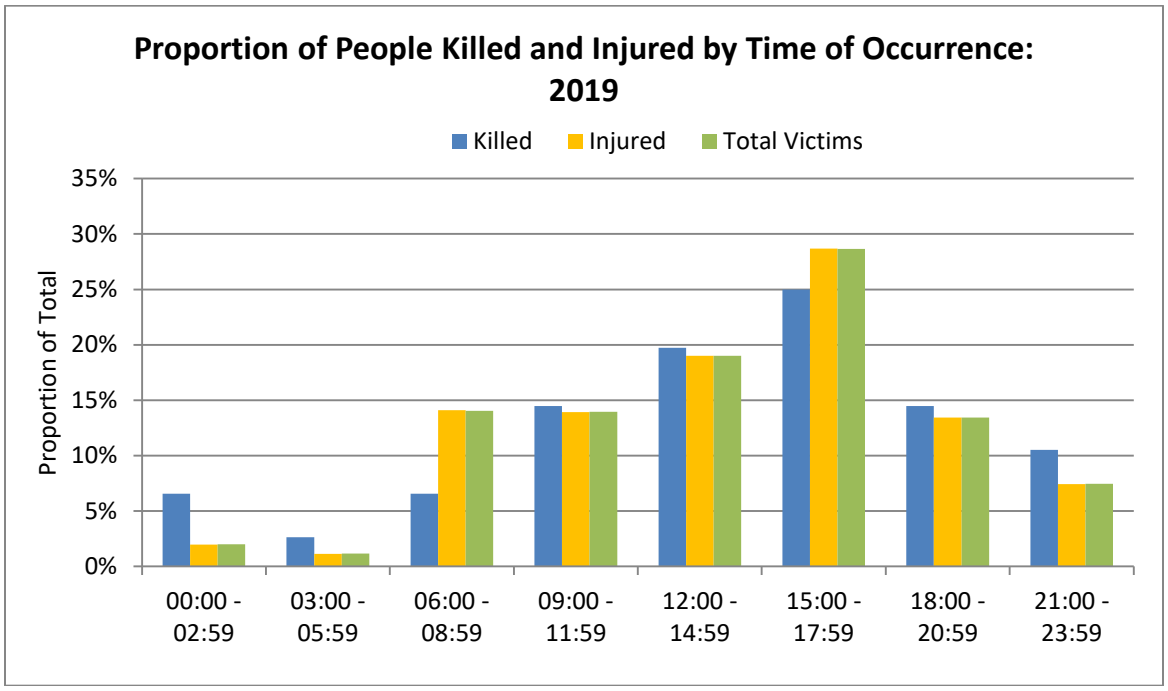


Table 5-6 Collision Victims by Gender and Casualty Type

Table 5-6

Collision Victims by Gender and Casualty Type: 2019

Gender	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Female	30	39.5%	166	46.9%	990	56.6%	5,401	58.8%	14	53.8%	6,571	58.1%	**6,601**	58.0%
Male	46	60.5%	188	53.1%	758	43.4%	3,777	41.2%	12	46.2%	4,735	41.9%	**4,781**	42.0%
Total	76	100%	354	100%	1,748	100%	9,178	100%	26	100%	11,306	100%	**11,382**	100%

Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Table 5-6a Collision Victims by Gender and Casualty Type for Previous Five Years

Table 5-6a

Collision Victims by Gender and Casualty Type: 2014-2018 Average

Gender	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Female	24	199	1,102	5,568	164	7,033	7,057	59.3%
Male	55	209	821	3,645	115	4,791	4,845	40.7%
Total	79	408	1,922	9,214	279	11,823	11,902	100%

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.
Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

In 2019, women account for 58% of all casualties in traffic collisions, same as the previous five year (2014 to 2018) annual average (59%). In 2019:

- Men account for a higher proportion of people killed (nearly 61%) than women, similar to the previous five years when men accounted for 69% of victims killed;
- Women account for the majority of people injured (but not killed) overall (58%), similar to the previous five years (nearly 60%);
- Women account for just under half of people seriously injured (47% compared to 53% men), similar to the previous five years (51% men compared to 49% women); and,
- Women account for more people sustaining minor injuries (57%) and minimal injuries (59%) than men, similar to the previous five years (minor injuries – 57%; minimal injuries – 60%).

Figure 5-5 Proportion of People Killed and Injured by Gender and Casualty Type

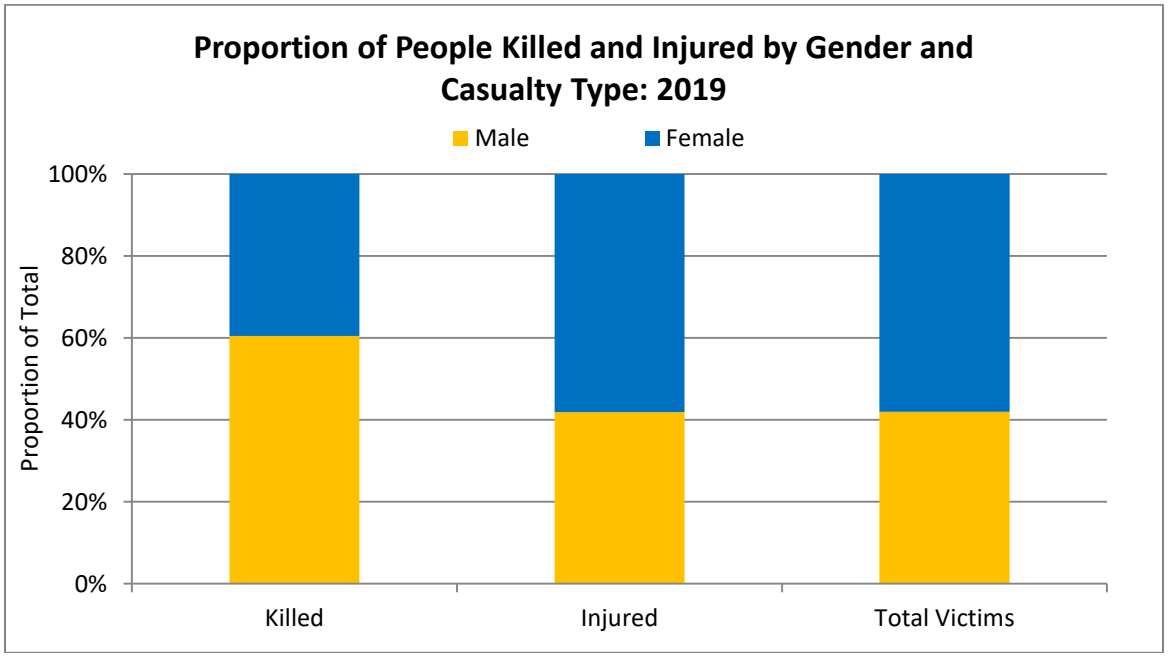


Table 5-7 Collision Victims by Age Group and Casualty Type

Table 5-7

Collision Victims by Age Group and Casualty Type: 2019

Age Group	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
0-4	2	2.6%	2	0.6%	30	1.7%	86	0.9%	2	7.7%	120	1.1%	**122**	1.1%
5-9	2	2.6%	3	0.9%	47	2.7%	129	1.4%	0	-	179	1.6%	**181**	1.6%
10-14	1	1.3%	6	1.7%	48	2.7%	154	1.7%	0	-	208	1.8%	**209**	1.8%
15-19	5	6.6%	26	7.4%	173	9.9%	487	5.3%	0	-	686	6.1%	**691**	6.1%
20-24	9	11.8%	33	9.4%	191	10.9%	886	9.7%	2	7.7%	1,112	9.9%	**1,121**	9.9%
25-34	8	10.5%	55	15.7%	329	18.8%	1,926	21.0%	7	26.9%	2,317	20.5%	**2,325**	20.5%
35-44	9	11.8%	42	12.0%	308	17.6%	1,908	20.8%	6	23.1%	2,264	20.1%	**2,273**	20.0%
45-54	12	15.8%	54	15.4%	246	14.1%	1,618	17.7%	4	15.4%	1,922	17.0%	**1,934**	17.0%
55-64	16	21.1%	56	16.0%	191	10.9%	1,202	13.1%	4	15.4%	1,453	12.9%	**1,469**	12.9%
65+	12	15.8%	73	20.9%	184	10.5%	767	8.4%	1	3.8%	1,025	9.1%	**1,037**	9.1%
Not Stated	0	-	4	-	1	-	15	-	0	-	20	-	**20**	-
Total	76	100%	354	100%	1,748	100%	9,178	100%	26	100%	11,306	100%	**11,382**	100%

*Percentage of the total does not include the "not stated" category.
Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Table 5-7a Collision Victims by Age Group and Casualty Type for Previous Five Years

Table 5-7a

Collision Victims by Age Group and Casualty Type: 2014-2018 Average

Age Group	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
0-4	<1	8	38	108	2	156	156	1.3%
5-9	<1	9	39	111	6	165	165	1.4%
10-14	2	5	42	137	5	190	191	1.6%
15-19	7	38	197	562	18	816	822	6.9%
20-24	8	46	231	933	26	1,236	1,245	10.5%
25-34	16	67	367	1,932	65	2,431	2,447	20.6%
35-44	12	60	299	1,813	50	2,223	2,234	18.8%
45-54	12	57	293	1,675	48	2,073	2,085	17.6%
55-64	8	48	224	1,182	34	1,488	1,497	12.6%
65+	14	68	182	732	23	1,005	1,020	8.6%
Not Stated	-	2	9	28	1	40	40	-
Total	79	408	1,922	9,214	279	11,823	11,902	100%

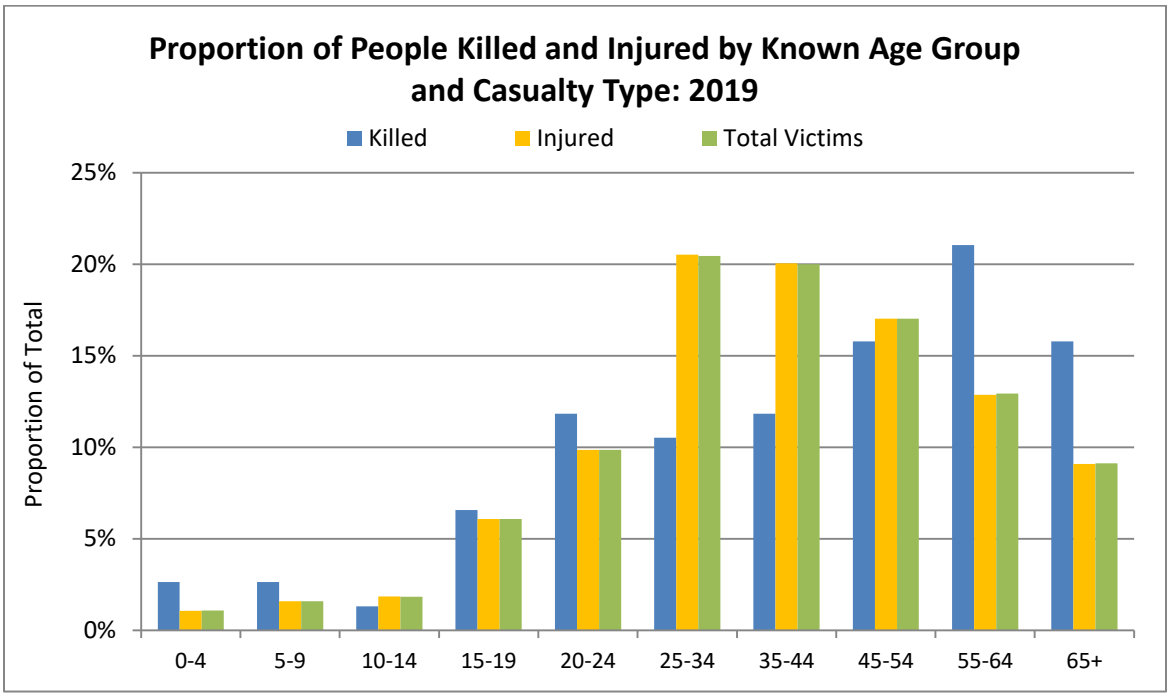
*Percentage of the total does not include the "not stated" category.
Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.
Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Victims aged 25 to 34 account for the highest proportion of casualties in 2019 (nearly 21% of all casualties; nearly 11% of people killed; 16% of people seriously injured), followed by those aged 35 to 44 (20% of all casualties; 12% of people killed; 12% of people seriously injured) and those age 45 to 54 (17% of all casualties; 16% of people killed; 15% of people seriously injured). Victims aged 15 to 19 account for 6% of all casualties while those aged 20 to 24 account for 10%.

The proportion of victims by age group in 2019 is very similar to what it has been in the previous five year (2014 to 2018) annual average. In the previous five years, victims aged 25 to 34 (21% of all victims) account for the largest group, followed by victims aged 35 to 44 (19% of all victims) and those aged 45 to 54 (18% of all victims). Victims aged 15 to 19 and 20 to 24 account for 7% and nearly 11% of all victims in the five year period (2014 to 2018), respectively.

In 2019, 53% of all people killed are aged 45 and older (16% aged 45-54; 21% aged 55-64; 16% aged 65 and older), 18% are aged 15 to 24, and 22% are aged 25 to 44. In the previous five year (2014 to 2018) annual average, 19% of people killed are aged 15 to 24, 34% are aged 25 to 44, and 43% are aged 45 and older.

Figure 5-6 Proportion of People Killed and Injured by Age Group and Casualty Type



In 2019, people aged 55 to 64 make up the largest group of people killed in traffic collisions (21%), followed by those aged 45 to 54 (16%) and 65 and older (16%).

NOTE: For a detailed count of collision victims for 2019 and the previous five year (2014 to 2018) annual average by age and gender combined, please refer to "*Table 5-8 Collision Victims by Age Group, Casualty Type, and Gender*" and "*Table 5-8a Collision Victims by Age Group, Casualty Type, and Gender for Previous Five Years*" on the following pages.

Table 5-8 Collision Victims by Age Group, Casualty Type, and Gender

Table 5-8

Collision Victims by Gender and Age Group and Casualty Type: 2019

Age Group		2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Female	0-4	2	6.7%	0	-	13	1.3%	47	0.9%	1	7.1%	61	0.9%	**63**	1.0%
	5-9	2	6.7%	0	-	26	2.6%	70	1.3%	0	-	96	1.5%	**98**	1.5%
	10-14	1	3.3%	4	2.4%	29	2.9%	85	1.6%	0	-	118	1.8%	**119**	1.8%
	15-19	0	-	11	6.7%	106	10.7%	314	5.8%	0	-	431	6.6%	**431**	6.5%
	20-24	4	13.3%	16	9.7%	112	11.3%	519	9.6%	1	7.1%	648	9.9%	**652**	9.9%
	25-34	4	13.3%	25	15.2%	193	19.5%	1,114	20.7%	2	14.3%	1,334	20.3%	**1,338**	20.3%
	35-44	3	10.0%	17	10.3%	176	17.8%	1,095	20.3%	4	28.6%	1,292	19.7%	**1,295**	19.6%
	45-54	3	10.0%	27	16.4%	135	13.6%	987	18.3%	4	28.6%	1,153	17.6%	**1,156**	17.5%
	55-64	4	13.3%	29	17.6%	105	10.6%	697	12.9%	1	7.1%	832	12.7%	**836**	12.7%
	65+	7	23.3%	36	21.8%	95	9.6%	464	8.6%	1	7.1%	596	9.1%	**603**	9.1%
	Not Stated	0	-	1	-	0	-	9	-	0	-	10	-	**10**	-
	Total Female	**30**	**100%**	**166**	**100%**	**990**	**100%**	**5,401**	**100%**	**14**	**100%**	**6,571**	**100%**	**6,601**	100%
Male	0-4	0	-	2	1.1%	17	2.2%	39	1.0%	1	8.3%	59	1.2%	**59**	1.2%
	5-9	0	-	3	1.6%	21	2.8%	59	1.6%	0	-	83	1.8%	**83**	1.7%
	10-14	0	-	2	1.1%	19	2.5%	69	1.8%	0	-	90	1.9%	**90**	1.9%
	15-19	5	10.9%	15	8.1%	67	8.9%	173	4.6%	0	-	255	5.4%	**260**	5.4%
	20-24	5	10.9%	17	9.2%	79	10.4%	367	9.7%	1	8.3%	464	9.8%	**469**	9.8%
	25-34	4	8.7%	30	16.2%	136	18.0%	812	21.5%	5	41.7%	983	20.8%	**987**	20.7%
	35-44	6	13.0%	25	13.5%	132	17.4%	813	21.6%	2	16.7%	972	20.6%	**978**	20.5%
	45-54	9	19.6%	27	14.6%	111	14.7%	631	16.7%	0	-	769	16.3%	**778**	16.3%
	55-64	12	26.1%	27	14.6%	86	11.4%	505	13.4%	3	25.0%	621	13.1%	**633**	13.3%
	65+	5	10.9%	37	20.0%	89	11.8%	303	8.0%	0	-	429	9.1%	**434**	9.1%
	Not Stated	0	-	3	-	1	-	6	-	0	-	10	-	**10**	-
	Total Male	**46**	**100%**	**188**	**100%**	**758**	**100%**	**3,777**	**100%**	**12**	**100%**	**4,735**	**100%**	**4,781**	100%

*Percentage of the total does not include the "not stated" category.

Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Table 5-8a Collision Victims by Age Group, Casualty Type, and Gender for Previous Five Years

Table 5-8a

Collision Victims by Gender and Age Group and Casualty Type: 2014-2018 Average

Age Group		2014-2018 Average Count of Victims							
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Female	0-4	<1	5	18	58	1	82	82	1.2%
	5-9	-	5	18	58	3	83	83	1.2%
	10-14	<1	2	22	82	3	109	109	1.6%
	15-19	2	21	122	334	10	487	489	7.0%
	20-24	3	21	134	571	15	740	743	10.6%
	25-34	5	30	219	1,174	39	1,462	1,467	20.9%
	35-44	3	33	172	1,103	30	1,338	1,341	19.1%
	45-54	4	26	167	1,030	28	1,251	1,255	17.8%
	55-64	2	22	124	709	23	879	880	12.5%
	65+	6	33	100	430	13	577	582	8.3%
	Not Stated	-	<1	5	18	-	24	24	-
	Total Female	24	199	1,102	5,568	164	7,033	7,057	100%
Male	0-4	<1	3	21	49	1	74	74	1.5%
	5-9	<1	4	21	53	4	82	83	1.7%
	10-14	1	3	20	55	3	81	82	1.7%
	15-19	5	17	75	228	8	328	333	6.9%
	20-24	5	25	98	362	11	496	501	10.4%
	25-34	11	37	148	758	26	969	980	20.3%
	35-44	9	27	127	710	21	885	894	18.5%
	45-54	8	31	126	645	20	822	830	17.2%
	55-64	7	26	100	473	11	610	616	12.8%
	65+	9	35	82	302	9	428	437	9.1%
	Not Stated	-	<1	3	10	1	15	15	-
	Total Male	55	209	821	3,645	115	4,791	4,845	100%

*Percentage of the total does not include the "not stated" category.
Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.
Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Table 5-9 Victim Involvement Rate (per 100,000 people) by Gender and Age Group and Casualty Type

Table 5-9

Victim Involvement Rate (per 100,000 people) by Gender and Age Group and Casualty Type: 2019, 2014-2018 Average

Age Group		2019 Casualty Type						**2019 Total Victims**	2014-2018 Average Victim Involvement Rate						
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims
Female	0-4	4.8	-	31.0	112.0	2.4	145.3	**150.1**	0.5	11.2	42.7	141.8	2.9	198.6	199.1
	5-9	4.6	-	60.3	162.4	-	222.7	**227.3**	-	11.4	42.4	137.8	6.2	197.9	197.9
	10-14	2.4	9.5	69.1	202.5	-	281.1	**283.5**	1.5	6.1	54.5	206.5	7.1	274.2	275.7
	15-19	-	27.5	264.6	783.7	-	1,075.8	**1,075.8**	5.3	51.2	294.4	805.5	24.6	1,175.6	1,180.9
	20-24	9.1	36.5	255.5	1,183.9	2.3	1,478.2	**1,487.3**	6.0	45.1	286.9	1,226.5	31.3	1,589.8	1,595.8
	25-34	4.1	25.6	197.4	1,139.5	2.0	1,364.5	**1,368.6**	5.1	32.2	233.7	1,250.3	41.3	1,557.4	1,562.6
	35-44	3.3	18.7	194.1	1,207.4	4.4	1,424.6	**1,428.0**	3.3	38.1	200.0	1,281.3	34.4	1,553.7	1,556.9
	45-54	3.6	32.1	160.5	1,173.1	4.8	1,370.4	**1,373.9**	4.3	29.6	190.6	1,173.0	31.4	1,424.6	1,429.0
	55-64	4.6	33.0	119.6	794.0	1.1	947.7	**952.3**	1.9	26.4	148.1	844.2	27.4	1,046.1	1,048.0
	65+	5.9	30.1	79.5	388.2	0.8	498.7	**504.5**	10.2	59.9	182.1	780.5	23.9	1,046.4	1,056.6
	Total Female	**4.3**	**24.0**	**143.3**	**781.8**	**2.0**	**951.1**	**955.5**	3.6	29.6	163.7	827.6	24.3	1,045.2	1,048.8
Male	0-4	-	4.5	38.2	87.7	2.2	132.7	**132.7**	0.5	6.9	47.1	112.9	2.3	169.1	169.6
	5-9	-	6.6	46.1	129.5	-	182.2	**182.2**	1.4	9.1	48.5	122.1	8.7	188.3	189.7
	10-14	-	4.6	43.3	157.4	-	205.3	**205.3**	2.4	7.2	48.8	131.7	6.2	193.9	196.3
	15-19	11.8	35.3	157.6	407.0	-	599.9	**611.7**	10.4	38.9	170.4	515.8	17.2	742.3	752.7
	20-24	10.8	36.9	171.4	796.3	2.2	1,006.8	**1,017.6**	11.0	51.5	197.9	733.8	22.7	1,006.0	1,016.9
	25-34	4.1	30.9	140.0	835.7	5.1	1,011.7	**1,015.9**	11.6	39.4	158.2	810.9	28.2	1,036.7	1,048.2
	35-44	6.6	27.7	146.2	900.7	2.2	1,076.9	**1,083.5**	10.3	31.5	148.2	827.4	24.0	1,031.1	1,041.3
	45-54	10.6	31.8	130.8	743.7	-	906.4	**917.0**	9.0	35.3	142.0	729.2	22.8	929.3	938.4
	55-64	13.7	30.7	97.9	574.7	3.4	706.7	**720.4**	7.9	30.9	119.4	567.2	13.4	731.0	738.9
	65+	5.0	37.3	89.7	305.3	-	432.2	**437.3**	19.6	78.3	182.4	671.2	20.9	952.7	972.3
	Total Male	**6.7**	**27.6**	**111.2**	**553.9**	**1.8**	**694.4**	**701.2**	8.3	31.5	123.6	549.1	17.4	721.6	729.9

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.
Note: Some victims do not have age and gender recorded and are therefore missing from the table above.

Overall, women have higher victim involvement rates than men. The involvement rate for females in all traffic collisions in 2019 is 955.5, while for males it is 701.2 (per 100,000 people). Similarly, in the previous five year (2014 to 2018) annual average, women have a higher involvement rate than men (women 1,048.8; men 729.9). However, men have higher involvement rates than women when it comes to being killed.

People aged 20 to 24 and 35 to 44 have the highest victim involvement rates (per 100,000 people) overall in 2019.

- Children under age 15 – rate of 196.2
- People aged 15 to 19 – rate of 836.9
- People aged 20 to 24 – rate of 1,246.6
- People aged 25 to 34 – rate of 1,192.8
- People aged 35 to 44 – rate of 1,256.2
- People aged 45 to 54 – rate of 1,144.5
- People aged 55 and older – rate of 635.3

In 2019, women aged 20 to 24 have the highest victim involvement rate of any age-gender group (1,487.3 per 100,000 people) followed by women aged 35 to 44 (1,428.0) and women aged 45 to 54 (1,373.9). While the victim involvement rates for men is lower than women in 2019, men aged 35 to 44 have the highest rate among male age groups (1,083.5 per 100,000 people) followed by men aged 20 to 24 (1,017.6) and men aged 25 to 34 (1,015.9).

The overall victim involvement rates in 2019 are generally lower than the rates in the previous five year (2014 to 2018) annual average. When compared to the previous five years, in 2019:

- Victim involvement rates for women decreased by 9% overall. The rate for women killed increased by 20%, but women seriously injured decreased by 19%.
- Victim involvement rates for men decreased by 4% overall. The rate for men killed decreased by 18% and seriously injured decreased by 13%.

Table 5-10 Collision Victims by Road User Class and Age Group

Table 5-10

Collision Victims by Road User Class and Age Group and Casualty Type: 2019

Age Group		2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Driver	0-4	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	5-9	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	10-14	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	15-19	3	8.3%	13	6.0%	106	9.3%	321	4.4%	0	-	440	5.1%	**443**	5.1%
	20-24	5	13.9%	23	10.6%	136	12.0%	715	9.7%	1	5.3%	875	10.0%	**880**	10.1%
	25-34	3	8.3%	40	18.5%	237	20.9%	1,638	22.3%	6	31.6%	1,921	22.1%	**1,924**	22.0%
	35-44	3	8.3%	29	13.4%	217	19.1%	1,644	22.4%	5	26.3%	1,895	21.8%	**1,898**	21.7%
	45-54	8	22.2%	33	15.3%	185	16.3%	1,394	19.0%	4	21.1%	1,616	18.6%	**1,624**	18.6%
	55-64	8	22.2%	36	16.7%	133	11.7%	1,020	13.9%	2	10.5%	1,191	13.7%	**1,199**	13.7%
	65+	6	16.7%	42	19.4%	122	10.7%	606	8.3%	1	5.3%	771	8.9%	**777**	8.9%
	Not Stated	0	-	0	-	1	-	1	-	0	-	2	-	**2**	-
	Total Drivers*	**36**	**100%**	**216**	**100%**	**1,137**	**100%**	**7,339**	**100%**	**19**	**100%**	**8,711**	**100%**	**8,747**	100%
Passenger	0-4	1	6.7%	3	3.8%	30	6.5%	94	5.4%	0	-	127	5.6%	**128**	5.6%
	5-9	2	13.3%	1	1.3%	40	8.7%	129	7.4%	0	-	170	7.4%	**172**	7.5%
	10-14	1	6.7%	4	5.0%	43	9.3%	158	9.1%	0	-	205	9.0%	**206**	9.0%
	15-19	1	6.7%	9	11.3%	53	11.5%	160	9.2%	0	-	222	9.7%	**223**	9.7%
	20-24	2	13.3%	5	6.3%	38	8.2%	164	9.4%	1	100.0%	208	9.1%	**210**	9.1%
	25-34	2	13.3%	11	13.8%	65	14.1%	254	14.6%	0	-	330	14.4%	**332**	14.4%
	35-44	1	6.7%	9	11.3%	63	13.7%	254	14.6%	0	-	326	14.3%	**327**	14.2%
	45-54	3	20.0%	11	13.8%	37	8.0%	212	12.2%	0	-	260	11.4%	**263**	11.4%
	55-64	1	6.7%	10	12.5%	44	9.5%	154	8.8%	0	-	208	9.1%	**209**	9.1%
	65+	1	6.7%	17	21.3%	48	10.4%	163	9.4%	0	-	228	10.0%	**229**	10.0%
	Not Stated	0	-	6	-	11	-	67	-	2	-	86	-	**86**	-
	Total Passengers*	**15**	**100%**	**86**	**100%**	**472**	**100%**	**1,809**	**100%**	**3**	**100%**	**2,370**	**100%**	**2,385**	100%

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Age Group		2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Motorcyclist	0-4	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	5-9	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	10-14	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	15-19	0	-	2	9.5%	3	5.9%	2	4.3%	0	-	7	5.9%	**7**	5.6%
	20-24	1	12.5%	1	4.8%	5	9.8%	5	10.9%	0	-	11	9.3%	**12**	9.5%
	25-34	1	12.5%	4	19.0%	4	7.8%	12	26.1%	0	-	20	16.9%	**21**	16.7%
	35-44	0	-	2	9.5%	10	19.6%	3	6.5%	0	-	15	12.7%	**15**	11.9%
	45-54	0	-	2	9.5%	11	21.6%	10	21.7%	0	-	23	19.5%	**23**	18.3%
	55-64	4	50.0%	6	28.6%	13	25.5%	14	30.4%	0	-	33	28.0%	**37**	29.4%
	65+	2	25.0%	4	19.0%	5	9.8%	0	-	0	-	9	7.6%	**11**	8.7%
	Not Stated	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	Total Motorcyclists*	**8**	**100%**	**21**	**100%**	**51**	**100%**	**46**	**100%**	**0**	**0%**	**118**	**100%**	**126**	100%
Moped	0-4	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	5-9	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	10-14	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	15-19	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	20-24	0	-	0	-	1	14.3%	0	-	0	-	1	7.1%	**1**	7.1%
	25-34	0	-	0	-	2	28.6%	0	-	0	-	2	14.3%	**2**	14.3%
	35-44	0	-	0	-	2	28.6%	0	-	0	-	2	14.3%	**2**	14.3%
	45-54	0	-	0	-	1	14.3%	2	40.0%	0	-	3	21.4%	**3**	21.4%
	55-64	0	-	1	50.0%	0	-	2	40.0%	0	-	3	21.4%	**3**	21.4%
	65+	0	-	1	50.0%	1	14.3%	1	20.0%	0	-	3	21.4%	**3**	21.4%
	Not Stated	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	Total Moped*	**0**	**0%**	**2**	**100%**	**7**	**100%**	**5**	**100%**	**0**	**0%**	**14**	**100%**	**14**	100%

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Age Group		2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
		Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Bicyclist	0-4	0	-	0	-	3	8.1%	0	-	2	100.0%	5	5.6%	**5**	5.6%
	5-9	0	-	1	10.0%	0	-	0	-	0	-	1	1.1%	**1**	1.1%
	10-14	0	-	1	10.0%	3	8.1%	4	10.0%	0	-	8	9.0%	**8**	8.9%
	15-19	0	-	0	-	1	2.7%	1	2.5%	0	-	2	2.2%	**2**	2.2%
	20-24	0	-	1	10.0%	5	13.5%	3	7.5%	0	-	9	10.1%	**9**	10.0%
	25-34	0	-	1	10.0%	7	18.9%	14	35.0%	0	-	22	24.7%	**22**	24.4%
	35-44	0	-	0	-	2	5.4%	9	22.5%	0	-	11	12.4%	**11**	12.2%
	45-54	1	100.0%	1	10.0%	8	21.6%	5	12.5%	0	-	14	15.7%	**15**	16.7%
	55-64	0	-	2	20.0%	6	16.2%	3	7.5%	0	-	11	12.4%	**11**	12.2%
	65+	0	-	3	30.0%	2	5.4%	1	2.5%	0	-	6	6.7%	**6**	6.7%
	Not Stated	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
	Total Bicyclists*	**1**	**100%**	**10**	**100%**	**37**	**100%**	**40**	**100%**	**2**	**100%**	**89**	**100%**	**90**	100%
Pedestrian	0-4	1	6.3%	0	-	2	2.3%	1	1.6%	0	-	3	1.6%	**4**	2.0%
	5-9	0	-	1	3.4%	4	4.7%	1	1.6%	0	-	6	3.3%	**6**	3.0%
	10-14	0	-	2	6.9%	5	5.8%	3	4.7%	0	-	10	5.5%	**10**	5.0%
	15-19	1	6.3%	2	6.9%	11	12.8%	9	14.1%	0	-	22	12.0%	**23**	11.6%
	20-24	1	6.3%	3	10.3%	9	10.5%	5	7.8%	0	-	17	9.3%	**18**	9.0%
	25-34	2	12.5%	1	3.4%	18	20.9%	15	23.4%	1	25.0%	35	19.1%	**37**	18.6%
	35-44	5	31.3%	4	13.8%	17	19.8%	12	18.8%	1	25.0%	34	18.6%	**39**	19.6%
	45-54	0	-	7	24.1%	5	5.8%	6	9.4%	0	-	18	9.8%	**18**	9.0%
	55-64	3	18.8%	2	6.9%	5	5.8%	10	15.6%	2	50.0%	19	10.4%	**22**	11.1%
	65+	3	18.8%	7	24.1%	10	11.6%	2	3.1%	0	-	19	10.4%	**22**	11.1%
	Not Stated	0	-	2	-	1	-	1	-	2	-	6	-	**6**	-
	Total Pedestrians*	**16**	**100%**	**31**	**100%**	**87**	**100%**	**65**	**100%**	**6**	**100%**	**189**	**100%**	**205**	100%

*Percentage of the total does not include the "not stated" category.

Note: Counts for “Motorcyclist”, “Bicyclist” and “Moped” include passengers on those vehicle types.

Note: In 2019, there are 15 victims in the class "Riding/hanging on" (i.e., not in the passenger compartment) who are not included in Table 5-10. This includes 1 person with serious injuries, 4 with minor injuries and 10 with minimal injuries.

Note: Some victims do not have their position in the vehicle recorded and are therefore missing from the table above. This includes 63 injured people (1 serious, 22 minor and 40 minimal injuries).

Table 5-10a Victims by Road User Class and Age Group and Casualty Type for Previous Five Years

Table 5-10a

Collision Victims by Road User Class and Age Group and Casualty Type: 2014-2018 Average

Age Group		2014-2018 Average Count of Victims							
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Driver	0-4	-	-	<1	1	-	1	1	<0.1%
	5-9	-	-	-	<1	-	<1	<1	<0.1%
	10-14	<1	<1	<1	<1	<1	1	1	<0.1%
	15-19	4	22	126	391	11	550	554	6.0%
	20-24	4	28	163	764	20	975	979	10.6%
	25-34	9	43	282	1,636	51	2,013	2,021	22.0%
	35-44	6	39	228	1,576	42	1,884	1,891	20.6%
	45-54	7	37	220	1,436	39	1,732	1,739	18.9%
	55-64	5	31	165	1,001	24	1,221	1,226	13.3%
	65+	8	46	126	586	18	775	783	8.5%
	Not Stated	-	-	1	3	-	4	4	-
	Total Drivers*	43	247	1,311	7,395	204	9,157	9,200	100%
Passenger	0-4	<1	9	40	117	3	169	169	7.2%
	5-9	<1	7	36	112	5	160	160	6.8%
	10-14	1	4	38	142	4	187	188	8.0%
	15-19	1	12	61	169	6	247	249	10.5%
	20-24	2	12	51	154	4	221	223	9.4%
	25-34	3	13	62	274	11	360	363	15.4%
	35-44	2	12	50	217	6	286	288	12.2%
	45-54	2	10	51	218	7	286	288	12.2%
	55-64	1	8	40	165	7	219	220	9.3%
	65+	3	15	46	141	3	206	209	8.9%
	Not Stated	-	1	26	93	1	121	121	-
	Total Passengers*	17	103	501	1,801	58	2,463	2,480	100%
Motorcyclist	0-4	-	-	-	-	-	-	-	-
	5-9	-	-	-	-	-	-	-	-
	10-14	-	-	<1	-	-	<1	<1	0.1%
	15-19	<1	1	2	2	-	5	5	3.6%
	20-24	<1	3	6	7	<1	16	16	11.7%
	25-34	<1	5	7	11	<1	24	25	18.3%
	35-44	<1	3	6	11	<1	21	22	16.0%
	45-54	2	7	10	15	<1	32	33	24.7%
	55-64	<1	6	9	10	-	25	26	19.3%
	65+	<1	2	3	3	-	8	8	6.2%
	Not Stated	-	<1	-	<1	-	<1	<1	-
	Total Motorcyclists*	4	27	43	60	1	131	135	100%

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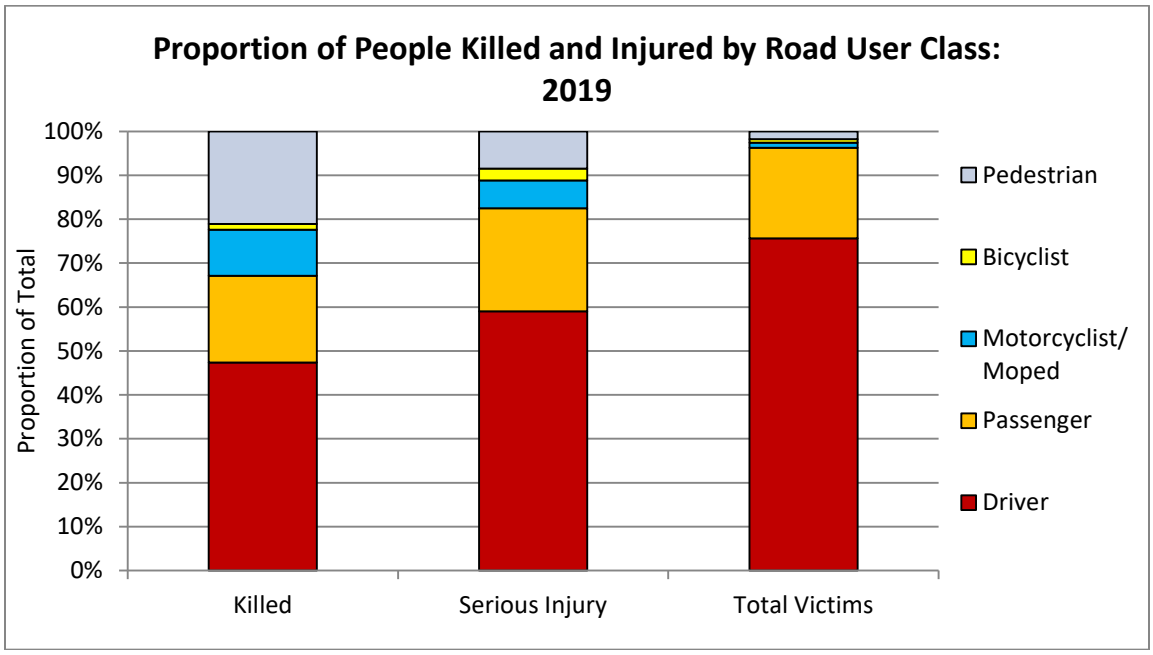
Age Group		2014-2018 Average Count of Victims							
		Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Moped	0-4	-	-	-	-	-	-	-	-
	5-9	-	-	-	-	-	-	-	-
	10-14	-	-	-	-	-	-	-	-
	15-19	-	-	<1	<1	-	<1	<1	3.9%
	20-24	-	-	-	<1	-	<1	<1	5.9%
	25-34	-	<1	<1	2	-	3	3	33.3%
	35-44	-	<1	<1	<1	-	2	2	19.6%
	45-54	-	<1	2	<1	-	3	3	27.5%
	55-64	-	-	<1	<1	-	<1	<1	7.8%
	65+	-	-	-	-	<1	<1	<1	2.0%
	Not Stated	-	-	-	-	-	-	-	-
	Total Moped*	-	1	4	5	<1	10	10	100%
Bicyclist	0-4	-	<1	1	3	<1	6	6	5.6%
	5-9	-	<1	1	<1	<1	2	2	2.0%
	10-14	<1	<1	3	1	<1	6	6	6.0%
	15-19	<1	1	5	4	<1	10	11	10.6%
	20-24	<1	<1	6	5	<1	11	12	11.6%
	25-34	<1	2	7	8	1	18	18	18.3%
	35-44	<1	1	7	7	1	16	17	16.9%
	45-54	<1	<1	5	6	2	13	14	13.7%
	55-64	<1	1	3	6	<1	11	11	11.0%
	65+	<1	<1	2	1	<1	4	4	4.4%
	Not Stated	-	<1	<1	<1	-	1	1	-
	Total Bicyclists*	3	9	41	42	7	99	101	100%
Pedestrian	0-4	<1	<1	3	1	<1	5	6	3.4%
	5-9	<1	1	2	<1	<1	4	5	2.8%
	10-14	-	<1	4	1	-	6	6	3.6%
	15-19	<1	2	5	3	1	11	12	7.1%
	20-24	2	3	7	5	2	17	20	12.1%
	25-34	3	3	12	8	2	25	27	16.9%
	35-44	2	4	9	8	<1	22	23	14.4%
	45-54	<1	3	9	8	1	21	21	13.2%
	55-64	1	2	8	7	2	19	20	12.5%
	65+	2	5	8	7	1	21	23	14.0%
	Not Stated	-	<1	2	3	2	9	9	-
	Total Pedestrians*	12	25	70	52	13	160	171	100%

*Percentage of the total does not include the "not stated" category.
Note: Counts for “Motorcyclist”, “Bicyclist” and “Moped” include passengers on those vehicle types.
Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.
Note: In 2014-2018, there is an average of 31 victims in the class “Riding/Hanging On”. There is also an average of 83 victims whose Road User Class cannot be determined. These victims are not included in Table 5-10a.

In 2019, “Drivers” account for nearly 76% of all casualties and motor vehicle “Passengers” account for 21%. “Motorcyclists” and “Moped” riders combined account for 1% of all casualties while “Bicyclists” account for 1% and “Pedestrians” account for 2%. In 2019, “Pedestrians” account for 21% of people killed in traffic collisions.

Figure 5-7 Proportion of People Killed and Injured by Road User Class



Considering people killed and seriously injured in Manitoba traffic collisions in 2019:

- Drivers account for the largest proportion of people killed (47%) and seriously injured (59%);
- Passengers account for 20% of people killed and 23% of people seriously injured;
- Pedestrians account for 21% of people killed and 8% of people seriously injured;
- Motorcyclists (including motorcycle and moped riders, combined) account for nearly 11% of people killed and 6% of people seriously injured; and,
- Bicyclists account for 1% of people killed and 3% of people seriously injured.

Vulnerable road users (pedestrians, motorcyclists/moped riders, and bicyclists) account for a much higher proportion of people killed and seriously injured than they do for people sustaining only minor or minimal injuries.

- Pedestrians account for 21% of people killed and 8% of people seriously injured, but only 2% of all victims in 2019.
- Motorcyclists and moped riders account for nearly 11% of people killed and 6% of people seriously injured, but only 1% of all victims in 2019.
- Bicyclists account for 1% of people killed and 3% of people seriously injured, but only 1% of all victims in 2019.

Table 5-11 Collision Victims by Collision Type and Casualty Type

Table 5-11
Collision Victims by Collision Type and Casualty Type: 2019

Collision Type	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Collision with pedestrian	4	5.3%	11	3.0%	50	2.8%	33	0.4%	2	6.7%	96	0.8%	**100**	0.9%
Collision with other motor vehicle	40	52.6%	231	62.8%	1,382	76.1%	8,129	86.9%	21	70.0%	9,763	84.4%	**9,803**	84.2%
Collisions with train	0	-	0	-	1	<0.1%	1	<0.1%	0	-	2	<0.1%	**2**	<0.1%
Collision with motorcycle	0	-	2	0.5%	5	0.3%	5	<0.1%	0	-	12	0.1%	**12**	0.1%
Collision with animal drawn vehicle	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
Collision with bicycle	1	1.3%	3	0.8%	20	1.1%	24	0.3%	1	3.3%	48	0.4%	**49**	0.4%
Collision with animal	3	3.9%	6	1.6%	38	2.1%	362	3.9%	0	-	406	3.5%	**409**	3.5%
Collision with fixed object	14	18.4%	78	21.2%	247	13.6%	534	5.7%	4	13.3%	863	7.5%	**877**	7.5%
Collision with other object	13	17.1%	28	7.6%	55	3.0%	215	2.3%	1	3.3%	299	2.6%	**312**	2.7%
Overturned in roadway	0	-	3	0.8%	5	0.3%	11	0.1%	0	-	19	0.2%	**19**	0.2%
Ran off roadway	1	1.3%	2	0.5%	2	0.1%	0	-	1	3.3%	5	<0.1%	**6**	<0.1%
Collision with moped	0	-	1	0.3%	0	-	0	-	0	-	1	<0.1%	**1**	<0.1%
Other non-collision	0	-	3	0.8%	12	0.7%	40	0.4%	0	-	55	0.5%	**55**	0.5%
Total	76	100%	368	100%	1,817	100%	9,354	100%	30	100%	11,569	100%	**11,645**	100%

Table 5-11a Collision Victims by Collision Type and Casualty Type for Previous Five Years

Table 5-11a

Collision Victims by Collision Type and Casualty Type: 2014-2018 Average

Collision Type	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Collision with pedestrian	3	11	25	23	7	66	69	0.6%
Collision with other motor vehicle	41	243	1,447	8,090	233	10,013	10,054	82.5%
Collisions with train	<1	<1	<1	<1	-	2	2	<0.1%
Collision with motorcycle	1	2	2	4	<1	10	11	<0.1%
Collision with animal drawn vehicle	-	-	-	-	-	-	-	-
Collision with bicycle	1	4	14	25	2	46	47	0.4%
Collision with animal	<1	10	37	320	8	375	375	3.1%
Collision with fixed object	18	89	288	560	19	956	974	8.0%
Collision with other object	8	37	134	337	12	520	528	4.3%
Overturned in roadway	1	1	6	5	-	12	13	0.1%
Ran off roadway	3	8	13	6	1	28	31	0.3%
Collision with moped	-	-	<1	<1	-	<1	<1	<0.1%
Other non-collision	1	4	21	48	4	77	78	0.6%
Total	79	411	1,987	9,419	286	12,104	12,183	100%

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.
Note: There are several victims in 2014 where collision type was not captured; these are not included in the average calculation.

Motor vehicles colliding with other motor vehicles account for the majority of casualties in Manitoba, both in 2019 and in the previous five year (2014 to 2018) annual average. In 2019, “collision with other motor vehicle” accounts for:

- 84% of all casualties (nearly 83% in the previous five years);
- 53% of people killed (52% in the previous five years); and,
- 63% of people seriously injured (59% in the previous five years).

“Collision with a pedestrian”, “collision with bicycle”, “collision with animal”, “collision with fixed object “, “collision with other object”, and “ran off roadway” each account for a higher proportion of people killed than of people injured in traffic collisions.

Table 5-12 Collision Victims by Accident Configuration and Casualty Type

Table 5-12
Collision Victims by Accident Configuration and Casualty Type: 2019

Accident Configuration	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Rear End	1	3.3%	31	11.0%	361	23.3%	4,361	53.8%	7	29.2%	4,760	47.8%	**4,761**	47.7%
Head On	9	30.0%	31	11.0%	64	4.1%	81	1.0%	1	4.2%	177	1.8%	**186**	1.9%
Side Swipe Opposing	0	-	2	0.7%	21	1.4%	76	0.9%	1	4.2%	100	1.0%	**100**	1.0%
Side Swipe Same Direction	0	-	7	2.5%	52	3.4%	521	6.4%	1	4.2%	581	5.8%	**581**	5.8%
Overtaking	0	-	0	-	3	0.2%	37	0.5%	0	-	40	0.4%	**40**	0.4%
Right Turn - Same direction	0	-	0	-	6	0.4%	21	0.3%	0	-	27	0.3%	**27**	0.3%
Right Turn - Opposing	0	-	0	-	3	0.2%	4	<0.1%	0	-	7	<0.1%	**7**	<0.1%
Left Turn - Opposing	1	3.3%	17	6.0%	80	5.2%	245	3.0%	1	4.2%	343	3.4%	**344**	3.4%
Left Turn - Same direction	0	-	0	-	8	0.5%	29	0.4%	0	-	37	0.4%	**37**	0.4%
Left Turn - Across	0	-	8	2.8%	58	3.7%	238	2.9%	1	4.2%	305	3.1%	**305**	3.1%
Intersection 90°	6	20.0%	92	32.7%	556	35.9%	1,754	21.7%	3	12.5%	2,405	24.2%	**2,411**	24.2%
Off Road Right	2	6.7%	31	11.0%	90	5.8%	126	1.6%	2	8.3%	249	2.5%	**251**	2.5%
Off Road Left	0	-	15	5.3%	72	4.7%	76	0.9%	1	4.2%	164	1.6%	**164**	1.6%
Fixed Object	4	13.3%	28	10.0%	92	5.9%	317	3.9%	0	-	437	4.4%	**441**	4.4%
Parking	0	-	1	0.4%	10	0.6%	147	1.8%	0	-	158	1.6%	**158**	1.6%
Pedestrian	7	23.3%	18	6.4%	71	4.6%	67	0.8%	6	25.0%	162	1.6%	**169**	1.7%
Other	46	-	87	-	270	-	1,254	-	6	-	1,617	-	**1,663**	-
Total	76	100%	368	100%	1,817	100%	9,354	100%	30	100%	11,569	100%	**11,645**	100%

Note: “Other” accident configurations consist primarily of collisions involving more than one configuration or sequence of events. Calculations in "% of Total" exclude the "Other" category.

Table 5-12a Collision Victims by Accident Configuration and Casualty Type for Previous Five Years

Table 5-12a

Collision Victims by Accident Configuration and Casualty Type: 2014-2018 Average

Accident Configuration	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Rear End	3	43	417	4,547	126	5,133	5,136	49.2%
Head On	16	24	58	102	4	187	203	1.9%
Side Swipe Opposing	<1	4	17	67	<1	89	89	0.9%
Side Swipe Same Direction	<1	10	54	457	12	532	532	5.1%
Overtaking	<1	1	6	26	<1	34	34	0.3%
Right Turn - Same direction	<1	<1	6	25	1	32	33	0.3%
Right Turn - Opposing	-	<1	3	10	<1	13	13	0.1%
Left Turn - Opposing	1	11	76	223	6	315	317	3.0%
Left Turn - Same direction	-	<1	5	30	1	37	37	0.4%
Left Turn - Across	<1	9	53	186	6	254	255	2.4%
Intersection 90°	9	104	624	1,796	54	2,579	2,588	24.8%
Off Road Right	6	35	110	159	5	310	316	3.0%
Off Road Left	3	26	81	105	3	214	218	2.1%
Fixed Object	3	23	88	276	10	396	400	3.8%
Parking	<1	2	15	135	2	153	154	1.5%
Pedestrian	6	16	40	46	8	111	117	1.1%
Other	29	106	341	1,246	47	1,739	1,768	-
Total	79	414	1,993	9,435	287	12,130	12,209	100%

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.
Note: “Other” accident configurations consist primarily of collisions involving more than one configuration or sequence of events. Calculations in "% of Total" exclude the "Other" category.
Note: There are several victims in 2014 where accident configuration was not captured; these are not included in the average calculation.

“Rear end” collisions and those occurring at “intersections 90°” account for the highest proportions of casualties, followed by collisions involving at least one vehicle turning, side-swipe collisions, and collisions where the vehicle leaves the road (either “off road right” or “off road left”). In 2019:

- “Rear end” collisions account for 48% of all victims, 3% of people killed, and 11% of people seriously injured;
- “Intersection 90°” collisions account for 24% of all victims, 20% of people killed, and 33% of people seriously injured;
- “Left turn” (including across, in the same direction, and opposing) collisions account for 7% of all victims, 3% of people killed, and 9% of people seriously injured;
- “Side swipe” (either opposing or same direction) collisions account for 7% of all victims, none killed, and 3% of people seriously injured;
- “Fixed object” collisions account for 4% of all victims, 13% of people killed, and 10% of people seriously injured; and,
- “Off road” (either right or left) collisions account for 4% of all victims, 7% of people killed, and 16% of people seriously injured.

In 2019, people are most often killed in traffic collisions where the accident configuration is noted as:

- A “head on” collision occurs (30% of people killed);
- A “pedestrian” collision (23% of people killed); or,
- A collision occurs at 90° intersections (20% of people killed).

Table 5-13 Collision Victims by Provincial Location and Casualty Type

Table 5-13

Collision Victims by Provincial Location and Casualty Type: 2019

Location	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Winnipeg	16	21.1%	165	44.8%	1,002	55.1%	7,668	82.0%	20	66.7%	8,855	76.5%	**8,871**	76.2%
Brandon	1	1.3%	8	2.2%	56	3.1%	172	1.8%	0	-	236	2.0%	**237**	2.0%
Portage	0	-	4	1.1%	33	1.8%	40	0.4%	0	-	77	0.7%	**77**	0.7%
Flin Flon	1	1.3%	1	0.3%	4	0.2%	0	-	0	-	5	<0.1%	**6**	<0.1%
Dauphin	0	-	0	-	5	0.3%	14	0.1%	0	-	19	0.2%	**19**	0.2%
Thompson	1	1.3%	0	-	20	1.1%	25	0.3%	1	3.3%	46	0.4%	**47**	0.4%
The Pas	0	-	0	-	6	0.3%	4	<0.1%	0	-	10	<0.1%	**10**	<0.1%
Selkirk	0	-	6	1.6%	28	1.5%	53	0.6%	0	-	87	0.8%	**87**	0.7%
Other Urban	21	27.6%	52	14.1%	184	10.1%	524	5.6%	2	6.7%	762	6.6%	**783**	6.7%
All Rural	36	47.4%	132	35.9%	479	26.4%	854	9.1%	7	23.3%	1,472	12.7%	**1,508**	12.9%
Total	76	100%	368	100%	1,817	100%	9,354	100%	30	100%	11,569	100%	**11,645**	100%

Table 5-13a Collision Victims by Provincial Location and Casualty Type for Previous Five Years

Table 5-13a

Collision Victims by Provincial Location and Casualty Type: 2014-2018 Average

Location	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Winnipeg	14	174	1,122	7,679	232	9,208	9,222	75.5%
Brandon	<1	12	77	174	6	270	270	2.2%
Portage	2	4	18	47	2	70	72	0.6%
Flin Flon	<1	<1	3	2	<1	5	6	<0.1%
Dauphin	<1	2	10	22	1	35	35	0.3%
Thompson	<1	3	14	22	2	40	41	0.3%
The Pas	-	1	8	8	<1	18	18	0.1%
Selkirk	<1	4	21	60	2	87	87	0.7%
Other Urban	9	50	212	513	16	791	800	6.5%
All Rural	53	164	510	908	26	1,609	1,662	13.6%
Total	79	415	1,995	9,437	287	12,133	12,212	100%

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.

While traffic collisions occurring in urban locations account for the majority of casualties overall, traffic collisions in rural locations account for disproportionate number of people killed. In 2019, 87% of all casualties result from traffic collisions in urban areas. Traffic collisions in rural locations, however, account for 47% of people killed. In the previous five year (2014 to 2018) annual average, 86% of all victims are from traffic collisions in urban locations, while 66% of people killed are from traffic collisions in rural locations.

Table 5-14 Collision Victims by Safety Equipment Use and Casualty Type

Table 5-14

Collision Victims by Safety Equipment Use and Casualty Type: 2019

Safety Equipment	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Lap belt only installed - In use	3	5.1%	4	1.2%	12	0.7%	54	0.6%	0	-	70	0.6%	**73**	0.6%
Lap belt only installed - Not in use	1	1.7%	2	0.6%	5	0.3%	14	0.2%	0	-	21	0.2%	**22**	0.2%
Shoulder belt only installed - In use	1	1.7%	1	0.3%	2	0.1%	31	0.3%	0	-	34	0.3%	**35**	0.3%
Shoulder belt only installed - Not in use	2	3.4%	3	0.9%	5	0.3%	12	0.1%	0	-	20	0.2%	**22**	0.2%
Lap and shoulder belt assembly - In use	15	25.4%	124	38.2%	956	57.3%	7,929	86.2%	15	68.2%	9,024	80.5%	**9,039**	80.2%
Combined belt installed - Not in use	7	11.9%	3	0.9%	16	1.0%	23	0.3%	0	-	42	0.4%	**49**	0.4%
Only lap part of full assembly in use	0	-	1	0.3%	4	0.2%	13	0.1%	0	-	18	0.2%	**18**	0.2%
Air bag deployed - Safety belt in use	9	15.3%	139	42.8%	533	32.0%	841	9.1%	2	9.1%	1,515	13.5%	**1,524**	13.5%
Air bag deployed - Safety belt not in use	6	10.2%	4	1.2%	11	0.7%	10	0.1%	1	4.5%	26	0.2%	**32**	0.3%
Safety seat properly installed - In use	2	3.4%	6	1.8%	45	2.7%	150	1.6%	0	-	201	1.8%	**203**	1.8%
Safety seat improperly installed - In use	0	-	0	-	1	<0.1%	23	0.3%	0	-	24	0.2%	**24**	0.2%
Safety seat installed - Not in use	0	-	0	-	1	<0.1%	3	<0.1%	0	-	4	<0.1%	**4**	<0.1%
Safety helmet worn	3	5.1%	23	7.1%	53	3.2%	49	0.5%	1	4.5%	126	1.1%	**129**	1.1%
Safety helmet not worn	1	1.7%	0	-	2	0.1%	0	-	0	-	2	<0.1%	**3**	<0.1%
No safety device available	3	5.1%	0	-	0	-	2	<0.1%	0	-	2	<0.1%	**5**	<0.1%
Other	0	-	0	-	5	0.3%	8	<0.1%	1	4.5%	14	0.1%	**14**	0.1%
Not Applicable	1	1.7%	3	0.9%	8	0.5%	19	0.2%	0	-	30	0.3%	**31**	0.3%
Unknown	5	8.5%	12	3.7%	8	0.5%	18	0.2%	2	9.1%	40	0.4%	**45**	0.4%
Total	59	100%	325	100%	1,667	100%	9,199	100%	22	100%	11,213	100%	**11,272**	100%

Note: Vehicle occupants (Road User Class = Driver, Passenger) plus Motorcyclists and Moped riders and their passengers.

Table 5-14a Collision Victims by Safety Equipment Use and Casualty Type for Previous Five Years

Table 5-14a

Collision Victims by Safety Equipment Use and Casualty Type: 2014-2018 Average

Safety Equipment	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Lap belt only installed - In use	<1	4	16	74	5	98	99	0.8%
Lap belt only installed - Not in use	2	4	9	23	<1	37	39	0.3%
Shoulder belt only installed - In use	1	2	10	38	5	55	56	0.5%
Shoulder belt only installed - Not in use	2	3	7	17	<1	28	29	0.2%
Lap and shoulder belt assembly - In use	13	179	1,114	7,999	214	9,506	9,520	80.5%
Combined belt installed - Not in use	9	7	20	24	<1	52	61	0.5%
Only lap part of full assembly in use	<1	<1	<1	20	<1	22	22	0.2%
Air bag deployed - Safety belt in use	9	116	541	765	23	1,445	1,454	12.3%
Air bag deployed - Safety belt not in use	4	5	11	9	<1	24	28	0.2%
Safety seat properly installed - In use	-	8	47	164	5	224	224	1.9%
Safety seat improperly installed - In use	<1	2	4	9	<1	15	15	0.1%
Safety seat installed - Not in use	<1	<1	<1	1	-	2	3	<0.1%
Safety helmet worn	3	25	44	59	2	131	133	1.1%
Safety helmet not worn	<1	2	1	<1	-	3	4	<0.1%
No safety device available	1	2	4	3	<1	10	11	<0.1%
Other	1	2	7	13	2	24	25	0.2%
Not Applicable	2	3	8	25	2	38	40	0.3%
Unknown	16	14	13	17	3	47	63	0.5%
Total	64	378	1,858	9,261	264	11,761	11,825	100%

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.
Note: Vehicle occupants (Road User Class = Driver, Passenger) plus Motorcyclists and Moped riders and their passengers.

In 2019, most victims in traffic collisions were using safety equipment at the time of the collision (99% of all victims where safety equipment use is known, i.e., excluding “other”, “not applicable” and “unknown”).

In 2019, 38% of the people killed in traffic collisions and 4% of the people seriously injured in traffic collisions are recorded as not wearing or using the available safety equipment at the time of the collision (where safety equipment use is known).

Table 5-15 Safety Equipment Effectiveness

Table 5-15

Safety Equipment Effectiveness - Ratio of Victims Killed and Injured While 'Not Using Safety Equipment' to 'Using Safety Equipment': 2019

Safety Equipment Use	Total Casualties	Killed	% of Total Casualties	Serious Injury	% of Total Casualties	Minor/ Minimal Injury	% of Total Casualties	Other Injury	% of Total Casualties
Equipment not in use	137	20	14.6%	12	8.8%	104	75.9%	1	0.7%
Equipment in use	11,045	33	0.3%	298	2.7%	10,696	96.8%	18	0.2%
Safety Equipment Effectiveness*			**48.86**		**3.25**		**0.78**		**4.48**

*Ratio of % not using equipment over the % using equipment.

As a large majority of vehicle occupants use safety equipment (such as seatbelts, child restraints and helmets), the number of victims in traffic collisions who use safety equipment exceeds the number of victims who did not use safety equipment. Considering this, one might erroneously conclude that using safety equipment contributes to more victims.

When considering the effectiveness of safety equipment in a traffic collision, the proportion of victims by casualty type who use safety equipment is compared to the proportion of victims by casualty type not using safety equipment. In this manner, it is possible to determine the effectiveness of the equipment by examining how much more likely the victim is to sustain injuries of a specific severity when using or not using safety equipment.

As shown in Table 5-15, in 2019, victims not using safety equipment are nearly fifty times more likely to be killed and three times more likely to be seriously injured in a traffic collision than those who used the equipment. Over the previous five years (2014 to 2018), people not using the available safety equipment are forty six times more likely to be killed and nearly five times more likely to be seriously injured in a collision than people using the equipment.

Figure 5-8 Safety Equipment Effectiveness: Ratio of "Not Using Equipment" to "Using Equipment"

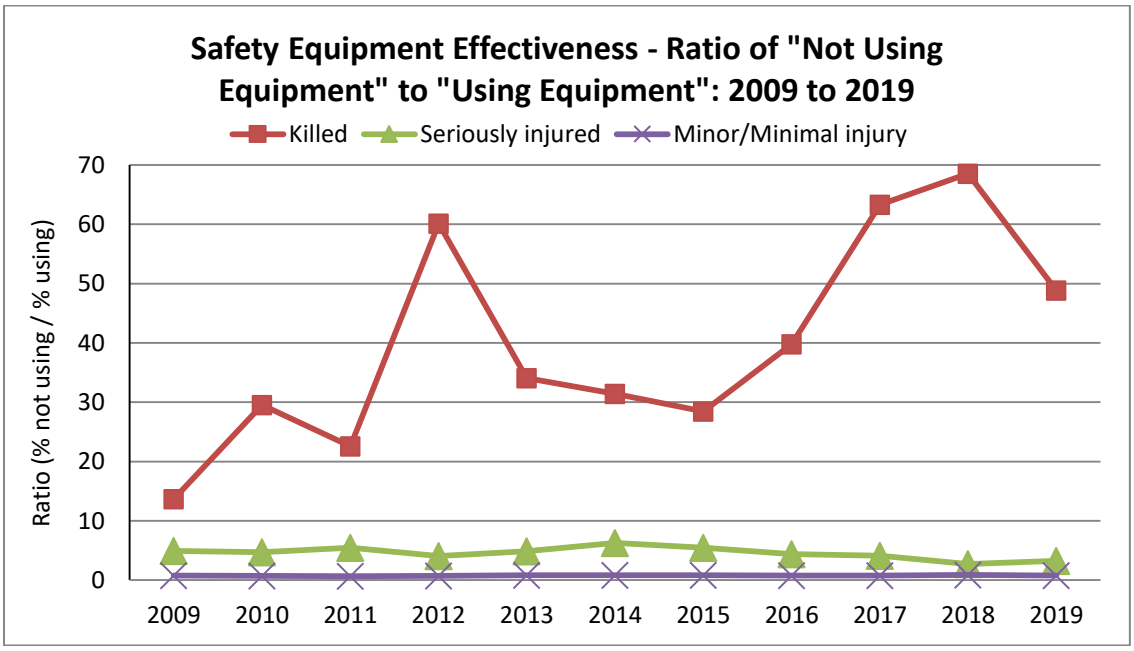


Table 5-16 Vehicle Occupant Victim Ejections in Traffic Collisions

Table 5-16

Vehicle Occupant Victims by Ejection From Vehicle and Casualty Type: 2019

Ejection	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Not Ejected	39	76.5%	294	97.4%	1,595	99.1%	9,109	99.6%	20	90.9%	11,018	99.4%	**11,057**	99.3%
Fully Ejected	10	19.6%	5	1.7%	10	0.6%	15	0.2%	2	9.1%	32	0.3%	**42**	0.4%
Partially Ejected	2	3.9%	3	1.0%	4	0.2%	24	0.3%	0	-	31	0.3%	**33**	0.3%
Total	51	100%	302	100%	1,609	100%	9,148	100%	22	100%	11,081	100%	**11,132**	100%

NOTE: Vehicle occupants (Drivers and Passengers; excluding Motorcyclist, Moped riders and passengers).

Table 5-16a Vehicle Occupant Victim Ejections in Traffic Collisions for Previous Five Years

Table 5-16a

Vehicle Occupant Victims by Ejection From Vehicle and Casualty Type: 2014-2018 Average

Ejection	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Not Ejected	44	327	1,792	9,143	261	11,524	11,568	99.0%
Fully Ejected	14	18	17	37	1	73	87	0.7%
Partially Ejected	2	4	3	16	0	23	25	0.2%
Total	60	350	1,812	9,196	263	11,620	11,680	100%

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.
Note: Vehicle occupants (Drivers and Passengers; excluding Motorcyclist, Moped riders and passengers).

In 2019, people fully or partially ejected from a vehicle and killed during a traffic collision account for 16% of all victims ejected from the vehicle. People killed but not ejected account for 0.4% of all victims not ejected during the collision. This makes people ejected during a collision forty five times more likely to be killed than people not ejected. Similarly, people ejected and seriously injured during a collision account for 11% of all victims ejected while people seriously injured but not ejected account for only 3% of victims not ejected. This makes people ejected during a collision four times more likely to be seriously injured than people not ejected.

SECTION 6 – Pedestrian Victims

Introduction

This section counts the number of pedestrians killed and injured in traffic collisions and examines the severity of the injury received by the pedestrian. Month, time and day of occurrence are examined and breaks are provided for the age of the pedestrian. The specific pedestrian actions taken immediately prior to the collision are also presented. Involvement rate of pedestrians in traffic collisions per 100,000 people in the general population is also calculated.

Key Highlights

In 2019, there are 205 pedestrians killed or injured in traffic collisions. Of these:

- 16 are killed;
- 31 are seriously injured;
- 87 sustain minor injuries;
- 65 sustain minimal injuries; and
- 6 sustain injuries that are undefined in terms of severity.

The involvement rate (per 100,000 people in the general population) of pedestrians in traffic collisions in 2019 (14.9) has decreased by nearly 11% compared to 2018 (16.7) but increased by 17% compared to the previous five year (2014 to 2018) annual average (12.8).

Pedestrian involvement rate in traffic collisions in 2019 where a pedestrian:

- Is killed (1.2) has increased by 22% compared to 2018 (1.0) and by nearly 35% compared to the previous five year average (0.9); and,
- Is injured (13.8) has decreased by nearly 13% compared to 2018 (15.7) but increased by 16% compared to the previous five year average (11.9).

In 2019, collision-related pedestrian casualties most frequently occur:

- In March (16% of pedestrian casualties); 3 of 16 pedestrian fatalities occurred in March;
- On weekdays (Monday to Friday – 83% of pedestrian casualties cumulatively); all 16 of the pedestrian fatalities occurred on weekdays; and,
- Between noon and 6 p.m. (12:00 to 14:59 – 17% of pedestrian casualties; 15:00 to 17:59 – 28% of pedestrian casualties).

Manitobans aged 15 to 19 have the highest pedestrian involvement rate (per 100,000 people) in traffic collisions, at 27.9 in 2019 (13.5 in the previous five years), followed by those aged 35 to 44 at 21.6 (13.6 in the previous five years).

Where the actions of the pedestrian immediately prior to the collision are known, most pedestrian casualties in 2019 occur when the pedestrian is:

- At an intersection, crossing with the right of way (42% of pedestrian casualties);
- Between intersections (nearly 14% of pedestrian casualties); and,
- At an intersection, crossing without the right of way (8% of pedestrian casualties).

For the 16 pedestrians killed in traffic collisions in 2019, 4 were at an intersection while crossing with the right of way, 3 were at an intersection while crossing without the right of way, 3 were walking on roadway, 1 was running into roadway, 1 was walking along roadway against traffic, 1 was at an intersection with no traffic control, and 1 was between intersections. No pedestrian action and other were recorded for 2 of the 16 pedestrians killed.

Major Elements Examined

Counts of collisions in Manitoba for 2019 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

It is important to note that the number of pedestrian victims in traffic collisions is not equal to the number of collisions that occurred involving pedestrians as each collision can result in multiple victims. It is also possible that a collision could involve a pedestrian who is not killed or injured.

The terms 'crash', 'collision' and 'accident' are used interchangeably in this report. The terms 'victims' and 'casualties' are used interchangeably in this report. The terms 'fatality' and 'killed' are used interchangeably in this report.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding pedestrian collisions of differing injury severity.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percent. Likewise, average calculations are presented for historical data from the years 2014 to 2018. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Terms and Definitions

"Casualty Type"

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal injury sustained (i.e., victims sustaining a serious/major, minor or minimal injury).

"Killed"

- The casualty type "killed" indicates the victim involved in the traffic collision died as a result of their injuries within thirty days of the collision occurrence.

"Injured"

- The casualty type "injured" indicates the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: 'serious' or 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required). 'Other' injury is noted when the severity of the victim's injuries is not known or recorded in the TAR.

"Collision severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Pedestrian Involvement Rate"

- A calculation of the number of pedestrians involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address: https://www.gov.mb.ca/health/annstats/index.html

"Pedestrian Action"

- Refers to the actions taken by a pedestrian immediately prior to a collision (including: crossing at an intersection with or without the right-of-way, crossing between intersections, running into the roadway, walking on the roadway, lying on the roadway, playing on the roadway, etc.).

Table 6-1 Historical Summary of Pedestrians Killed and Injured in Traffic Collisions

Table 6-1
Historical Summary of Pedestrians Killed and Injured in Traffic Collisions: 2009 to 2019

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
2009	9	-	37	-	137	-	90	-	95	-	359	-	368	-
2010	14	55.6%	32	-13.5%	126	-8.0%	111	23.3%	116	22.1%	385	7.2%	399	8.4%
2011	10	-28.6%	24	-25.0%	130	3.2%	62	-44.1%	114	-1.7%	330	-14.3%	340	-14.8%
2012	13	30.0%	21	-12.5%	90	-30.8%	40	-35.5%	12	-89.5%	163	-50.6%	176	-48.2%
2013	10	-23.1%	22	4.8%	49	-45.6%	25	-37.5%	10	-16.7%	106	-35.0%	116	-34.1%
2014	11	10.0%	22	0.0%	68	38.8%	38	52.0%	9	-10.0%	137	29.2%	148	27.6%
2015	9	-18.2%	18	-18.2%	51	-25.0%	40	5.3%	12	33.3%	121	-11.7%	130	-12.2%
2016	13	44.4%	27	50.0%	49	-3.9%	54	35.0%	29	141.7%	159	31.4%	172	32.3%
2017	12	-7.7%	22	-18.5%	78	59.2%	56	3.7%	11	-62.1%	167	5.0%	179	4.1%
2018	13	8.3%	36	63.6%	103	32.1%	71	26.8%	4	-63.6%	214	28.1%	227	26.8%
2019	**16**	**23.1%**	**31**	**-13.9%**	**87**	**-15.5%**	**65**	**-8.5%**	**6**	**50.0%**	**189**	**-11.7%**	**205**	**-9.7%**
2014-2018 Average*	12	37.9%	25	24.0%	70	24.6%	52	25.5%	13	-53.8%	160	18.4%	171	19.7%

* "% change" in this line compares the current year to the 5-year average

In 2019, there are 205 pedestrians killed or injured in traffic collisions. Of these:

- 16 are killed;
- 31 are seriously injured;
- 87 sustain minor injuries;
- 65 sustain minimal injuries; and
- 6 sustain injuries that are undefined in terms of severity.

The total number of pedestrians killed and injured in traffic collisions in 2019 has decreased by 10% compared to 2018 but increased by 20% compared to the previous five year (2014 to 2018) annual average. In 2019, the number of pedestrians:

- Killed has increased by 23% compared to 2018 and by 38% compared to the previous five years;
- Sustaining serious injuries has decreased by 14% compared to 2018 but increased by 24% compared to the previous five years;
- Sustaining minor injuries has decreased by nearly 16% compared to 2018 but increased by 25% compared to the previous five years;
- Sustaining minimal injuries has decreased by nearly 9% compared to 2018 but increased by nearly 26% compared to the previous five years; and,
- Sustaining an unspecified injury has increased by 50% compared to 2018 but decreased by 54% compared to the previous five years.

The number of pedestrians killed in traffic collisions over the past ten years has fluctuated, ranging from a low of 9 in 2009 and 2015 to a high of 16 in 2019, which is the highest count in the past ten years. The number of pedestrians killed in 2019 is up by a count of 3 compared to 2018, and is 4 more than the previous five year (2014 to 2018) annual average.

Recognizing that counts of pedestrians involved in collisions could be impacted either positively or negatively by changing population statistics, involvement rates per 100,000 people in the general population in Manitoba is examined (see Table 6-2) to provide a standardized rate comparison. This accounts for changing population size instead of simply a raw count of the number of pedestrians involved overall.

Table 6-2 Historical Summary of Pedestrian Involvement Rate (per 100,000 people) in Traffic Collisions

Table 6-2
Historical Summary of Pedestrian Involvement Rates (per 100,000 people) in Traffic Collisions: 2009 to 2019

Year	Casualty Type												Total Victims	% change to previous year
	Killed	% change to previous year	Serious Injury	% change to previous year	Minor Injury	% change to previous year	Minimal Injury	% change to previous year	Other Injury	% change to previous year	Total Injured	% change to previous year		
2009	0.7	-	3.0	-	11.3	-	7.4	-	7.8	-	29.6	-	30.3	-
2010	1.1	53.5%	2.6	-14.6%	10.2	-9.2%	9.0	21.7%	9.4	20.5%	31.3	5.9%	32.4	7.0%
2011	0.8	-29.7%	1.9	-26.2%	10.4	1.5%	5.0	-45.0%	9.1	-3.3%	26.4	-15.7%	27.2	-16.2%
2012	1.0	27.9%	1.7	-13.9%	7.1	-31.9%	3.1	-36.5%	0.9	-89.6%	12.8	-51.4%	13.8	-49.1%
2013	0.8	-24.1%	1.7	3.3%	3.8	-46.3%	1.9	-38.4%	0.8	-17.8%	8.2	-35.9%	9.0	-35.0%
2014	0.8	8.6%	1.7	-1.3%	5.2	37.0%	2.9	50.0%	0.7	-11.2%	10.5	27.6%	11.3	25.9%
2015	0.7	-19.1%	1.4	-19.1%	3.9	-25.8%	3.0	4.1%	0.9	31.9%	9.2	-12.6%	9.8	-13.1%
2016	1.0	42.4%	2.0	47.9%	3.7	-5.3%	4.0	33.1%	2.2	138.2%	11.9	29.5%	12.8	30.4%
2017	0.9	-8.9%	1.6	-19.6%	5.7	57.1%	4.1	2.4%	0.8	-62.6%	12.3	3.7%	13.2	2.7%
2018	1.0	8.1%	2.6	63.2%	7.6	31.7%	5.2	26.5%	0.3	-63.7%	15.7	27.8%	16.7	26.5%
2019	**1.2**	**22.0%**	**2.3**	**-14.7%**	**6.3**	**-16.3%**	**4.7**	**-9.3%**	**0.4**	**48.7%**	**13.8**	**-12.5%**	**14.9**	**-10.5%**
2014-2018 Average*	0.9	34.5%	1.9	21.0%	5.2	21.7%	3.9	22.6%	1.0	-55.1%	11.9	15.6%	12.8	16.9%

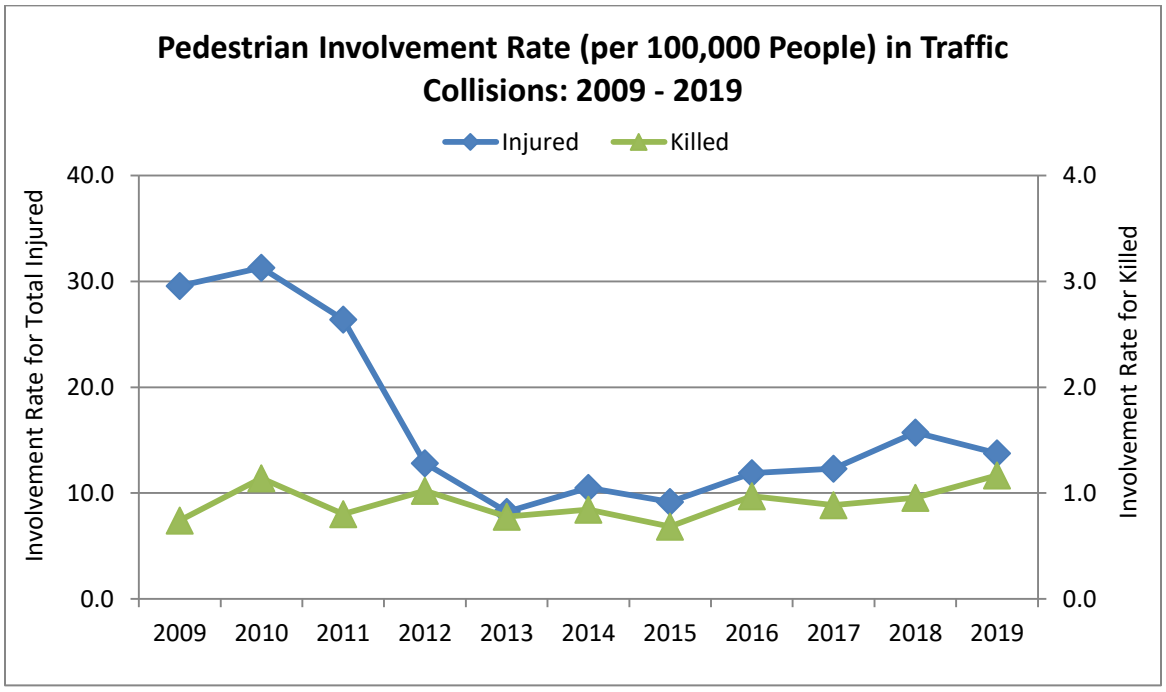
* "% change" in this line compares the current year to the 5-year average

The involvement rate (per 100,000 people in the general population) of pedestrians in traffic collisions in 2019 (14.9) has decreased by nearly 11% compared to 2018 (16.7) but increased by 17% compared to the previous five year (2014 to 2018) annual average (12.8).

Pedestrian involvement rate in traffic collisions in 2019 where a pedestrian:

- Is killed (1.2) has increased by 22% compared to 2018 (1.0) and by nearly 35% compared to the previous five year average (0.9);
- Is injured (13.8) has decreased by nearly 13% compared to 2018 (15.7) but increased by 16% compared to the previous five year average (11.9);
- Sustains serious injuries (2.3) has decreased by 15% compared to 2018 (2.6) but increased by 21% compared to the previous five years (1.9);
- Sustains minor injuries (6.3) has decreased by 16% compared to 2018 (7.6) but increased by 22% compared to the previous five years (5.2);
- Sustains minimal injuries (4.7) has decreased by 9% compared to 2018 (5.2) but increased by 23% compared to the previous five years (3.9); and,
- Sustains an unspecified injury (0.4) has increased by 49% compared to 2018 (0.3) but decreased by 55% compared to the previous five years (1.0).

Figure 6-1 Pedestrian Involvement Rate (per 100,000 People) in Traffic Collisions



Over the last eleven years, pedestrian involvement in injuries resulting from traffic collisions have generally declined from 2009 to 2013, but have gradually increased since 2013.

Over this same time frame, the involvement rate for pedestrians killed in traffic collisions has fluctuated somewhat between 0.7 and 1.2. The involvement rate in 2019 (1.2) is the highest pedestrian involvement rate for deaths recorded in the past eleven years.

Table 6-3 Pedestrians Killed and Injured by Month of Occurrence and Casualty Type

Table 6-3
Total Pedestrians Killed and Injured by Month of Occurrence and Casualty Type: 2019

Month of Occurrence	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
January	2	12.5%	2	6.5%	6	6.9%	8	12.3%	0	-	16	8.5%	**18**	8.8%
February	0	-	6	19.4%	7	8.0%	2	3.1%	1	16.7%	16	8.5%	**16**	7.8%
March	3	18.8%	3	9.7%	16	18.4%	10	15.4%	0	-	29	15.3%	**32**	15.6%
April	1	6.3%	4	12.9%	5	5.7%	5	7.7%	1	16.7%	15	7.9%	**16**	7.8%
May	2	12.5%	3	9.7%	9	10.3%	2	3.1%	1	16.7%	15	7.9%	**17**	8.3%
June	0	-	3	9.7%	6	6.9%	4	6.2%	0	-	13	6.9%	**13**	6.3%
July	3	18.8%	1	3.2%	6	6.9%	3	4.6%	0	-	10	5.3%	**13**	6.3%
August	1	6.3%	3	9.7%	6	6.9%	5	7.7%	1	16.7%	15	7.9%	**16**	7.8%
September	1	6.3%	0	-	8	9.2%	7	10.8%	1	16.7%	16	8.5%	**17**	8.3%
October	1	6.3%	4	12.9%	5	5.7%	6	9.2%	0	-	15	7.9%	**16**	7.8%
November	1	6.3%	0	-	5	5.7%	7	10.8%	1	16.7%	13	6.9%	**14**	6.8%
December	1	6.3%	2	6.5%	8	9.2%	6	9.2%	0	-	16	8.5%	**17**	8.3%
Total	16	100%	31	100%	87	100%	65	100%	6	100%	189	100%	**205**	100%

Table 6-3a Pedestrians Killed and Injured by Month of Occurrence and Casualty Type for Previous Five Years

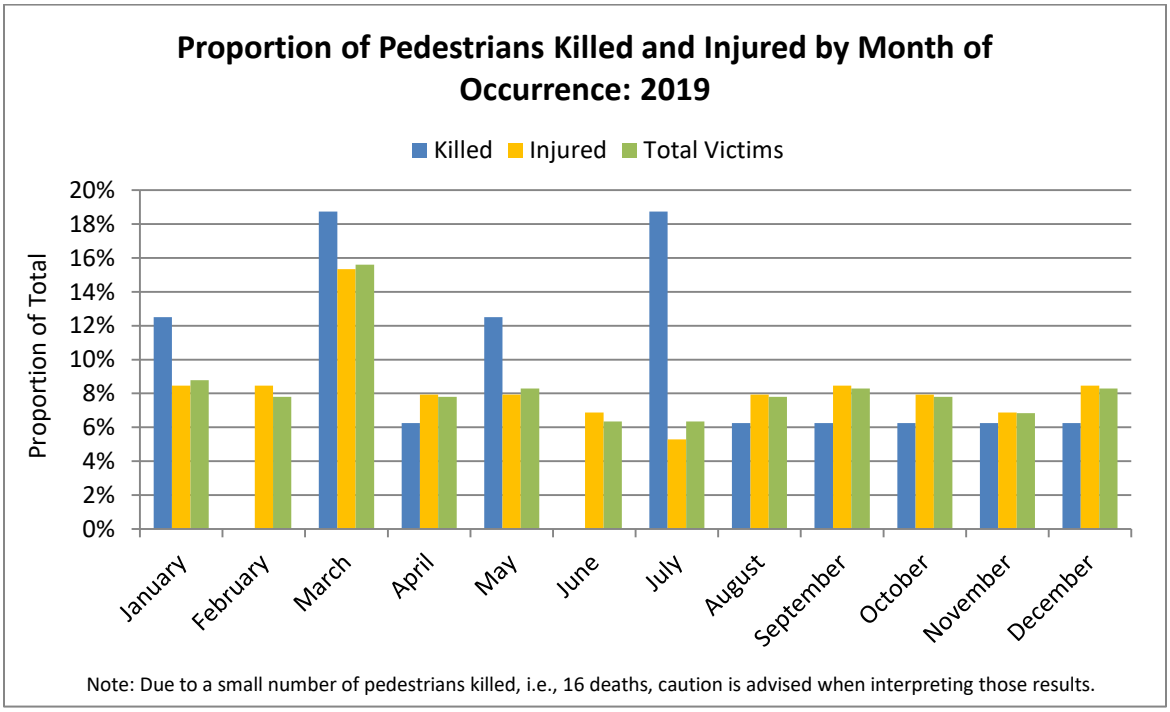
Table 6-3a
Pedestrians Killed and Injured by Month of Occurrence and Casualty Type: 2014-2018 Average

Month of Occurrence	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
January	<1	2	6	5	<1	12	13	7.7%
February	<1	2	6	4	<1	13	13	7.8%
March	1	3	6	5	1	15	16	9.5%
April	1	<1	5	3	<1	8	10	5.8%
May	<1	2	6	5	<1	13	14	8.1%
June	<1	2	5	4	2	13	13	7.7%
July	2	<1	5	3	1	9	12	6.9%
August	1	2	6	4	2	14	15	9.0%
September	1	3	4	4	<1	10	12	7.0%
October	1	3	8	5	<1	16	18	10.4%
November	<1	3	7	6	2	17	18	10.6%
December	1	2	7	5	2	15	16	9.5%
Total	12	25	70	52	13	160	171	100%

Note: Counts of pedestrians in the 2014-2018 average may not add to the total due to rounding.

In 2019, at least one pedestrian was killed in collisions on Manitoba roadways in each month except February and June (none killed). Pedestrians are most likely to be injured in March (15%). During the previous five year (2014 to 2018) period, on average, October and November have the highest involvement of pedestrian casualties in collisions.

Figure 6-2 Proportion of Pedestrians Killed and Injured by Month of Occurrence



Note: Due to a small number of pedestrians killed, i.e., 16 deaths, caution is advised when interpreting those results.

Table 6-4 Total Pedestrians Killed and Injured by Day of Occurrence and Casualty Type

Table 6-4
Total Pedestrians Killed and Injured by Day of Occurrence and Casualty Type: 2019

Day of the Week	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Sunday	0	-	0	-	5	5.7%	5	7.7%	0	-	10	5.3%	**10**	4.9%
Monday	2	12.5%	5	16.1%	18	20.7%	11	16.9%	2	33.3%	36	19.0%	**38**	18.5%
Tuesday	6	37.5%	3	9.7%	14	16.1%	5	7.7%	2	33.3%	24	12.7%	**30**	14.6%
Wednesday	4	25.0%	6	19.4%	11	12.6%	14	21.5%	0	-	31	16.4%	**35**	17.1%
Thursday	1	6.3%	6	19.4%	12	13.8%	8	12.3%	1	16.7%	27	14.3%	**28**	13.7%
Friday	3	18.8%	8	25.8%	19	21.8%	9	13.8%	1	16.7%	37	19.6%	**40**	19.5%
Saturday	0	-	3	9.7%	8	9.2%	13	20.0%	0	-	24	12.7%	**24**	11.7%
Total	16	100%	31	100%	87	100%	65	100%	6	100%	189	100%	**205**	100%

Table 6-4a Pedestrians Killed and Injured by Day of Occurrence and Casualty Type for Previous Five Years

Table 6-4a
Pedestrians Killed and Injured by Day of Occurrence and Casualty Type: 2014-2018 Average

Day of the Week	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Sunday	2	1	6	4	1	13	15	8.5%
Monday	1	3	9	8	2	22	23	13.4%
Tuesday	2	5	13	7	<1	25	27	15.9%
Wednesday	<1	4	10	10	2	26	26	15.4%
Thursday	2	4	10	7	2	23	24	14.3%
Friday	2	4	14	11	4	32	34	19.9%
Saturday	3	4	8	4	2	19	22	12.6%
Total	12	25	70	52	13	160	171	100%

Note: Counts of pedestrians in the 2014-2018 average may not add to the total due to rounding.

In 2019, pedestrians involved in traffic collisions on weekdays (Monday to Friday) account for 83% of all casualties. This is very similar to the previous five year (2014 to 2018) annual average, where weekdays (Monday to Friday) account for 79% of all pedestrian casualties.

In 2019, all of 16 pedestrians are killed in traffic collisions on weekdays (Monday to Friday), and none killed on the weekend (Saturday and Sunday). This is somewhat different from the previous five year (2014 to 2018) annual average, where 59% are killed on weekdays and 41% on the weekend.

Figure 6-3 Proportion of Pedestrians Killed and Injured by Day of Occurrence

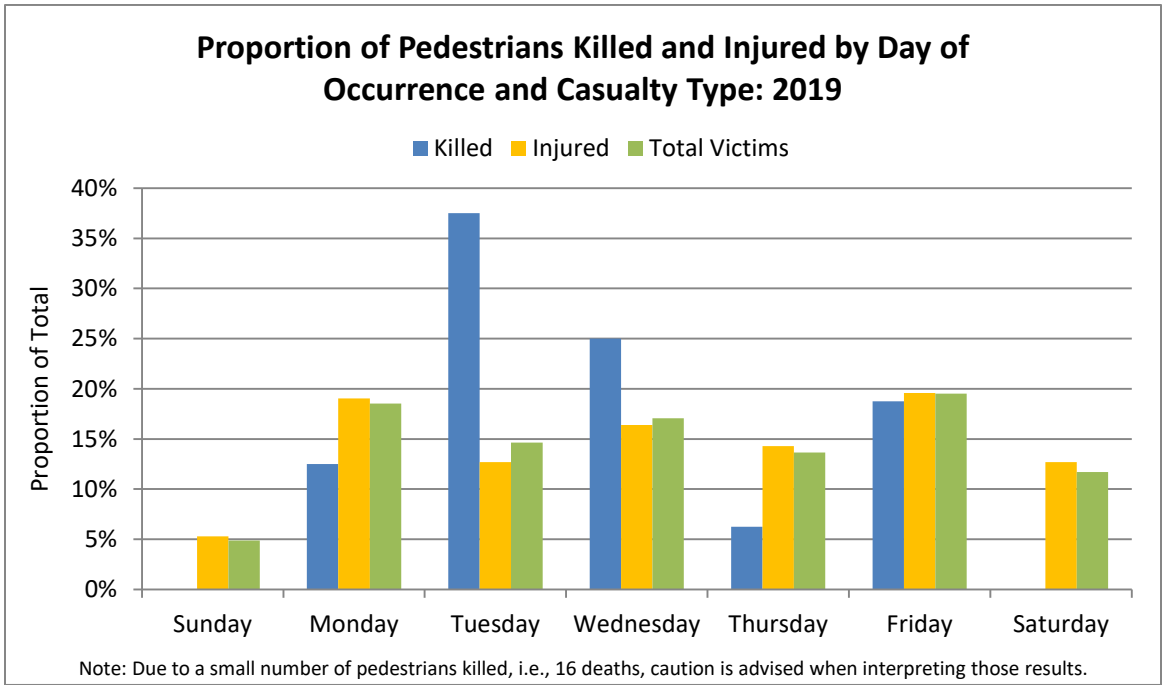


Table 6-5 Total Pedestrians Killed and Injured by Time of Occurrence and Casualty Type

Table 6-5
Total Pedestrians Killed and Injured by Time of Occurrence and Casualty Type: 2019

Time of the Day	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims*
	Killed	% of Total Killed*	Serious Injury	% of Total Serious Injury*	Minor Injury	% of Total Minor Injury*	Minimal Injury	% of Total Minimal Injury*	Other Injury	% of Total Other Injury*	Total Injured	% of Total Injured*		
00:00 - 02:59	4	25.0%	1	3.3%	4	4.6%	3	4.6%	1	16.7%	9	4.8%	**13**	6.4%
03:00 - 05:59	0	-	1	3.3%	2	2.3%	0	-	1	16.7%	4	2.1%	**4**	2.0%
06:00 - 08:59	1	6.3%	2	6.7%	15	17.2%	13	20.0%	0	-	30	16.0%	**31**	15.2%
09:00 - 11:59	1	6.3%	6	20.0%	13	14.9%	5	7.7%	0	-	24	12.8%	**25**	12.3%
12:00 - 14:59	1	6.3%	9	30.0%	8	9.2%	14	21.5%	2	33.3%	33	17.6%	**34**	16.7%
15:00 - 17:59	4	25.0%	4	13.3%	32	36.8%	15	23.1%	2	33.3%	53	28.2%	**57**	27.9%
18:00 - 20:59	1	6.3%	4	13.3%	9	10.3%	8	12.3%	0	-	21	11.2%	**22**	10.8%
21:00 - 23:59	4	25.0%	3	10.0%	4	4.6%	7	10.8%	0	-	14	7.4%	**18**	8.8%
Not Stated	0	-	1	-	0	-	0	-	0	-	1	-	**1**	-
Total	16	100%	31	100%	87	100%	65	100%	6	100%	189	100%	**205**	100%

*Percentage of the total does not include the 'not stated' category.

Table 6-5a Pedestrian Victims by Time of Occurrence and Casualty Type for the Previous Five Years

Table 6-5a
Pedestrians Killed and Injured by Time of Occurrence and Casualty Type: 2014-2018 Average

Time of the Day	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims*
00:00 - 02:59	1	2	3	1	1	7	8	5.0%
03:00 - 05:59	1	<1	1	<1	-	2	4	2.2%
06:00 - 08:59	1	1	10	6	2	20	21	12.4%
09:00 - 11:59	<1	3	8	9	2	22	23	13.3%
12:00 - 14:59	<1	4	13	10	4	31	32	19.0%
15:00 - 17:59	2	7	17	15	2	42	43	25.5%
18:00 - 20:59	2	4	10	6	<1	21	23	13.6%
21:00 - 23:59	2	3	6	3	1	13	15	9.1%
Not Stated	<1	<1	<1	<1	-	1	2	-
Total	12	25	70	52	13	160	171	100%

Note: Counts of pedestrians in the 2014-2018 average may not add to the total due to rounding.
*Percentage of the total does not include the 'not stated' category.

In 2019, 28% of all pedestrian victims are involved in traffic collisions between 3 p.m. and 6 p.m. (15:00 to 17:59) while 17% are between noon and 3 p.m. (12:00 to 14:59). This is similar to the previous five year (2014 to 2018) annual average (15:00 to 17:59 – nearly 26%; 12:00 to 14:59 – 19%).

In 2019, 13 of 16 pedestrians are killed between 3 p.m. and 3 a.m. (15:00 to 02:59). In the previous five year (2014 to 2018) annual average, 7 of 12 pedestrians are killed between 3 p.m. and 3 a.m.

Figure 6-4 Proportion of Pedestrians Killed and Injured by Time of Occurrence

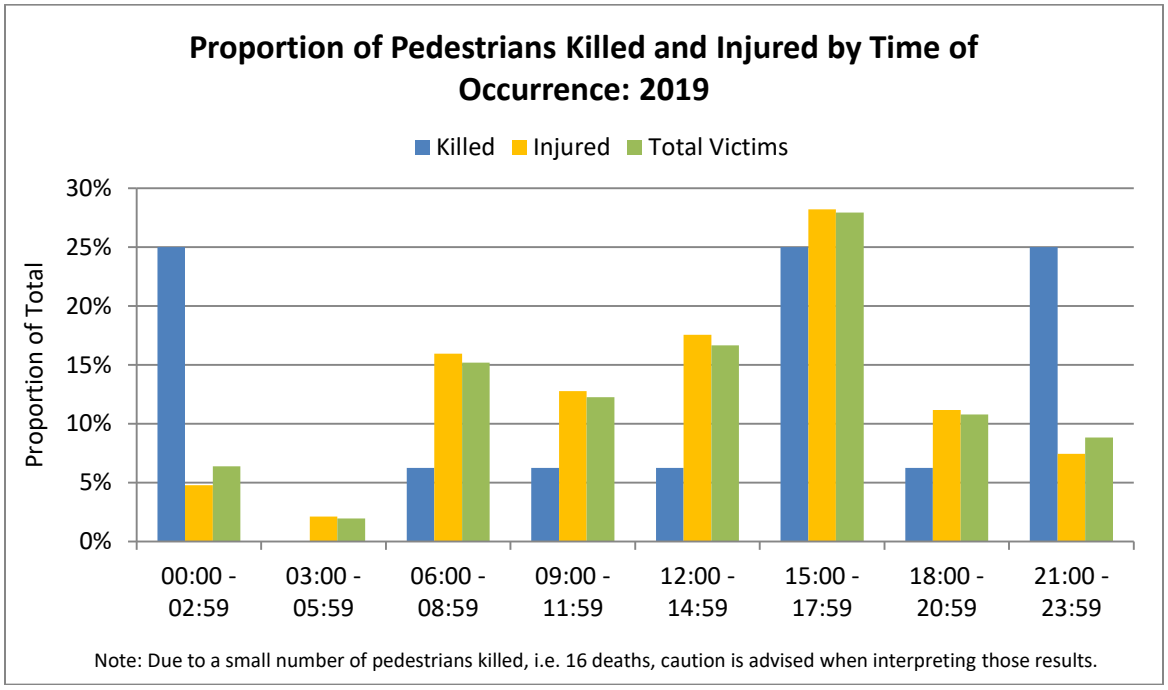


Table 6-6 Total Pedestrians Killed and Injured by Age Group and Casualty Type

Table 6-6
Total Pedestrians Killed and Injured by Age Group and Casualty Type: 2019

Age Group	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims*
	Killed	% of Total Killed*	Serious Injury	% of Total Serious Injury*	Minor Injury	% of Total Minor Injury*	Minimal Injury	% of Total Minimal Injury*	Other Injury	% of Total Other Injury*	Total Injured	% of Total Injured*		
0-4	1	6.3%	0	-	2	2.3%	1	1.6%	0	-	3	1.6%	**4**	2.0%
5-9	0	-	1	3.4%	4	4.7%	1	1.6%	0	-	6	3.3%	**6**	3.0%
10-14	0	-	2	6.9%	5	5.8%	3	4.7%	0	-	10	5.5%	**10**	5.0%
15-19	1	6.3%	2	6.9%	11	12.8%	9	14.1%	0	-	22	12.0%	**23**	11.6%
20-24	1	6.3%	3	10.3%	9	10.5%	5	7.8%	0	-	17	9.3%	**18**	9.0%
25-34	2	12.5%	1	3.4%	18	20.9%	15	23.4%	1	25.0%	35	19.1%	**37**	18.6%
35-44	5	31.3%	4	13.8%	17	19.8%	12	18.8%	1	25.0%	34	18.6%	**39**	19.6%
45-54	0	-	7	24.1%	5	5.8%	6	9.4%	0	-	18	9.8%	**18**	9.0%
55-64	3	18.8%	2	6.9%	5	5.8%	10	15.6%	2	50.0%	19	10.4%	**22**	11.1%
65+	3	18.8%	7	24.1%	10	11.6%	2	3.1%	0	-	19	10.4%	**22**	11.1%
Not Stated	0	-	2	-	1	-	1	-	2	-	6	-	**6**	-
Total	16	100%	31	100%	87	100%	65	100%	6	100%	189	100%	**205**	100%

*Percentage of the total does not include the 'Not Stated' category.
Note: The reader is cautioned that age is missing ('Not Stated') in several collisions - interpret with caution.

Table 6-6a Pedestrians Killed and Injured by Age and Casualty Type for Previous Five Years

Table 6-6a
Pedestrians Killed and Injured by Age Group and Casualty Type: 2014-2018 Average

Age Group	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims*
0-4	<1	<1	3	1	<1	5	6	3.4%
5-9	<1	1	2	<1	<1	4	5	2.8%
10-14	-	<1	4	1	-	6	6	3.6%
15-19	<1	2	5	3	1	11	12	7.1%
20-24	2	3	7	5	2	17	20	12.1%
25-34	3	3	12	8	2	25	27	16.9%
35-44	2	4	9	8	<1	22	23	14.4%
45-54	<1	3	9	8	1	21	21	13.2%
55-64	1	2	8	7	2	19	20	12.5%
65+	2	5	8	7	1	21	23	14.0%
Not Stated	-	<1	2	3	2	9	9	-
Total	12	25	70	52	13	160	171	100%

Note: Counts of pedestrians in the 2014-2018 average may not add to the total due to rounding.
*Percentage of the total does not include the 'Not Stated' category.
Note: The reader is cautioned that age is missing ('Not Stated') in several collisions - interpret with caution.

In 2019, 22% of pedestrian casualties are under the age of 20 (5% under age 10; 17% age 10 to 19), while 28% are between the ages of 20 and 34, and 29% are between the ages of 35 and 54. Adults aged 55 and older account for 22% of pedestrian victims. This distribution of pedestrian casualties by age is somewhat similar to what it is in the previous five years. In the five year (2014 to 2018) annual average, 17% of pedestrian victims are under the age of 20, 29% were age 20 to 34, 28% were age 35 to 54 and 27% were age 55 and older.

People aged 35 to 44 represent the largest proportion of pedestrians killed in 2019 (5 of 16 killed, 31%). During the previous five years (2014 to 2018), 22% of pedestrians killed are aged 25 to 34.

In 2019, there are 2 pedestrians under age twenty killed in traffic collisions in Manitoba. During the previous five year period (2014 to 2018) there is an average of 1 pedestrian killed in this age group each year.

Figure 6-5 Proportion of Pedestrians Killed and Injured by Age Group

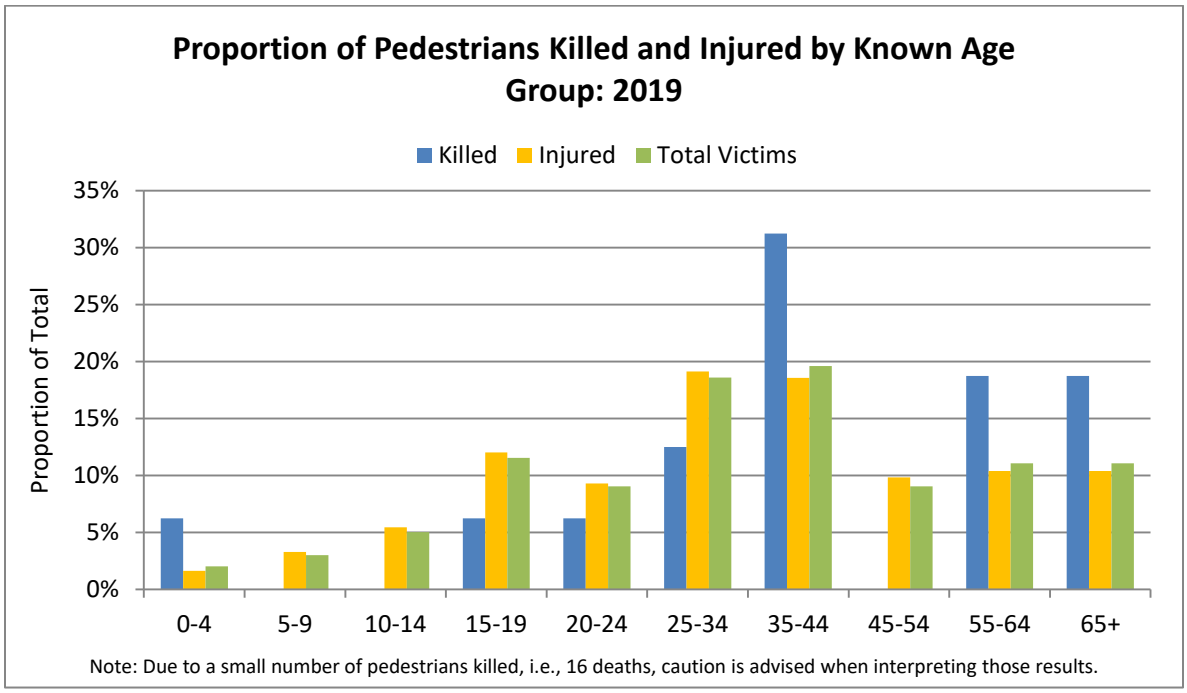


Table 6-7 Pedestrian Involvement Rate (per 100,000 People) in Traffic Collisions by Age Group

Table 6-7

Pedestrian Involvement Rate (per 100,000 People) in Traffic Collisions by Age Group: 2019, 2014-2018 Average

Age Group	2019 Casualty Type						**2019 Total Victims**	2014-2018 Average Involvement Rate		
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured		Killed	Injured	Total Victims
0-4	1.2	-	2.3	1.2	-	3.5	**4.6**	0.2	6.4	6.6
5-9	-	1.1	4.5	1.1	-	6.8	**6.8**	0.2	5.1	5.4
10-14	-	2.3	5.8	3.5	-	11.7	**11.7**	-	7.1	7.1
15-19	1.2	2.4	13.3	10.9	-	26.6	**27.9**	0.9	12.6	13.5
20-24	1.1	3.3	10.0	5.6	-	18.9	**20.0**	2.5	17.9	20.4
25-34	1.0	0.5	9.2	7.7	0.5	18.0	**19.0**	1.4	13.2	14.6
35-44	2.8	2.2	9.4	6.6	0.6	18.8	**21.6**	0.9	12.7	13.6
45-54	-	4.1	3.0	3.6	-	10.7	**10.7**	0.5	11.7	12.1
55-64	1.7	1.1	2.8	5.7	1.1	10.8	**12.5**	0.6	11.6	12.2
65+	1.4	3.2	4.6	0.9	-	8.7	**10.1**	1.0	10.4	11.4
Total	1.2	2.3	6.3	4.7	0.4	13.8	**14.9**	0.9	11.9	12.8

In 2019, Manitobans aged 15 to 19 have the highest pedestrian involvement rate (per 100,000 people) in traffic collisions, at 27.9 (13.5 in the previous five years), followed by those aged 35 to 44 at 21.6 (13.6 in the previous five years).

Table 6-8 Pedestrian Action and Casualty Type

Table 6-8
Pedestrian Action and Casualty Type: 2019

Pedestrian Action	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims*
	Killed	% of Total Killed*	Serious Injury	% of Total Serious Injury*	Minor Injury	% of Total Minor Injury*	Minimal Injury	% of Total Minimal Injury*	Other Injury	% of Total Other Injury*	Total Injured	% of Total Injured*		
At intersection, with right of way	4	26.7%	10	43.5%	30	45.5%	22	45.8%	0	-	62	44.0%	**66**	42.3%
At intersection, without right of way	3	20.0%	2	8.7%	4	6.1%	3	6.3%	0	-	9	6.4%	**12**	7.7%
At intersection, no traffic control	1	6.7%	1	4.3%	3	4.5%	2	4.2%	0	-	6	4.3%	**7**	4.5%
Between intersections	1	6.7%	5	21.7%	11	16.7%	4	8.3%	0	-	20	14.2%	**21**	13.5%
Walking along roadway against traffic	1	6.7%	1	4.3%	0	-	0	-	0	-	1	0.7%	**2**	1.3%
Walking along roadway with traffic	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
On sidewalk/median/safety zone	0	-	1	4.3%	1	1.5%	4	8.3%	0	-	6	4.3%	**6**	3.8%
Walking on roadway (travelled portion)	3	20.0%	0	-	2	3.0%	0	-	1	25.0%	3	2.1%	**6**	3.8%
From behind vehicle/object on roadside	0	-	0	-	2	3.0%	1	2.1%	1	25.0%	4	2.8%	**4**	2.6%
Running into roadway	1	6.7%	0	-	2	3.0%	0	-	0	-	2	1.4%	**3**	1.9%
Getting on/off vehicle	0	-	0	-	0	-	1	2.1%	0	-	1	0.7%	**1**	0.6%
Pushing/working on vehicle	0	-	0	-	0	-	1	2.1%	0	-	1	0.7%	**1**	0.6%
Playing on roadway	0	-	0	-	0	-	1	2.1%	0	-	1	0.7%	**1**	0.6%
Working on roadway	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
Lying on roadway	0	-	0	-	0	-	0	-	0	-	0	-	**0**	-
Other	1	6.7%	3	13.0%	11	16.7%	9	18.8%	2	50.0%	25	17.7%	**26**	16.7%
Unknown	1	-	8	-	21	-	17	-	2	-	48	-	**49**	-
Total	16	100%	31	100%	87	100%	65	100%	6	100%	189	100%	**205**	100%

*Percentage of the total has been rebased to exclude the 'unknown' category.

Table 6-8a Pedestrian Action and Casualty Type for the Previous Five Years

Table 6-8a
Pedestrian Action and Casualty Type: 2014-2018 Average

Pedestrian Action	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims*
At intersection, with right of way	1	6	21	18	2	47	48	41.1%
At intersection, without right of way	<1	2	3	2	<1	6	6	5.5%
At intersection, no traffic control	-	<1	2	2	<1	5	5	4.4%
Between intersections	<1	1	4	2	<1	8	9	7.3%
Walking along roadway against traffic	<1	<1	<1	<1	-	2	2	2.0%
Walking along roadway with traffic	<1	<1	<1	1	<1	2	3	2.4%
On sidewalk/median/safety zone	<1	<1	2	3	<1	5	6	4.8%
Walking on roadway (travelled portion)	1	<1	1	<1	<1	3	4	3.8%
From behind vehicle/object on roadside	-	<1	1	1	<1	3	3	2.6%
Running into roadway	1	1	2	<1	-	3	4	3.4%
Getting on/off vehicle	<1	<1	-	<1	-	0	1	0.5%
Pushing/working on vehicle	-	-	-	-	-	0	0	-
Playing on roadway	<1	<1	<1	<1	-	1	1	1.0%
Working on roadway	-	<1	-	-	-	0	0	0.2%
Lying on roadway	<1	<1	-	-	<1	1	1	1.0%
Other	<1	2	10	9	1	23	23	20.0%
Unknown	5	7	20	10	7	45	50	-
Total	12	24	68	51	13	155	167	100%

Note: Counts of pedestrians in the 2014-2018 average may not add to the total due to rounding.
*Percentage of the total has been rebased to exclude the 'unknown' category.
Note: There are several victims in 2014 where pedestrian action was not captured; these are not included in the average calculation.

Where the actions of the pedestrian immediately prior to the collision are known, most pedestrian casualties in 2019 occur when the pedestrian is:

- At an intersection, crossing with the right of way (42% of pedestrian casualties);
- Between intersections (nearly 14% of pedestrian casualties); and,
- At an intersection, crossing without the right of way (8% of pedestrian casualties).

For the 16 pedestrians killed in traffic collisions in 2019, 4 were at an intersection while crossing with the right of way, 3 were at an intersection while crossing without the right of way, 3 were walking on roadway, 1 was running into roadway, 1 was walking along roadway against traffic, 1 was at an intersection with no traffic control, and 1 was between intersections. For 2 of the 16 pedestrians killed, no pedestrian action and other were recorded.

SECTION 7 – Vehicle Involvement

Introduction

This section counts the number of vehicles involved in traffic collisions. Vehicle involvement in a collision is calculated for each vehicle type (such as passenger vehicles, vans, pick-up trucks, types of emergency vehicles). Vehicles involved in collisions that were, or were not, transporting hazardous loads and the nature of these loads is also indicated.

Key Highlights

In 2019, there are 73,287 vehicles involved in traffic collisions. Of these:

- 99 are involved in fatal collisions;
- 15,276 are involved in injury collisions; and,
- 57,912 are involved in PDO collisions.

Vehicle involvement in traffic collisions per 10,000 registered vehicles (vehicle involvement rate) has increased in 2019 compared to 2018 and the previous five year (2014 to 2018) annual average. The vehicle involvement rate in collisions in 2019 for:

- Total collisions is 789.4 – increased by 4% from 2018 and by 6% from the previous five years;
- Fatal collisions is 1.1 – relatively unchanged from 2018 but decreased by 10% from the previous five years;
- Injury collisions is 164.6 – decreased by 5% from 2018 and by 10% from the previous five years; and,
- PDO collisions is 623.8 – increased by 6% from 2018 and by 12% from the previous five years.

Light duty vehicles, including passenger vehicles, minivans, and light trucks, represent 97% of the vehicles involved in all traffic collisions in 2019, the same as 2018 and the previous five year (2014 to 2018) annual average (97%). Commercial vehicles represent 3% of the vehicles involved (the same as in the previous five years) while motorcycles, scooters, and mopeds represent 0.3% of the vehicles involved (the same as in the previous five years).

Major Elements Examined

Counts of vehicles involved in collisions in Manitoba for 2019 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

It is important to note that the number of collisions is not equal to the number of vehicles involved in those collisions. All collisions reported involve at least one vehicle, but may involve more than one as well.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2014 to 2018. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and vehicle involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

Terms and Definitions

"Vehicles"

- The number of vehicles involved in collisions. It excludes pedestrians, but includes automobiles, trucks, vans, buses, mobility vehicles, motorcycles, scooters, mopeds, bicycles, off-road vehicles, farm and construction equipment, and trains.

"Collision Severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Vehicle Involvement Rate"

- A calculation of the number of vehicles involved in traffic collisions for every 10,000 vehicles registered in Manitoba. The total number of vehicles registered is based on a point-in-time observation of the number of vehicles registered in specific vehicle classes. More detail regarding the methodology used to count registered vehicles can be found in "*Section 3 Vehicle Registrations*" of this report.

"Light Duty Vehicles"

- A classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: passenger vehicles (automobile), mini/multi-purpose van, van under 4,500 kg, and pick-up under 4,500 kg.

"NSC Commercial Vehicles"

- The National Safety Code (NSC) classification of vehicles is a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Truck greater than 4,500 kilograms (unit chassis)", "Power Unit for Semi-Trailer", "Truck (Other)" (where the type and size of truck is unknown), "School Bus", "Transit Bus (Urban)", "Inter-City Bus", and "Bus (Other)". These vehicles bear a National Safety Code Number and are entered onto the National Safety Code Collision Monitoring Report.

"PSV Vehicles"

- Also known as 'public service vehicles', a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Other school vehicle", and "Emergency vehicles", including ambulance, fire and police vehicles.

Table 7-1 Historical Summary of Vehicles Involved in Traffic Collisions

Table 7-1
Historical Summary of Vehicles Involved in Traffic Collisions: 2009 to 2019

Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
2009	126	-	9,268	-	34,216	-	43,610	-
2010	110	-12.7%	9,358	1.0%	35,511	3.8%	44,979	3.1%
2011	141	28.2%	10,956	17.1%	42,419	19.5%	53,516	19.0%
2012	126	-10.6%	14,802	35.1%	44,628	5.2%	59,556	11.3%
2013	111	-11.9%	15,663	5.8%	48,542	8.8%	64,316	8.0%
2014	95	-14.4%	16,233	3.6%	45,949	-5.3%	62,277	-3.2%
2015	106	11.6%	16,184	-0.3%	45,421	-1.1%	61,711	-0.9%
2016	143	34.9%	16,927	4.6%	48,993	7.9%	66,063	7.1%
2017	88	-38.5%	16,748	-1.1%	55,219	12.7%	72,055	9.1%
2018	98	11.4%	15,975	-4.6%	54,171	-1.9%	70,244	-2.5%
2019	**99**	**1.0%**	**15,276**	**-4.4%**	**57,912**	**6.9%**	**73,287**	**4.3%**
2014-2018 Average*	106	-6.6%	16,413	-6.9%	49,951	15.9%	66,470	10.3%

* "% change" in this line compares the current year to the 5-year average

In 2019, there are 73,287 vehicles involved in traffic collisions. Of these:

- 99 are involved in fatal collisions;
- 15,276 are involved in injury collisions; and,
- 57,912 are involved in PDO collisions.

Overall, there are more vehicles involved in traffic collisions in 2019 (73,287) than in 2018 (70,244), and the previous five year (2014 to 2018) annual average (66,470). In 2019, there are:

- 3,043 more vehicles involved in total collisions than in 2018 (a 4% increase) and 6,817 more than in the previous five year average (a 10% increase);
- 1 more vehicle involved in fatal collisions than in 2018 (a 1% increase) and 7 fewer than in the previous five years (a 7% decrease);
- 699 fewer vehicles involved in injury collisions compared to 2018 (a 4% decrease) and 1,137 fewer than in the previous five years (a 7% decrease); and,
- 3,741 more vehicles involved in PDO collisions compared to 2018 (a 7% increase) and 7,961 more than in the previous five years (a 16% increase).

Table 7-2 Historical Summary of Vehicle Involvement Rate (per 10,000 Registered Vehicles) in Traffic Collisions

Table 7-2
Historical Summary of Vehicle Involvement Rate (per 10,000 Registered Vehicles) in Traffic Collisions: 2009 to 2019

Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
2009	1.6	-	118.4	-	437.2	-	557.3	-
2010	1.4	-14.4%	117.2	-1.0%	444.7	1.7%	563.3	1.1%
2011	1.7	25.7%	134.6	14.9%	521.2	17.2%	657.5	16.7%
2012	1.5	-13.2%	176.7	31.3%	532.8	2.2%	711.0	8.1%
2013	1.3	-13.3%	184.0	4.1%	570.3	7.0%	755.6	6.3%
2014	1.1	-15.9%	187.4	1.8%	530.3	-7.0%	718.8	-4.9%
2015	1.2	9.8%	183.8	-1.9%	515.9	-2.7%	700.9	-2.5%
2016	1.6	32.5%	188.8	2.7%	546.5	5.9%	737.0	5.1%
2017	1.0	-39.3%	184.4	-2.3%	608.0	11.3%	793.4	7.7%
2018	1.1	9.7%	173.2	-6.1%	587.3	-3.4%	761.6	-4.0%
2019	**1.1**	**0.4%**	**164.6**	**-5.0%**	**623.8**	**6.2%**	**789.4**	**3.7%**
2014-2018 Average*	1.2	-10.0%	183.5	-10.3%	557.6	11.9%	742.3	6.3%

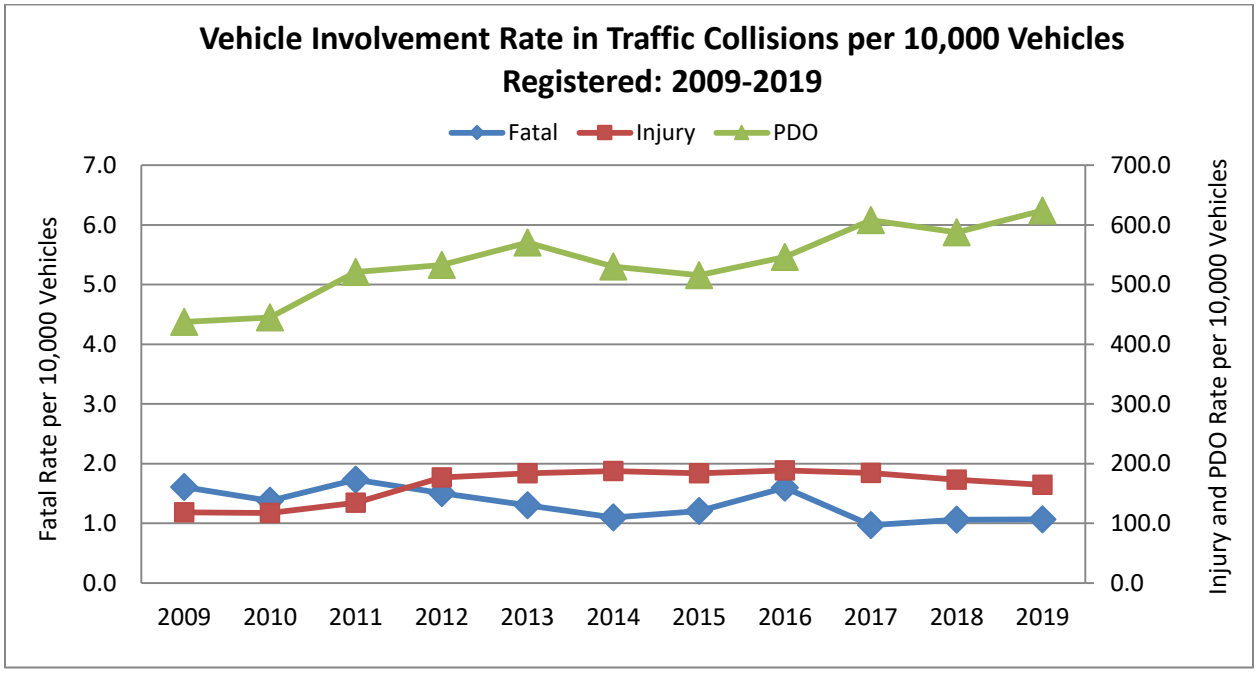
* "% change" in this line compares the current year to the 5-year average

Note: Legislative changes over the course of 2018 and 2019 have reduced the number and type of registration categories reported in this report. To reflect these changes in the historical summary, registration counts from 2009 to 2018 have been adjusted to match the methodology employed for 2019. As such, the historical summary reported here will slightly differ from previously published Traffic Collision Statistics Reports for these years.

Vehicle involvement in traffic collisions per 10,000 registered vehicles (vehicle involvement rate) has increased in 2019 compared to 2018 and the previous five year (2014 to 2018) annual average. The vehicle involvement rate in collisions in 2019 for:

- Total collisions is 789.4 – increased by 4% from 2018 and by 6% from the previous five years;
- Fatal collisions is 1.1 – relatively unchanged from 2018 but decreased by 10% from the previous five years;
- Injury collisions is 164.6 – decreased by 5% from 2018 and by 10% from the previous five years; and,
- PDO collisions is 623.8 – increased by 6% from 2018 and by 12% from the previous five years.

Figure 7-1 Vehicle Involvement Rate (per 10,000 Registered Vehicles) in Fatal, Injury and PDO Collisions



As shown in Figure 7-1, in 2019, vehicle involvement rate decreased slightly for injury crashes but increased for PDO crashes, while vehicle involvement rate for fatal crashes stayed relatively unchanged compared to 2018.

Table 7-3 Vehicle Types (as defined in TAR) Involved in Traffic Collisions and Collision Severity

Table 7-3

Vehicle Types (as defined in TAR) Involved in Traffic Collisions and Collision Severity: 2019, 2014-2018 Average

Vehicle Type	2019 Collision Severity						**2019 Total**	% of 2019 Total	2014-2018 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Passenger vehicle (automobile)	46	46.5%	11,700	76.6%	41,508	71.7%	**53,254**	72.7%	47	12,292	34,993	47,333	71.2%
Mini/Multi-Purpose Van	5	5.1%	997	6.5%	3,671	6.3%	**4,673**	6.4%	7	1,230	3,678	4,915	7.4%
Van under 4500 kg	2	2.0%	135	0.9%	460	0.8%	**597**	0.8%	1	143	451	595	0.9%
Pick-up under 4500 kg	24	24.2%	1,803	11.8%	10,242	17.7%	**12,069**	16.5%	26	2,061	9,007	11,093	16.7%
Truck over 4500 kg (unit chassis)	1	1.0%	179	1.2%	1,033	1.8%	**1,213**	1.7%	5	194	905	1,104	1.7%
Power Unit for Semi-Trailer	11	11.1%	111	0.7%	399	0.7%	**521**	0.7%	9	117	395	520	0.8%
Truck/Camper	0	-	0	-	0	-	**0**	-	<1	<1	<1	0	<0.1%
Motor home	0	-	3	<0.1%	27	<0.1%	**30**	<0.1%	<1	2	24	26	<0.1%
Truck (other)	1	1.0%	16	0.1%	54	<0.1%	**71**	<0.1%	1	25	69	95	0.1%
School Bus	0	-	11	<0.1%	61	0.1%	**72**	<0.1%	<1	9	33	42	<0.1%
Other School Vehicle	0	-	0	-	0	-	**0**	-	<1	<1	<1	0	-
Transit Bus – urban	0	-	44	0.3%	60	0.1%	**104**	0.1%	<1	50	53	103	0.2%
Para-transit Bus	0	-	2	<0.1%	1	<0.1%	**3**	<0.1%	<1	3	6	9	<0.1%
Intercity Bus	0	-	3	<0.1%	16	<0.1%	**19**	<0.1%	<1	2	10	12	<0.1%
Bus (other)	0	-	13	<0.1%	82	0.1%	**95**	0.1%	<1	19	75	95	0.1%
Motorcycle/Scooter	7	7.1%	127	0.8%	53	<0.1%	**187**	0.3%	4	130	56	190	0.3%
Moped	0	-	15	<0.1%	1	<0.1%	**16**	<0.1%	<1	11	3	14	<0.1%
Bicycle	1	1.0%	96	0.6%	112	0.2%	**209**	0.3%	3	109	129	240	0.4%
Ambulance	0	-	5	<0.1%	33	<0.1%	**38**	<0.1%	<1	3	12	15	<0.1%
Fire	0	-	14	<0.1%	86	0.1%	**100**	0.1%	<1	9	44	53	<0.1%
Police	0	-	0	-	0	-	**0**	-	<1	<1	<1	0	-
Mobility Vehicle	0	-	0	-	0	-	**0**	-	<1	<1	<1	0	<0.1%
Motorized Snow Vehicle HTA	0	-	0	-	0	-	**0**	-	<1	<1	<1	0	<0.1%
Farm Equipment	1	1.0%	0	-	1	<0.1%	**2**	<0.1%	<1	<1	<1	1	<0.1%
Construction Equipment	0	-	0	-	1	<0.1%	**1**	<0.1%	<1	<1	1	1	<0.1%
Train/Other Rail Vehicle	0	-	0	-	0	-	**0**	-	<1	<1	<1	0	-
Off-Road Vehicles	0	-	1	<0.1%	10	<0.1%	**11**	<0.1%	<1	2	1	12	<0.1%
Total	99	100%	15,275	100%	57,911	100%	**73,285**	100%	106	16,413	49,951	66,470	100%

Note: Counts of vehicles in the 2014-2018 average may not add to the total due to rounding.
Note: Some vehicles are not identified by vehicle type due to a hit and run scenario.

Table 7-4 Combined Select Vehicle Categories Involved in Traffic Collisions by Collision Severity

Table 7-4

Vehicle Types (Combined Select Categories) Involved in Traffic Collisions and Collision Severity: 2019, 2014-2018 Average

Vehicle Type	2019 Collision Severity						**2019 Total**	% of 2019 Total	2014-2018 Average Count of Collisions				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Light Duty Vehicles	77	79.4%	14,635	96.4%	55,881	96.7%	**70,593**	96.6%	82	15,725	48,129	63,936	96.6%
Passenger vehicles	53	54.6%	12,832	84.6%	45,639	79.0%	**58,524**	80.1%	56	13,664	39,122	52,843	79.8%
Light trucks	24	24.7%	1,803	11.9%	10,242	17.7%	**12,069**	16.5%	26	2,061	9,007	11,093	16.8%
NSC Commercial Vehicles	13	13.4%	379	2.5%	1,706	3.0%	**2,098**	2.9%	15	418	1,546	1,979	3.0%
PSV Vehicles	0	-	19	0.1%	119	0.2%	**138**	0.2%	0	11	56	67	0.1%
Motorcycle/Moped/Scooter	7	7.2%	142	0.9%	54	<0.1%	**203**	0.3%	4	141	59	204	0.3%
Off-Road vehicles	0	-	1	<0.1%	10	<0.1%	**11**	<0.1%	<1	2	1	12	<0.1%

Note: Counts of vehicles in the 2014-2018 average may not add to the total due to rounding.
Note: Some vehicles are not identified by vehicle type due to a hit and run scenario.
Note: The above categories are not an exhaustive list. Only primary vehicle types are included; vehicle types such as trains, bicycles, truck/camper units and motor homes are not.

Table 7-5 Vehicle Involvement (per 10,000 Registered Vehicles) in Traffic Collision by Combined Vehicle Types and Collision Severity

Table 7-5

Vehicle Involvement (per 10,000 Registered Vehicles) in Traffic Collisions by Combined Vehicle Types and Collision Severity: 2019, 2014-2018 Average

Vehicle Type	2019 Collision Severity				2014-2018 Average			
	Fatal	Injury	PDO	**2019 Total**	Fatal	Injury	PDO	Total
Light Duty Vehicles	1.0	198.6	758.1	**957.7**	1.1	219.0	670.2	890.3
Passenger vehicles	0.9	219.6	780.9	**1,001.4**	1.0	241.7	691.9	934.6
Light trucks	1.6	118.1	671.0	**790.7**	1.7	135.0	589.8	726.4
NSC Commercial Vehicles	1.2	34.4	154.7	**190.2**	1.6	43.6	161.4	206.7
PSV Vehicles	0.0	17.7	110.9	**128.6**	0.0	8.2	40.1	48.4
Motorcycle/Moped/Scooter	4.5	90.5	34.4	**129.4**	2.9	97.1	40.8	140.8

Light duty vehicles, including passenger vehicles, minivans, and light trucks, represent 97% of the vehicles involved in all traffic collisions in 2019, the same as 2018 and the previous five year (2014 to 2018) annual average (97%). Commercial vehicles represent 3% of the vehicles involved (the same as in the previous five years) while motorcycles, scooters, and mopeds represent 0.3% of the vehicles involved (the same as in the previous five years).

Light duty vehicles have the highest vehicle involvement rate (per 10,000 registered vehicles) among all the vehicle types examined. Light duty vehicles (passenger vehicles and light trucks, combined) have an involvement rate of 957.7 in 2019 and 890.3 in the previous five year (2014 to 2018) annual average. NSC commercial vehicles have an involvement rate of 190.2 in 2019 and 206.7 in the previous five years.

Motorcycles (including scooters and mopeds) have the second lowest rates of involvement in traffic collisions among all vehicle types examined. Motorcycles have a rate of involvement of 129.4 in 2019 and 140.8 for the previous five year (2014 to 2018) annual average.

Few PSV vehicles are recorded as being involved in traffic collisions in 2019 (only 138 in total). They had an involvement rate (per 10,000 registered vehicles) of 128.6 in 2019 and 48.4 in the previous five years.

Motorcycles (including scooters and mopeds) are much more likely than light duty vehicles to be involved in a fatal collision. In 2019, motorcycles have an involvement rate of 4.5 in fatal collisions, more than four times the involvement rate of light duty vehicles in fatal collisions (1.0). In the previous five year (2014 to 2018) annual average, motorcycles had a vehicle involvement rate of 2.9 in fatal collisions, two-and-a-half times the rate of light duty vehicles.

NOTE: No vehicle involvement rate for off-road vehicles (ORV) is calculated due to difficulty in developing a reliable and accurate population count of these vehicles.

SECTION 8 – Driver Involvement

Introduction

This section counts the number of drivers involved in traffic collisions and breaks this down by age and gender of the driver. The rate of involvement (per 10,000 licensed drivers) in traffic collisions is also detailed.

Key Highlights

In 2019, there are 69,564 drivers involved in traffic collisions. Of these:

- 97 are involved in fatal collisions;
- 15,095 are involved in injury collisions; and,
- 54,372 are involved in PDO collisions.

Drivers aged 16 to 24, 25 to 34, and those age 35 to 44 account for the largest proportions of drivers (by age group) involved in traffic collisions in 2019.

Young drivers have a much higher rate of involvement in traffic collisions than older drivers. In 2019, drivers aged 16 to 24 years old have an involvement rate (per 10,000 licensed drivers) in traffic collisions of 1,005.5. This is:

- 1.1 times that of drivers aged 25 to 34 (rate of 884.1);
- 1.2 times that of drivers aged 35 to 44 (rate of 840.9);
- 1.3 times that of drivers aged 45 to 54 (rate of 779.1);
- 1.6 times that of drivers aged 55 to 64 (rate of 609.8); and,
- Nearly two-and-a-half times that of drivers aged 65 and older (rate of 436.3).

The majority of drivers involved in traffic collisions are male. Among all drivers involved in traffic collisions in 2019 where the driver gender is known, 61% are male and 39% are female.

- Fatal collisions: 76% are male drivers, 24% are female drivers
- Injury collisions: 54% are male drivers, 46% are female drivers
- PDO collisions: 63% are male drivers, 37% are female drivers

The rate of involvement for men in traffic collisions in 2019 is 875.9, nearly one-and-a-half times that of women (604.5). Driver involvement rates in 2019:

- Fatal collisions: male rate – 1.5, female rate – 0.5
- Injury collisions: male rate – 168.5, female rate – 154.3
- PDO collisions: male rate – 705.8, female rate – 449.6

The reader should note that neither the count of drivers involved in collisions nor the calculated rate of involvement takes into account exposure to risk in terms of hours of driving, kilometres driven, or driving situations.

Major Elements Examined

Counts of drivers involved in collisions in Manitoba for 2019 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

It is important to note that the number of collisions is not equal to the number of drivers involved in those collisions; nor is the number of vehicles involved in collisions. Some collisions involve more than one driver while others involve a single driver; the number of drivers will not equal the number of collisions. Likewise, not every vehicle involved in a collision will have a driver. Some collisions involve parked vehicles while others may involve driverless vehicles, such as construction or farm equipment (a full definition of what constitutes a “driver” for this report is provided under the “*Terms and Definitions*” heading). As there are more drivers involved in collisions than collisions overall, involvement rates calculated based on the number of drivers will be higher than the involvement rates calculated based on the number of collisions.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2014 to 2018. Rounding errors in these calculations will cause individual average counts not to add to total average counts in some cases.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

Terms and Definitions

"Drivers"

- The number of drivers involved in collisions. It excludes pedestrians, bicyclists, snowmobiles, off-road vehicles, farm and construction equipment, trains and parked vehicles.

"Collision Severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Driver Involvement Rate"

- A calculation of the number of drivers involved in traffic collisions for every 10,000 drivers licensed in Manitoba. The total number of drivers licensed to drive includes both active and suspended drivers. This involvement rate does not take into account the number of vehicle kilometres driven by each driver group. More detail regarding the methodology used to count licensed drivers can be found in "*Section 2 Licensed Drivers*" of this report.

Table 8-1 Historical Summary of Drivers Involved in Traffic Collisions

Table 8-1
Historical Summary of Drivers Involved in Traffic Collisions: 2009 to 2019

Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
2009	120	-	8,938	-	32,039	-	41,097	-
2010	105	-12.5%	8,969	0.3%	33,236	3.7%	42,310	3.0%
2011	130	23.8%	10,644	18.7%	40,505	21.9%	51,279	21.2%
2012	119	-8.5%	14,696	38.1%	44,062	8.8%	58,877	14.8%
2013	106	-10.9%	15,539	5.7%	47,856	8.6%	63,501	7.9%
2014	90	-15.1%	16,120	3.7%	45,084	-5.8%	61,294	-3.5%
2015	103	14.4%	16,088	-0.2%	43,525	-3.5%	59,716	-2.6%
2016	138	34.0%	16,753	4.1%	46,948	7.9%	63,839	6.9%
2017	85	-38.4%	16,531	-1.3%	51,831	10.4%	68,447	7.2%
2018	95	11.8%	15,752	-4.7%	50,759	-2.1%	66,606	-2.7%
2019	**97**	**2.1%**	**15,095**	**-4.2%**	**54,372**	**7.1%**	**69,564**	**4.4%**
2014-2018 Average*	102	-5.1%	16,249	-7.1%	47,629	14.2%	63,980	8.7%

* "% change" in this line compares the current year to the 5-year average

In 2019, there are 69,564 drivers involved in traffic collisions. Of these:

- 97 are involved in fatal collisions;
- 15,095 are involved in injury collisions; and,
- 54,372 are involved in PDO collisions.

Overall, the number of drivers involved in traffic collisions in 2019 increased from 2018 (up 4%) and from the previous five year (2014 to 2018) annual average (up 9%). In 2019, there are:

- 2,958 more drivers involved in total collisions than in 2018 and 5,584 more than in the previous five years;
- 2 more drivers involved in fatal collisions than in 2018 (a 2% increase) and 5 fewer than in the previous five years (a 5% decrease);
- 657 fewer drivers involved in injury collisions compared to 2018 (a 4% decrease) and 1,154 fewer than in the previous five years (a 7% decrease); and,
- 3,613 more drivers involved in PDO collisions compared to 2018 (a 7% increase) and 6,743 more than in the previous five years (a 14% increase).

Table 8-2 Historical Summary of Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions

Table 8-2

Historical Summary of Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions: 2009 to 2019

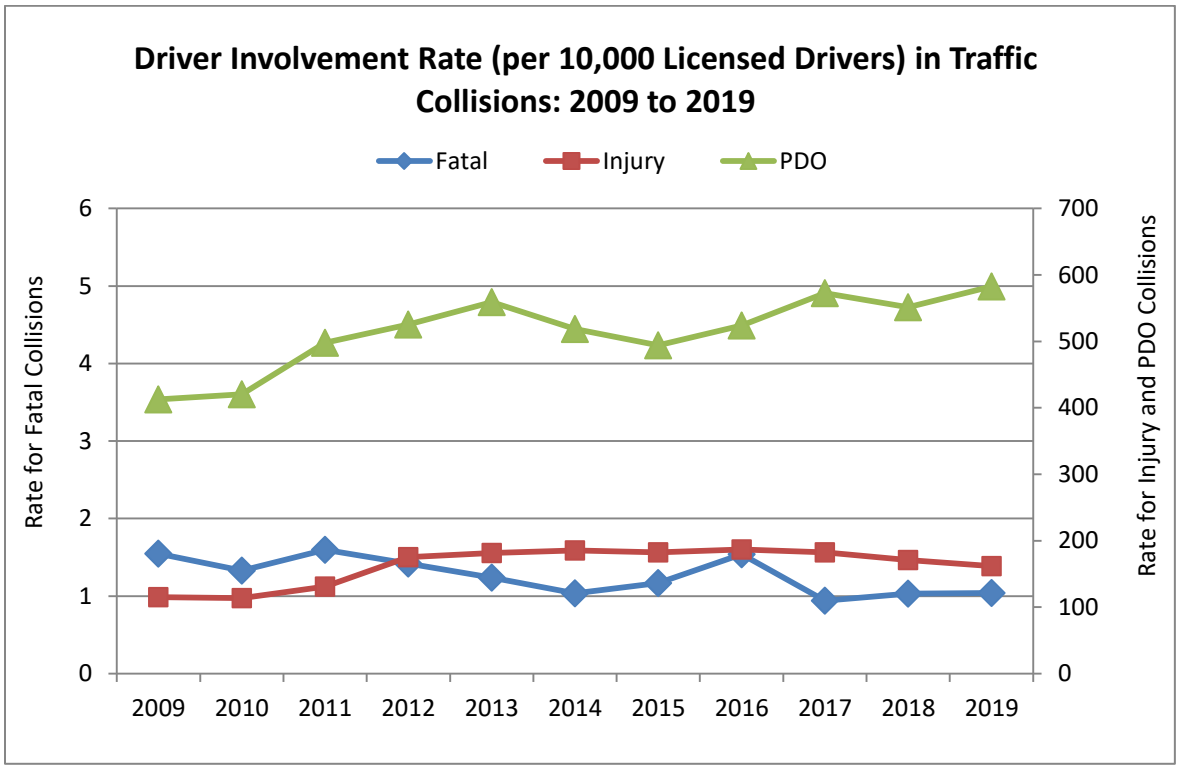
Year	Collision Severity						Total Collisions	% change to previous year
	Fatal	% change to previous year	Injury	% change to previous year	PDO	% change to previous year		
2009	1.5	-	115.1	-	412.8	-	529.5	-
2010	1.3	-14.1%	113.5	-1.4%	420.5	1.9%	535.3	1.1%
2011	1.6	20.3%	130.8	15.3%	497.8	18.4%	630.2	17.7%
2012	1.4	-11.2%	175.3	34.0%	525.5	5.6%	702.2	11.4%
2013	1.2	-12.7%	181.6	3.6%	559.2	6.4%	742.0	5.7%
2014	1.0	-16.4%	185.4	2.1%	518.7	-7.2%	705.1	-5.0%
2015	1.2	12.9%	182.5	-1.6%	493.9	-4.8%	677.6	-3.9%
2016	1.5	31.8%	187.0	2.4%	524.0	6.1%	712.6	5.2%
2017	0.9	-39.1%	182.6	-2.4%	572.5	9.2%	756.0	6.1%
2018	1.0	9.9%	171.1	-6.3%	551.5	-3.7%	723.7	-4.3%
2019	**1.0**	**0.7%**	**161.8**	**-5.5%**	**582.7**	**5.7%**	**745.5**	**3.0%**
2014-2018 Average*	1.1	-9.1%	181.7	-11.0%	532.1	9.5%	715.0	4.3%

* "% change" in this line compares the current year to the 5-year average

The driver involvement rate (per 10,000 licensed drivers) in traffic collisions in 2019 is 745.5, an increase of 3% compared to the rate in 2018 (723.7) and an increase of 4% from the previous five year (2014 to 2018) annual average (715.0). In 2019, driver involvement in:

- Fatal collisions (1.0) stayed relatively unchanged from 2018 but decreased by 9% compared to the previous five years;
- Injury collisions (161.8) decreased by nearly 6% from 2018 and by 11% compared to the previous five years; and,
- PDO collisions (582.7) increased by 6% from 2018 and by nearly 10% compared to the previous five years.

Figure 8-1 Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Severity



The rate of involvement for drivers in PDO collisions had been fairly consistent between 2009 and 2010. The rate increased in 2011, 2012 and 2013, before falling in 2014 and 2015; then increased in 2016 and 2017 before falling in 2018, and increased again in 2019. The increased driver involvement rates in PDO collisions since 2011 (compared to 2009 to 2010) are at least partially attributable to changes in the reporting structure that took effect in 2011.

The driver involvement rate for injury collisions increased in 2011 and 2012, and were relatively stable from 2013 through 2017, then decreased slightly in 2018 and 2019. The rate for fatal collisions had steadily decreased until increases in 2015 and 2016, then decreased again in 2017 and stayed fairly stable in 2018 and 2019. The increases in driver involvement in injury collisions since 2011 are at least partially attributable to changes in the reporting structure that took effect in 2011. However, changes in driver involvement in fatal collisions cannot be attributed to this reporting structure change.

Table 8-3 Drivers Involved in Traffic Collisions by Age Group and Collision Severity

Table 8-3

Drivers Involved in Traffic Collisions by Age Group and Collision Severity: 2019, 2014-2018 Average

Age Group	2019 Collision Severity						**2019 Total Collisions**	% of 2019 Total Collisions*	2014-2018 Average Count of Drivers				
	Fatal	% of Total Fatal*	Injury	% of Total Injury*	PDO	% of Total PDO*			Fatal	Injury	PDO	Total	% of Total Collisions*
<16	0	-	10	<0.1%	28	<0.1%	**38**	<0.1%	0	20	47	68	0.1%
16-19	7	7.2%	912	6.0%	3,455	6.4%	**4,374**	6.3%	10	1,164	3,538	4,712	7.4%
20-24	15	15.5%	1,704	11.3%	6,313	11.6%	**8,032**	11.6%	10	1,941	6,057	8,008	12.5%
25-34	16	16.5%	3,264	21.6%	11,498	21.2%	**14,778**	21.3%	22	3,535	10,108	13,665	21.4%
35-44	10	10.3%	3,077	20.4%	10,246	18.9%	**13,333**	19.2%	15	3,099	8,628	11,742	18.4%
45-54	19	19.6%	2,604	17.3%	8,944	16.5%	**11,567**	16.6%	17	2,861	7,908	10,787	16.9%
55-64	17	17.5%	1,995	13.2%	7,547	13.9%	**9,559**	13.8%	12	2,092	6,174	8,278	13.0%
65+	13	13.4%	1,521	10.1%	6,267	11.5%	**7,801**	11.2%	15	1,520	5,066	6,601	10.3%
Not Stated	0	-	8	-	74	-	**82**	-	1	17	103	120	-
Total*	**97**	**100%**	**15,095**	**100%**	**54,372**	**100%**	**69,564**	100%	102	16,249	47,629	63,980	100%

*Percentage of the total does not include the 'not stated' category.
Note: Counts of drivers in the 2014-2018 average may not add to the total due to rounding.

Drivers aged 16 to 24, 25 to 34, and those age 35 to 44 account for the largest proportions of drivers (by age group) involved in traffic collisions in 2019. Overall, these proportions are very similar to previous years.

- Total collisions: aged 16 to 24 – 18%; aged 25 to 34 – 21%; aged 35 to 44 – 19%; aged 45 to 54 – 17%; aged 55 to 64 – 14%; aged 65 and older – 11%.
- Fatal collisions: aged 16 to 24 – 23%; aged 25 to 34 – nearly 17%; aged 35 to 44 – 10%; aged 45 to 54 – 20%; aged 55 to 64 – nearly 18%; aged 65 and older – 13%.
- Injury collisions: aged 16 to 24 – 17%; aged 25 to 34 – 22%; aged 35 to 44 – 20%; aged 45 to 54 – 17%; aged 55 to 64 – 13%; aged 65 and older – 10%.
- PDO collisions: aged 16 to 24 – 18%; aged 25 to 34 – 21%; aged 35 to 44 – 19%; aged 45 to 54 – nearly 17%; aged 55 to 64 – 14%; aged 65 and older – nearly 12%.

Figure 8-2 Proportion of Traffic Collisions by Driver Age and Collision Severity

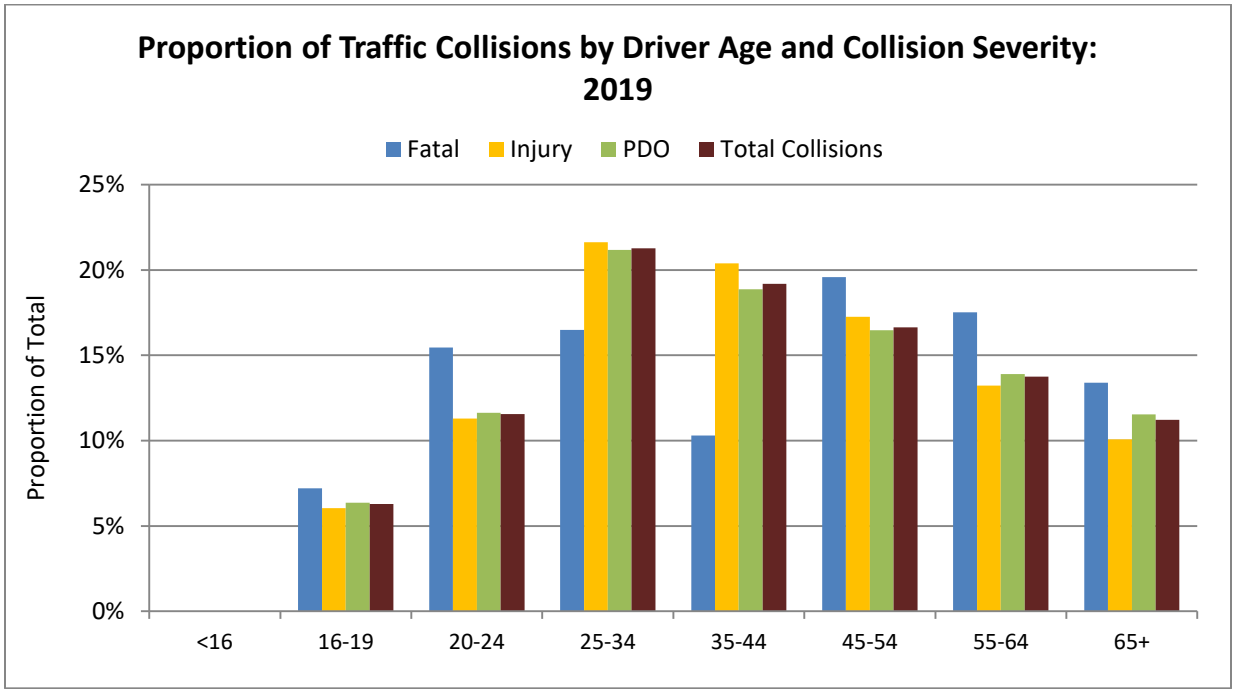


Table 8-4 Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Age Group and Collision Severity

Table 8-4
Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Age Group and Collision Severity: 2019, 2014-2018 Average

Age Group	2019 Collision Severity			**2019 Total Collisions**	2014-2018 Average			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
<16	-	-	-	**-**	-	-	-	-
16-19	1.5	190.1	720.3	**911.9**	2.1	243.4	739.9	985.4
20-24	2.0	226.0	837.1	**1,065.1**	1.3	260.2	812.2	1,073.7
25-34	1.0	195.3	687.8	**884.1**	1.4	224.9	643.2	869.5
35-44	0.6	194.1	646.2	**840.9**	1.0	208.1	579.2	788.3
45-54	1.3	175.4	602.4	**779.1**	1.1	184.8	510.9	696.9
55-64	1.1	127.3	481.5	**609.8**	0.8	140.1	413.4	554.2
65+	0.7	85.1	350.5	**436.3**	0.9	93.9	313.1	408.0

Recognizing that counts of drivers involved in collisions could be impacted either positively or negatively by changing population statistics, involvement rates per 10,000 licensed drivers are examined to provide a standardized collision rate comparison. This eliminates the effect of changing population size and focuses on how many drivers are involved in collisions instead of simply a raw count of drivers. Further, in the absence of the number of kilometres driven, the driver involvement rate acts as a proxy for exposure to collision risk.

Young drivers have a much higher rate of involvement in traffic collisions than older drivers. In 2019, drivers aged 16 to 24 years old have an involvement rate (per 10,000 licensed drivers) in traffic collisions of 1,005.5. This is:

- 1.1 times that of drivers aged 25 to 34 (rate of 884.1);
- 1.2 times that of drivers aged 35 to 44 (rate of 840.9);
- 1.3 times that of drivers aged 45 to 54 (rate of 779.1);
- 1.6 times that of drivers aged 55 to 64 (rate of 609.8); and,
- Nearly two-and-a-half times that of drivers aged 65 and older (rate of 436.3).

Table 8-5 Drivers Involved in Traffic Collisions by Gender and Age Group and Collision Severity

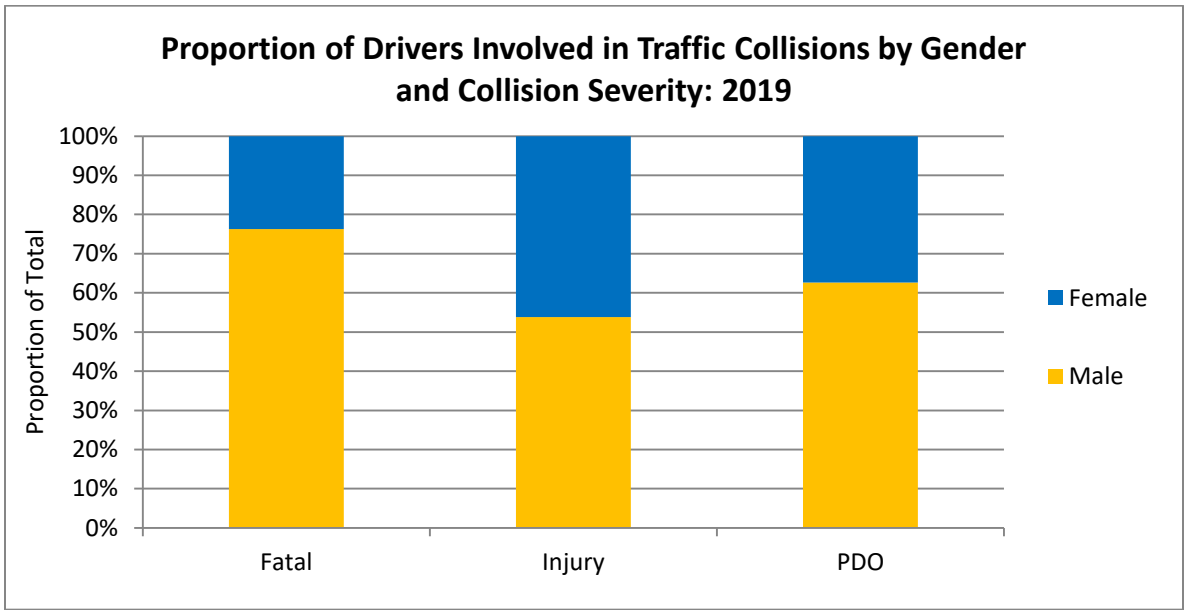
Table 8-5

Total Drivers Involved in Traffic Collisions by Gender and Age Group and Collision Severity: 2019, 2014-2018 Average

Gender - Age Group		2019 Collision Severity						**2019 Total Collisions**	% of 2019 Total Collisions*	2014-2018 Average Count of Drivers				
		Fatal	% of Total Fatal*	Injury	% of Total Injury*	PDO	% of Total PDO*			Fatal	Injury	PDO	Total	% of Total Collisions*
Female	<16	0	-	8	0.1%	15	<0.1%	**23**	<0.1%	<1	7	20	27	0.1%
	16-19	2	8.7%	425	6.1%	1,346	6.6%	**1,773**	6.5%	3	544	1,321	1,868	7.4%
	20-24	6	26.1%	783	11.2%	2,251	11.1%	**3,040**	11.1%	2	926	2,252	3,180	12.5%
	25-34	5	21.7%	1,508	21.6%	4,416	21.7%	**5,929**	21.7%	5	1,716	3,816	5,537	21.8%
	35-44	3	13.0%	1,461	21.0%	3,991	19.7%	**5,455**	20.0%	3	1,532	3,351	4,886	19.2%
	45-54	3	13.0%	1,243	17.8%	3,340	16.4%	**4,586**	16.8%	4	1,363	2,944	4,312	17.0%
	55-64	3	13.0%	902	12.9%	2,671	13.2%	**3,576**	13.1%	3	952	2,215	3,170	12.5%
	65+	1	4.3%	639	9.2%	2,275	11.2%	**2,915**	10.7%	3	627	1,801	2,432	9.6%
	Not Stated	0	-	1	-	3	-	**4**	-	<1	1	9	10	-
	Total Female*	**23**	**100%**	**6,970**	**100%**	**20,308**	**100%**	**27,301**	100%	25	7,669	17,729	25,423	100%
Male	<16	0	-	2	<0.1%	13	<0.1%	**15**	<0.1%	<1	13	27	41	0.1%
	16-19	5	6.8%	486	6.0%	2,107	6.2%	**2,598**	6.2%	7	619	2,212	2,838	7.4%
	20-24	9	12.2%	919	11.3%	4,057	11.9%	**4,985**	11.8%	7	1,014	3,797	4,818	12.5%
	25-34	11	14.9%	1,755	21.6%	7,075	20.8%	**8,841**	21.0%	16	1,817	6,289	8,123	21.1%
	35-44	7	9.5%	1,616	19.9%	6,254	18.4%	**7,877**	18.7%	13	1,566	5,274	6,853	17.8%
	45-54	16	21.6%	1,361	16.8%	5,602	16.5%	**6,979**	16.6%	13	1,498	4,963	6,473	16.8%
	55-64	14	18.9%	1,093	13.5%	4,875	14.3%	**5,982**	14.2%	9	1,139	3,959	5,107	13.3%
	65+	12	16.2%	882	10.9%	3,992	11.7%	**4,886**	11.6%	11	892	3,264	4,168	10.8%
	Not Stated	0	-	1	-	8	-	**9**	-	<1	3	17	20	-
	Total Male*	**74**	**100%**	**8,115**	**100%**	**33,983**	**100%**	**42,172**	100%	76	8,561	29,803	38,440	100%

*Percentage of the total does not include the 'not stated' category.
Note: Counts of drivers in the 2014-2018 average may not add to the total due to rounding.
Note: Some drivers do not have age and gender recorded and are therefore missing from the table above.

Figure 8-3 Proportion of Drivers Involved in Traffic Collisions by Gender and Collision Severity



The majority of drivers involved in traffic collisions are male. Among all drivers involved in traffic collisions in 2019 where the driver gender is known, 61% are male and 39% are female.

- Fatal collisions: 76% are male drivers, 24% are female drivers
- Injury collisions: 54% are male drivers, 46% are female drivers
- PDO collisions: 63% are male drivers, 37% are female drivers

The reader should note that the count of drivers involved in collisions does not take into account exposure to risk in terms of driving situations, hours driven or kilometres driven.

As shown in Table 8-6 (on the following page), young drivers account for the highest proportions of collisions. In particular, young male drivers account for a larger proportion of collisions than any other group of drivers. In 2019:

- Male drivers aged 16 to 24 account for 11% of all collisions, 14% of fatal collisions, 9% of injury collisions, and 11% of PDO collisions;
- Male drivers aged 25 to 34 account for 13% of all collisions, 11% of fatal collisions, 12% of injury collisions, and 13% of PDO collisions;
- Female drivers aged 16 to 24 account for 7% of all collisions, 8% of fatal collisions, 8% of injury collisions and 7% of PDO collisions; and,
- Female drivers aged 25 to 34 account for nearly 9% of all collisions, 5% of fatal collisions, 10% of injury collisions and 8% of PDO collisions.

Table 8-6 Drivers Involved in Traffic Collisions by Age Group and Gender and Collision Severity

Table 8-6

Total Drivers Involved in Traffic Collisions by Age Group and Gender and Collision Severity: 2019, 2014-2018 Average

Age Group - Gender		2019 Collision Severity						**2019 Total Collisions**	% of 2019 Total Collisions*	2014-2018 Average Count of Drivers				
		Fatal	% of Total Fatal*	Injury	% of Total Injury*	PDO	% of Total PDO*			Fatal	Injury	PDO	Total	% of Total Collisions*
<16	Female	0	-	8	<0.1%	15	<0.1%	**23**	<0.1%	<1	7	20	27	<0.1%
	Male	0	-	2	<0.1%	13	<0.1%	**15**	<0.1%	<1	13	27	41	<0.1%
16 to 24	Female	8	8.2%	1,208	8.0%	3,597	6.6%	**4,813**	6.9%	6	1,470	3,573	5,049	7.9%
	Male	14	14.4%	1,405	9.3%	6,164	11.4%	**7,583**	10.9%	14	1,633	6,009	7,656	12.0%
25 to 34	Female	5	5.2%	1,508	10.0%	4,416	8.1%	**5,929**	8.5%	5	1,716	3,816	5,537	8.7%
	Male	11	11.3%	1,755	11.6%	7,075	13.0%	**8,841**	12.7%	16	1,817	6,289	8,123	12.7%
35 to 44	Female	3	3.1%	1,461	9.7%	3,991	7.4%	**5,455**	7.9%	3	1,532	3,351	4,886	7.7%
	Male	7	7.2%	1,616	10.7%	6,254	11.5%	**7,877**	11.3%	13	1,566	5,274	6,853	10.7%
45 to 54	Female	3	3.1%	1,243	8.2%	3,340	6.2%	**4,586**	6.6%	4	1,363	2,944	4,312	6.8%
	Male	16	16.5%	1,361	9.0%	5,602	10.3%	**6,979**	10.0%	13	1,498	4,963	6,473	10.1%
55 to 64	Female	3	3.1%	902	6.0%	2,671	4.9%	**3,576**	5.1%	3	952	2,215	3,170	5.0%
	Male	14	14.4%	1,093	7.2%	4,875	9.0%	**5,982**	8.6%	9	1,139	3,959	5,107	8.0%
65 and older	Female	1	1.0%	639	4.2%	2,275	4.2%	**2,915**	4.2%	3	627	1,801	2,432	3.8%
	Male	12	12.4%	882	5.8%	3,992	7.4%	**4,886**	7.0%	11	892	3,264	4,168	6.5%
Not Stated	Female	0	-	1	-	3	-	**4**	-	<1	1	9	10	-
	Male	0	-	1	-	8	-	**9**	-	<1	3	17	20	-
Total	Female	23	23.7%	6,970	46.2%	20,308	37.4%	**27,301**	39.3%	25	7,669	17,729	25,423	39.8%
	Male	74	76.3%	8,115	53.8%	33,983	62.6%	**42,172**	60.7%	76	8,561	29,803	38,440	60.1%

*Percentage of the total does not include the 'not stated' category.
Note: Counts of drivers in the 2014-2018 average may not add to the total due to rounding.
Note: Some drivers do not have age and gender recorded and are therefore missing from the table above.

Table 8-7 Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Gender and Age Group and Collision Severity

Table 8-7
Driver Involvement Rate (per 10,000 Licensed Drivers) in Traffic Collisions by Gender and Age Group and Collision Severity: 2019, 2014-2018 Average

Gender - Age Group		2019 Collision Severity			2019 Total Collisions	2014-2018 Average			
		Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Female	<16	-	-	-	**-**	-	-	-	-
	16-19	0.9	184.4	584.1	**769.3**	1.4	235.8	573.0	810.2
	20-24	1.7	220.2	633.1	**855.0**	0.7	259.7	631.3	891.7
	25-34	0.6	186.0	544.6	**731.2**	0.7	224.9	500.0	725.6
	35-44	0.4	188.4	514.6	**703.3**	0.4	211.2	461.8	673.3
	45-54	0.4	173.2	465.3	**638.9**	0.6	182.6	394.3	577.4
	55-64	0.4	119.5	353.8	**473.6**	0.4	132.2	307.5	440.1
	65+	0.1	73.3	261.1	**334.6**	0.4	80.9	232.3	313.6
	Total	0.5	154.3	449.6	**604.5**	0.6	177.6	410.5	588.7
Male	<16	-	-	-	**-**	-	-	-	-
	16-19	2.0	195.0	845.6	**1,042.6**	2.8	250.0	893.4	1,146.2
	20-24	2.3	230.6	1,017.8	**1,250.7**	1.9	260.5	975.7	1,238.1
	25-34	1.3	203.9	821.9	**1,027.1**	2.0	224.7	777.8	1,004.6
	35-44	0.9	199.5	772.2	**972.5**	1.6	205.0	690.5	897.1
	45-54	2.1	177.5	730.5	**910.0**	1.6	186.9	619.4	807.9
	55-64	1.7	134.5	600.0	**736.3**	1.1	147.3	511.9	660.4
	65+	1.3	96.2	435.4	**532.9**	1.4	105.9	387.5	494.8
	Total	1.5	168.5	705.8	**875.9**	1.7	185.1	644.2	831.0

The rate of involvement for men in traffic collisions in 2019 is 875.9, nearly one-and-a-half times that of women (604.5). Driver involvement rates in 2019:

- Fatal collisions: male rate – 1.5, female rate – 0.5
- Injury collisions: male rate – 168.5, female rate – 154.3
- PDO collisions: male rate – 705.8, female rate – 449.6

The reader should note that the calculated driver involvement rates do not take into account exposure to risk in terms of driving situations, hours driven or kilometres driven.

In 2019, young males, especially those under age 25, have the highest driver involvement rates of all driver gender-age groups. Young females under age 25 have higher driver involvement rates in total collisions than female drivers aged 25 and older.

Compared to the previous five year (2014 to 2018) annual average, driver involvement rates in 2019 increased for drivers aged 25 and older but decreased for drivers under 25 for overall traffic collisions.

Driver involvement rates in fatal collisions show some variations. Comparing 2019 to the previous five year (2014 to 2018) annual average:

- Female involvement rates in fatal collisions decreased by 11% overall. However, the rates for female drivers age 20 to 24 more than doubled, and rates for females age 35 to 44 also increased while other age groups decreased.
- Male involvement rates in fatal collisions decreased by 7% overall. However, the rates among male drivers age 20 to 24, 45 to 54 and 55 to 64 increased while all other age groups decreased.

SECTION 9 – Contributing Factors

Introduction

This section examines the contributing factors to traffic collisions as reported on the Traffic Accident Report (TAR). Detail is provided at the collision level, at the victim level and at the driver level. Driver involvement rates (per 10,000 licensed drivers) in collisions with specific contributing factors are also provided and discussed. The reader is cautioned to note that more than one contributing factor can be recorded for each vehicle and/or driver involved in a collision. The total count of contributing factors noted will add to more than the number of collisions, vehicles, drivers, or victims in those crashes.

Key Highlights

In 2019, 53% of all collisions have some at-fault contributing factor recorded (91% of fatal collisions; 71% of injury collisions). In 2019:

- A driver action is a contributing factor in 49% of all collisions (78% of fatal collisions; 69% of injury collisions; 45% of PDO collisions);
- A human condition is a contributing factor in 0.4% of all collisions (32% of fatal collisions; 1% of injury collisions; 0.2% of PDO collisions); and,
- Environmental conditions are contributing factors in 8% of all collisions (21% of fatal collisions; 8% of injury collisions; 8% of PDO collisions).

The most prevalent **contributing factors recorded for collisions** in 2019 include:

- Distracted driving – 25% of all collisions (47% fatal; 32% injury; 24% PDO);
- "Following too closely" – 8% of all collisions (no fatal; 16% injury; 6% PDO);
- "Backing unsafely" – nearly 6% of all collisions (no fatal; 3% injury; 6% PDO);
- Speed – 5% of all collisions (nearly 27% fatal; 7% injury; 5% PDO);
- "Turning improperly" – 4% of all collisions (4% fatal; 8% injury; 4% PDO);
- "Slippery road surface" – 4% of all collisions (4% fatal; 5% injury; 4% PDO);
- "Fail to yield right-of-way" – 4% of all collisions (10% fatal; nearly 9% injury; 3% PDO);
- "Changing lanes improperly" – 4% of all collisions (3% fatal; 4% injury; nearly 4% PDO);
- "Lost control/Drive off the road" – 3% of all collisions (7% fatal; 3% injury; 3% PDO); and,
- The actions of a wild animal – 2% of all collisions (3% fatal; 1% injury; 3% PDO).

Considering the **victims from collisions** in 2019:

- 71% of all victims resulted from a collision where at least one driver is noted as having a driver action contributing to the collision (78% of people killed; 84% of people seriously injured);
- 1% of all victims resulted from a collision where at least one driver is noted as having a human condition contributing to the collision (33% of people killed; 9% of people seriously injured); and,
- 8% of all victims resulted from a collision where environmental conditions are noted as contributing to the collision (22% of people killed; 12% of people seriously injured).

The most prevalent contributing factors recorded for collisions where **people are killed or seriously injured** in 2019 include:

- Distracted driving – 43% of people killed and nearly 38% of people seriously injured;
- Speed – 29% of people killed and 13% of people seriously injured;
- Impaired – 29% of people killed and 5% of people seriously injured;
- "Disobey traffic control device/officer" – 12% of people killed and 5% of people seriously injured;
- Weather – nearly 11% of people killed and 2% of people seriously injured;
- "Fail to yield right-of-way" – 9% of people killed and 18% of people seriously injured;
- "Lost control/Drive off the road" – 8% of people killed and 10% of people seriously injured;
- "Slippery road surface" – 7% of people killed and 5% of people seriously injured;
- "Take avoiding action" – 5% of people killed and 2% of people seriously injured;
- "Pedestrian error/confusion" – 5% of people killed and 2% of people seriously injured;
- "Turning improperly" – 4% of people killed and 11% of people seriously injured;
- "Passing improperly" – 4% of people killed and 2% of people seriously injured;
- "Leave stop sign before safe to do so" – 4% of people killed and 4% of people seriously injured;
- "Loss of consciousness" – 4% of people killed and 1% of people seriously injured;
- "Animal action – Wild" – 4% of people killed and 1% of people seriously injured; and,
- "View obstructed/limited" – 4% of people killed and 2% of people seriously injured.

In 2019, 57% of the **drivers involved in traffic collisions** were recorded as not being at-fault in the collision.

- 35% of the drivers involved in a fatal collision were noted as not being at-fault.
- 56% of the drivers in an injury collision were noted as not being at-fault.
- 58% of the drivers in a PDO collision were noted as not being at-fault.

Driver actions were recorded as contributing factors for 39% of the **drivers involved in traffic collisions** in 2019.

- 56% of the drivers involved in fatal collisions had a driver action recorded.
- Nearly 42% of the drivers involved in injury collisions had a driver action recorded.
- 38% of the drivers involved in PDO collisions had a driver action recorded.

Human conditions were recorded as contributing factors for 0.3% of the **drivers involved in traffic collisions** in 2019.

- 19% of the drivers involved in fatal collisions had a human condition recorded.
- 0.5% of the drivers involved in injury collisions had a human condition recorded.
- 0.2% of the drivers involved in PDO collisions had a human condition recorded.

Environmental conditions were recorded as contributing factors for 6% of **drivers involved in traffic collisions** in 2019.

- 13% of the drivers involved in fatal collisions had some environmental condition recorded.
- 4% of the drivers involved in injury collisions had some environmental condition recorded.
- 7% of the drivers involved in PDO collisions had some environmental condition recorded.

In 2019, the **driver involvement rate** (per 10,000 licensed drivers) in traffic collisions where:

- Any driver action is a contributing factor is 289.9, decreased by 5% from the previous five years (304.9);
- Any human condition is a contributing factor is 2.0, decreased by 32% from the previous five years (3.0);
- Some environmental condition is a contributing factor is 47.5, decreased by 17% from the previous five years (57.0);
- Distracted driving is a contributing factor is 149.1, increased by 13% from the previous five years (131.9);
- Speed is a contributing factor is 31.1, decreased by 8% from the previous five years (33.8); and,
- Impaired is a contributing factor is 1.1, decreased by 20% from the previous five years (1.4).

Major Elements Examined

Counts of drivers involved in collisions in Manitoba for 2019 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

When reviewing the “Contributing Factors” for a traffic collision, the reader is cautioned to note that more than one contributing factor can be recorded for each collision. The total count of contributing factors noted will add to more than the number of collisions, vehicles, drivers or victims in those crashes.

For the purposes of this report, speed as a contributing factor is discussed as being a combination of the individual factors “exceeding speed limit”, “driving too fast for conditions” and “unsafe operating speed (too fast or too slow)”.

For the purposes of this report, impaired as a contributing factor is discussed as being a combination of the individual factors “ability impaired by alcohol”, “ability impaired by drugs” and “had been drinking/suspected alcohol use”.

For the purposes of this report, distracted driving as a contributing factor is discussed as being a combination of the individual factors “careless driving” and “distraction/inattention”.

It is important to note that the number of collisions is not equal to the number of drivers involved in collisions because some collisions involve more than one driver while others involve a single driver. (A full definition of what constitutes a "driver" for this report is provided under the "Terms and Definitions" heading.) Because there are more drivers involved in collisions than collisions overall, relative involvement rates calculated based on the number of drivers will be higher than the relative involvement rates calculated based on the number of collisions.

When exploring the number of drivers in different age groups involved in traffic collisions, the reader is cautioned that the driver's age is missing in some collisions.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Average annual calculations are presented for historical data from the years 2014 to 2018. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and relative involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

Terms and Definitions

"Contributing Factor"

- Those circumstances or factors recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environmental condition. The TAR allows for up to three contributing factors to be recorded for each driver or vehicle involved in the collision.

"At-fault Contributing Factor"

- A contributing factor where some action or condition other than "driving properly" and "apparently normal" has been noted.

"Driver Action"

- A category of contributing factors attributed to actions taken or performed by a driver immediately prior to a collision.

"Human Condition"

- A category of contributing factors attributed to the physical or mental condition of a driver immediately prior to a collision, most often that limit the driver's ability to drive safely or properly.

"Vehicle Condition"

- A category of contributing factors attributed to the physical condition of a vehicle immediately prior to a collision.

"Environmental Condition"

- A category of contributing factors attributed to environmental conditions (i.e., weather, road surface and animal actions) immediately prior to a collision.

"Drivers"

- The number of drivers involved in collisions. It excludes pedestrians, bicyclists, snowmobiles, off-road vehicles, farm and construction equipment, trains and parked vehicles.

"Collision Severity"

- A classification of a collision based on the most severe result of the collision; i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

“Fatal Collision”

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

“Injury Collision”

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: ‘major’ (admitted to hospital); ‘minor’ (treated and released from hospital); and, ‘minimal’ (no hospital treatment required).

“Property Damage Only (PDO) Collision”

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

“Driver Involvement Rate”

- A calculation of the number of drivers involved in traffic collisions for every 10,000 drivers licensed in Manitoba. The total number of drivers licensed to drive includes both active and suspended drivers. This involvement rate does not take into account the number of vehicle kilometers driven by each driver group.

Table 9-1 Contributing Factors to a Collision by Collision Severity

Table 9-1
Contributing Factors to a Collision by Collision Severity: 2019

Contributing Factor	2019 Collision Severity						**2019 Total Collisions**	**% of 2019 Total Collisions**
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Driver Action - Driving Properly and Human Condition - Apparently Normal	26	38.2%	7,564	84.1%	33,502	73.3%	**41,092**	**75.0%**
Driver Action - Driving properly	1	1.5%	26	0.3%	211	0.5%	**238**	**0.4%**
Any Driver Action	53	77.9%	6,192	68.9%	20,556	45.0%	**26,801**	**48.9%**
Follow too closely	0	-	1,439	16.0%	2,861	6.3%	**4,300**	**7.9%**
Turning improperly	3	4.4%	702	7.8%	1,692	3.7%	**2,397**	**4.4%**
Passing improperly	3	4.4%	25	0.3%	72	0.2%	**100**	**0.2%**
Changing lanes improperly	2	2.9%	354	3.9%	1,606	3.5%	**1,962**	**3.6%**
Fail to yield right-of-way	7	10.3%	768	8.5%	1,327	2.9%	**2,102**	**3.8%**
Disobey traffic control device/officer	7	10.3%	221	2.5%	193	0.4%	**421**	**0.8%**
Drive wrong way on roadway	1	1.5%	3	<0.1%	7	<0.1%	**11**	**<0.1%**
Passing a vehicle at pedestrian X-walk	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Back unsafely	0	-	245	2.7%	2,791	6.1%	**3,036**	**5.5%**
Parking improperly	0	-	11	0.1%	115	0.3%	**126**	**0.2%**
Lost control/Drive off road	5	7.4%	287	3.2%	1,394	3.1%	**1,686**	**3.1%**
Driverless vehicle ran out of control	0	-	2	<0.1%	17	<0.1%	**19**	**<0.1%**
Leave stop sign before safe to do so	3	4.4%	268	3.0%	489	1.1%	**760**	**1.4%**
Failed to signal	0	-	4	<0.1%	4	<0.1%	**8**	**<0.1%**
Take avoiding action	2	2.9%	63	0.7%	366	0.8%	**431**	**0.8%**
Driver inexperience	0	-	23	0.3%	85	0.2%	**108**	**0.2%**
Pedestrian error/confusion	3	4.4%	21	0.2%	41	<0.1%	**65**	**0.1%**
NET Speed	18	26.5%	604	6.7%	2,281	5.0%	**2,903**	**5.3%**
Exceeding speed limit	9	13.2%	1	<0.1%	2	<0.1%	**12**	**<0.1%**
Driving too fast for conditions	6	8.8%	597	6.6%	2,272	5.0%	**2,875**	**5.3%**
Unsafe operating speed (Too fast or too slow)	4	5.9%	7	<0.1%	10	<0.1%	**21**	**<0.1%**
NET Distracted driving	32	47.1%	2,911	32.4%	10,979	24.0%	**13,922**	**25.4%**
Careless Driving	28	41.2%	2,841	31.6%	10,841	23.7%	**13,710**	**25.0%**
Distraction/Inattention	9	13.2%	135	1.5%	289	0.6%	**433**	**0.8%**

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Contributing Factor	2019 Collision Severity						2019 Total Collisions	% of 2019 Total Collisions
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Human Condition - Apparently Normal	23	33.8%	4,282	47.6%	15,256	33.4%	**19,561**	**35.7%**
Any Human Condition	22	32.4%	82	0.9%	104	0.2%	**208**	**0.4%**
Loss of consciousness/Blackout prior to collision	3	4.4%	8	<0.1%	8	<0.1%	**19**	**<0.1%**
Extreme fatigue/Fell asleep	0	-	18	0.2%	26	<0.1%	**44**	**<0.1%**
Defective eyesight	0	-	2	<0.1%	2	<0.1%	**4**	**<0.1%**
Defective hearing	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	8	<0.1%	3	<0.1%	**11**	**<0.1%**
Physical disability	0	-	0	-	0	-	**0**	**-**
Mental disability	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Mental confusion/Inability to remember	1	1.5%	6	<0.1%	9	<0.1%	**16**	**<0.1%**
Sudden illness	1	1.5%	2	<0.1%	2	<0.1%	**5**	**<0.1%**
Exceed hours of service (commercial drivers only)	0	-	1	<0.1%	0	-	**1**	**<0.1%**
NET Impaired	19	27.9%	42	0.5%	58	0.1%	**119**	**0.2%**
Ability impaired alcohol	13	19.1%	35	0.4%	45	<0.1%	**93**	**0.2%**
Ability impaired drugs	4	5.9%	7	<0.1%	3	<0.1%	**14**	**<0.1%**
Had been drinking/Suspected alcohol use	7	10.3%	4	<0.1%	11	<0.1%	**22**	**<0.1%**
No Apparent (Vehicle) Defect	36	52.9%	8,457	94.1%	41,877	91.6%	**50,370**	**92.0%**
Any Vehicle Defect	0	-	19	0.2%	220	0.5%	**239**	**0.4%**
Defective brakes	0	-	3	<0.1%	12	<0.1%	**15**	**<0.1%**
Defective steering	0	-	3	<0.1%	3	<0.1%	**6**	**<0.1%**
Defective headlights	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Defective brake lights	0	-	1	<0.1%	5	<0.1%	**6**	**<0.1%**
Defective lighting (unspecified)	0	-	0	-	0	-	**0**	**-**
Defective engine controls/drive train	0	-	0	-	3	<0.1%	**3**	**<0.1%**
Defective suspension/wheels	0	-	2	<0.1%	42	<0.1%	**44**	**<0.1%**
Defective tires	0	-	4	<0.1%	53	0.1%	**57**	**0.1%**
Tow hitch/yoke defective	0	-	0	-	6	<0.1%	**6**	**<0.1%**
Defective exhaust system	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Hood/tailgate/door/covering opened	0	-	0	-	8	<0.1%	**8**	**<0.1%**
Defective glazing (obscured windows)	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Vehicle modifications	0	-	3	<0.1%	1	<0.1%	**4**	**<0.1%**
Fire	0	-	0	-	3	<0.1%	**3**	**<0.1%**
Overloaded/oversized	0	-	0	-	2	<0.1%	**2**	**<0.1%**
Load shifted/spilled	0	-	1	<0.1%	18	<0.1%	**19**	**<0.1%**

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Contributing Factor	2019 Collision Severity						2019 Total Collisions	% of 2019 Total Collisions
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Jack-knife/trailer swing	0	-	2	<0.1%	57	0.1%	**59**	**0.1%**
Hydroplaning tires	0	-	0	-	5	<0.1%	**5**	**<0.1%**
Any Environmental Condition	14	20.6%	697	7.8%	3,779	8.3%	**4,490**	**8.2%**
Animal action - Wild	2	2.9%	57	0.6%	1,243	2.7%	**1,302**	**2.4%**
Animal action - Domestic	0	-	11	0.1%	44	<0.1%	**55**	**0.1%**
Slippery road surface	3	4.4%	441	4.9%	1,825	4.0%	**2,269**	**4.1%**
Snow drift	0	-	15	0.2%	108	0.2%	**123**	**0.2%**
Obstruction/debris on roadway	0	-	11	0.1%	233	0.5%	**244**	**0.4%**
View obstructed/limited	3	4.4%	82	0.9%	145	0.3%	**230**	**0.4%**
Glare/reflection	1	1.5%	20	0.2%	30	<0.1%	**51**	**<0.1%**
Construction zone	0	-	4	<0.1%	13	<0.1%	**17**	**<0.1%**
Defective driving surface	0	-	14	0.2%	69	0.2%	**83**	**0.2%**
Shoulders defective	0	-	0	-	3	<0.1%	**3**	**<0.1%**
Lane markings inadequate	0	-	1	<0.1%	3	<0.1%	**4**	**<0.1%**
Defective/inoperative traffic control device	0	-	3	<0.1%	8	<0.1%	**11**	**<0.1%**
Weather	7	10.3%	37	0.4%	75	0.2%	**119**	**0.2%**
Pedestrian corridor in use	1	1.5%	18	0.2%	18	<0.1%	**37**	**<0.1%**
Uninvolved vehicle	1	1.5%	4	<0.1%	15	<0.1%	**20**	**<0.1%**
Uninvolved pedestrian	0	-	8	<0.1%	1	<0.1%	**9**	**<0.1%**
Presence of prior accident	0	-	1	<0.1%	6	<0.1%	**7**	**<0.1%**
No Contributing Factor(s) Identified	2	2.9%	279	3.1%	556	1.2%	**837**	**1.5%**
Not Stated	0	-	5	<0.1%	23	<0.1%	**28**	**<0.1%**
Total	68	100%	8,992	100%	45,695	100%	**54,755**	**100.0%**

*Note: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-1a Contributing Factors to a Collision by Collision Severity for Previous Five Years

Table 9-1a

Contributing Factors to a Collision by Collision Severity: 2014-2018 Average

Contributing Factor	2014-2018 Average Count				
	Fatal	Injury	PDO	Total Collisions	% of Total Collisions
Driver Action - Driving Properly and Human Condition - Apparently Normal	32	7,706	24,091	31,829	68.9%
Driver Action - Driving properly	1	124	309	434	0.9%
Any Driver Action	54	6,788	20,171	27,013	58.4%
Following too closely	1	2,319	4,015	6,334	13.7%
Turning improperly	2	753	1,731	2,486	5.4%
Passing improperly	2	31	116	149	0.3%
Changing lanes improperly	<1	354	1,624	1,978	4.3%
Fail to yield right-of-way	7	812	1,492	2,311	5.0%
Disobey traffic control device/officer	5	232	259	495	1.1%
Drive wrong way on roadway	3	8	15	26	<0.1%
Passing a vehicle at pedestrian X-walk	-	<1	<1	<1	<0.1%
Back unsafely	<1	226	2,955	3,181	6.9%
Parking improperly	<1	12	150	162	0.4%
Lost control/Drive off road	11	326	1,047	1,384	3.0%
Driverless vehicle ran out of control	<1	8	29	38	<0.1%
Leave stop sign before safe to do so	3	313	532	848	1.8%
Failed to signal	-	7	13	20	<0.1%
Take avoiding action	1	87	402	490	1.1%
Driver inexperience	2	44	124	170	0.4%
Pedestrian error/confusion	4	26	34	64	0.1%
NET Speed	15	691	2,315	3,021	6.5%
Exceeding speed limit	7	10	18	36	<0.1%
Driving too fast for conditions	6	671	2,279	2,957	6.4%
Unsafe operating speed (Too fast or too slow)	3	13	19	35	<0.1%
NET Distracted driving	22	2,702	9,084	11,808	25.5%
Careless Driving	17	2,577	8,817	11,410	24.7%
Distraction/Inattention	7	212	491	709	1.5%
Human Condition - Apparently Normal	13	2,917	10,132	13,062	28.3%
Any Human Condition	26	111	141	278	0.6%
Loss of consciousness/Blackout prior to collision	2	25	17	44	<0.1%
Extreme fatigue/Fell asleep	1	22	45	68	0.1%
Defective eyesight	<1	1	1	3	<0.1%
Defective hearing	<1	-	<1	<1	<0.1%
Medical disability	-	8	6	14	<0.1%
Physical disability	<1	<1	2	3	<0.1%
Mental disability	<1	3	1	5	<0.1%
Mental confusion/Inability to remember	-	12	9	21	<0.1%
Sudden illness	<1	4	3	7	<0.1%
Exceed hours of service (commercial drivers only)	-	-	-	-	-
NET Impaired	22	48	65	134	0.3%
Ability impaired alcohol	15	36	53	104	0.2%
Ability impaired drugs	2	3	3	8	<0.1%
Had been drinking/Suspected alcohol use	7	12	12	31	<0.1%
No Apparent (Vehicle) Defect	33	8,328	29,514	37,875	81.9%
Any Vehicle Defect	2	32	254	288	0.6%
Defective brakes	<1	7	17	24	<0.1%
Defective steering	-	1	6	7	<0.1%
Defective headlights	-	<1	<1	<1	<0.1%
Defective brake lights	<1	1	4	6	<0.1%
Defective lighting (unspecified)	<1	<1	1	2	<0.1%

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Contributing Factor	2014-2018 Average Count				
	Fatal	Injury	PDO	Total Collisions	% of Total Collisions
Defective engine controls/drive train	-	2	6	7	<0.1%
Defective suspension/wheels	-	3	47	50	0.1%
Defective tires	<1	7	72	79	0.2%
Tow hitch/yoke defective	-	2	14	16	<0.1%
Defective exhaust system	-	-	-	-	-
Hood/tailgate/door/covering opened	<1	<1	5	6	<0.1%
Defective glazing (obscured windows)	-	<1	1	2	<0.1%
Vehicle modifications	-	<1	1	1	<0.1%
Fire	-	1	1	2	<0.1%
Overloaded/oversized	-	<1	4	4	<0.1%
Load shifted/spilled	-	2	20	23	<0.1%
Jack-knife/trailer swing	<1	2	56	58	0.1%
Hydroplaning tires	<1	1	4	5	<0.1%
Any Environmental Condition	9	681	4,437	5,127	11.1%
Animal action - Wild	<1	110	2,425	2,535	5.5%
Animal action - Domestic	-	10	41	51	0.1%
Slippery road surface	3	377	1,299	1,679	3.6%
Snow drift	<1	12	82	94	0.2%
Obstruction/debris on roadway	<1	17	202	220	0.5%
View obstructed/limited	2	60	135	198	0.4%
Glare/reflection	<1	12	26	38	<0.1%
Construction zone	-	5	15	19	<0.1%
Defective driving surface	<1	15	100	115	0.2%
Shoulders defective	<1	2	5	7	<0.1%
Lane markings inadequate	-	1	4	5	<0.1%
Defective/inoperative traffic control device	-	7	8	14	<0.1%
Weather	2	55	131	189	0.4%
Pedestrian corridor in use	<1	13	12	26	<0.1%
Uninvolved vehicle	-	9	17	25	<0.1%
Uninvolved pedestrian	-	4	3	7	<0.1%
Presence of prior accident	<1	2	2	3	<0.1%
No Contributing Factor(s) Identified	6	385	818	1,210	2.6%
Not Stated	<1	13	38	50	0.1%
Total	72	9,350	36,801	46,222	100%

Note: Counts of collisions in the 2014-2018 average may not add to the total due to rounding.
*Note: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

While contributing factors are recorded for each vehicle and/or driver involved in a collision, examining contributing factors at the driver level does not reveal the full detail of what may have caused the collision overall. To understand the **contributing factors to a collision**, contributing factors recorded for each vehicle and/or driver involved in the collision are examined at the collision level, that is, rather than at the individual driver level. In this analysis (presented in Table 9-1 and Table 9-1a), all factors noted as contributing to the collision overall are examined.

In 2019, 53% of **all collisions** have at least one driver noted as having an at-fault contributing factor[2]. Most fatal collisions (91%) have at least one driver with an at-fault contributing factor while 71% of injury collisions do. In the previous five year (2014 to 2018) annual average, 66% of all collisions have at least one driver noted as having an at-fault contributing factor, including 86% of fatal collisions and nearly 76% of injury collisions.

In 2019:

- A driver action is a contributing factor in 49% of all collisions (78% of fatal collisions; 69% of injury collisions; 45% of PDO collisions);
- A human condition is a contributing factor in 0.4% of all collisions (32% of fatal collisions; 1% of injury collisions; 0.2% of PDO collisions);
- Environmental conditions are contributing factors in 8% of all collisions (21% of fatal collisions; 8% of injury collisions; 8% of PDO collisions); and,
- Some vehicle defect is noted as contributing factor in 0.4% of all collisions, with no fatal collisions.

In the five year (2014 to 2018) annual average:

- 58% of all collisions have at least one driver noted as having a driver action (75% of fatal collisions; 73% of injury collisions; 55% of PDO collisions);
- 1% of all collisions have at least one driver noted as having a human condition (36% of fatal collisions; 1% of injury collisions; 0.4% of PDO collisions);
- 11% of all collisions have an environmental condition noted as contributing to the collision (13% of fatal collisions; 7% of injury collisions; 12% of PDO collisions); and,
- 1% of collisions have a vehicle defect noted as contributing to the collision, including 2 fatal collisions each year.

The most prevalent **contributing factors recorded for collisions** in 2019 include:

- Distracted driving – 25% of all collisions (47% fatal; 32% injury; 24% PDO);
- “Following too closely” – 8% of all collisions (no fatal; 16% injury; 6% PDO);
- “Backing unsafely” – nearly 6% of all collisions (no fatal; 3% injury; 6% PDO);
- Speed – 5% of all collisions (nearly 27% fatal; 7% injury; 5% PDO);
- “Turning improperly” – 4% of all collisions (4% fatal; 8% injury; 4% PDO);
- “Slippery road surface” – 4% of all collisions (4% fatal; 5% injury; 4% PDO);
- “Fail to yield right-of-way” – 4% of all collisions (10% fatal; nearly 9% injury; 3% PDO);
- “Changing lanes improperly” – 4% of all collisions (3% fatal; 4% injury; nearly 4% PDO);
- “Lost control/Drive off the road” – 3% of all collisions (7% fatal; 3% injury; 3% PDO); and,
- The actions of a wild animal – 2% of all collisions (3% fatal; 1% injury; 3% PDO).

NOTE: For a detailed count of contributing factors recorded for collisions occurring in each year from 2014 to 2019, please refer to “*Table 9-6 Historical Summary of Contributing Factors to a Collision*” at the end of this section.

[2] An “at-fault contributing factor” is an indication that some action or condition of the driver, vehicle or environment has been recorded as contributing to the collision. It excludes indications of the driver “driving properly” and being “apparently normal”.

Table 9-2 Contributing Factors for Victims of a Collision by Casualty Type

Table 9-2
Contributing Factors for Each Victim of a Collision by Casualty Type: 2019

Contributing Factor	2019 Casualty Type								**2019 Total Casualties**	**% of 2019 Total Casualties**
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Other Injuries	% of Total Other Injuries	Total Injuries	% of Total Injuries		
Driver Action - Driving Properly and Human Condition - Apparently Normal	28	36.8%	216	58.7%	9,697	86.6%	9,913	85.7%	**9,941**	**85.4%**
Driver Action - Driving properly	1	1.3%	5	1.4%	40	0.4%	45	0.4%	**46**	**0.4%**
Any Driver Action	59	77.6%	309	84.0%	7,873	70.3%	8,182	70.7%	**8,241**	**70.8%**
Following too closely	0	-	22	6.0%	1,924	17.2%	1,946	16.8%	**1,946**	**16.7%**
Turning improperly	3	3.9%	39	10.6%	906	8.1%	945	8.2%	**948**	**8.1%**
Passing improperly	3	3.9%	6	1.6%	33	0.3%	39	0.3%	**42**	**0.4%**
Changing lanes improperly	2	2.6%	10	2.7%	446	4.0%	456	3.9%	**458**	**3.9%**
Fail to yield right-of-way	7	9.2%	66	17.9%	1,003	9.0%	1,069	9.2%	**1,076**	**9.2%**
Disobey traffic control device/officer	9	11.8%	20	5.4%	326	2.9%	346	3.0%	**355**	**3.0%**
Drive wrong way on roadway	1	1.3%	2	0.5%	4	<0.1%	6	<0.1%	**7**	**<0.1%**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	0	-	**0**	**-**
Back unsafely	0	-	2	0.5%	281	2.5%	283	2.4%	**283**	**2.4%**
Parking improperly	0	-	0	-	13	0.1%	13	0.1%	**13**	**0.1%**
Lost control/Drive off road	6	7.9%	38	10.3%	321	2.9%	359	3.1%	**365**	**3.1%**
Driverless vehicle ran out of control	0	-	1	0.3%	3	<0.1%	4	<0.1%	**4**	**<0.1%**
Leave stop sign before safe to do so	3	3.9%	15	4.1%	342	3.1%	357	3.1%	**360**	**3.1%**
Failed to signal	0	-	0	-	4	<0.1%	4	<0.1%	**4**	**<0.1%**
Take avoiding action	4	5.3%	9	2.4%	63	0.6%	72	0.6%	**76**	**0.7%**
Driver inexperience	0	-	4	1.1%	25	0.2%	29	0.3%	**29**	**0.2%**
Pedestrian error/confusion	4	5.3%	6	1.6%	21	0.2%	27	0.2%	**31**	**0.3%**
NET Speed	22	28.9%	48	13.0%	745	6.7%	793	6.9%	**815**	**7.0%**
Exceeding speed limit	11	14.5%	3	0.8%	2	<0.1%	5	<0.1%	**16**	**0.1%**
Driving too fast for conditions	8	10.5%	40	10.9%	738	6.6%	778	6.7%	**786**	**6.7%**
Unsafe operating speed (Too fast or too slow)	5	6.6%	5	1.4%	6	<0.1%	11	<0.1%	**16**	**0.1%**
NET Distracted driving	33	43.4%	138	37.5%	3,649	32.6%	3,787	32.7%	**3,820**	**32.8%**
Careless Driving	29	38.2%	128	34.8%	3,562	31.8%	3,690	31.9%	**3,719**	**31.9%**
Distraction/Inattention	10	13.2%	18	4.9%	178	1.6%	196	1.7%	**206**	**1.8%**

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Contributing Factor	2019 Casualty Type								2019 Total Casualties	% of 2019 Total Casualties
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Other Injuries	% of Total Other Injuries	Total Injuries	% of Total Injuries		
Human Condition - Apparently Normal	24	31.6%	182	49.5%	5,424	48.4%	5,606	48.5%	**5,630**	**48.3%**
Any Human Condition	25	32.9%	33	9.0%	98	0.9%	131	1.1%	**156**	**1.3%**
Loss of consciousness/Blackout prior to collision	3	3.9%	3	0.8%	9	<0.1%	12	0.1%	**15**	**0.1%**
Extreme fatigue/Fell asleep	0	-	3	0.8%	20	0.2%	23	0.2%	**23**	**0.2%**
Defective eyesight	0	-	2	0.5%	1	<0.1%	3	<0.1%	**3**	**<0.1%**
Defective hearing	0	-	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	8	2.2%	2	<0.1%	10	<0.1%	**10**	**<0.1%**
Physical disability	0	-	0	-	0	-	0	-	**0**	**-**
Mental disability	0	-	0	-	0	-	0	-	**0**	**-**
Mental confusion/Inability to remember	1	1.3%	1	0.3%	7	<0.1%	8	<0.1%	**9**	**<0.1%**
Sudden illness	1	1.3%	2	0.5%	1	<0.1%	3	<0.1%	**4**	**<0.1%**
Exceed hours of service (commercial drivers only)	0	-	1	0.3%	0	-	1	<0.1%	**1**	**<0.1%**
NET Impaired	22	28.9%	18	4.9%	59	0.5%	77	0.7%	**99**	**0.9%**
Ability impaired alcohol	16	21.1%	13	3.5%	52	0.5%	65	0.6%	**81**	**0.7%**
Ability impaired drugs	5	6.6%	8	2.2%	6	<0.1%	14	0.1%	**19**	**0.2%**
Had been drinking/Suspected alcohol use	7	9.2%	2	0.5%	5	<0.1%	7	<0.1%	**14**	**0.1%**
No Apparent (Vehicle) Defect	38	50.0%	303	82.3%	10,635	94.9%	10,938	94.5%	**10,976**	**94.3%**
Any Vehicle Defect	0	-	2	0.5%	21	0.2%	23	0.2%	**23**	**0.2%**
Defective brakes	0	-	1	0.3%	3	<0.1%	4	<0.1%	**4**	**<0.1%**
Defective steering	0	-	0	-	3	<0.1%	3	<0.1%	**3**	**<0.1%**
Defective headlights	0	-	0	-	0	-	0	-	**0**	**-**
Defective brake lights	0	-	0	-	1	<0.1%	1	<0.1%	**1**	**<0.1%**
Defective lighting (unspecified)	0	-	0	-	0	-	0	-	**0**	**-**
Defective engine controls/drive train	0	-	0	-	0	-	0	-	**0**	**-**
Defective suspension/wheels	0	-	0	-	2	<0.1%	2	<0.1%	**2**	**<0.1%**
Defective tires	0	-	1	0.3%	3	<0.1%	4	<0.1%	**4**	**<0.1%**
Tow hitch/yoke defective	0	-	0	-	0	-	0	-	**0**	**-**
Defective exhaust system	0	-	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	0	-	0	-	**0**	**-**
Defective glazing (obscured windows)	0	-	0	-	0	-	0	-	**0**	**-**
Vehicle modifications	0	-	0	-	4	<0.1%	4	<0.1%	**4**	**<0.1%**
Fire	0	-	0	-	0	-	0	-	**0**	**-**
Overloaded/oversized	0	-	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	0	-	0	-	1	<0.1%	1	<0.1%	**1**	**<0.1%**

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Contributing Factor	2019 Casualty Type								2019 Total Casualties	% of 2019 Total Casualties
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Other Injuries	% of Total Other Injuries	Total Injuries	% of Total Injuries		
Jack-knife/trailer swing	0	-	0	-	4	<0.1%	4	<0.1%	**4**	**<0.1%**
Hydroplaning tires	0	-	0	-	0	-	0	-	**0**	**-**
Any Environmental Condition	17	22.4%	45	12.2%	847	7.6%	892	7.7%	**909**	**7.8%**
Animal action - Wild	3	3.9%	3	0.8%	64	0.6%	67	0.6%	**70**	**0.6%**
Animal action - Domestic	0	-	1	0.3%	16	0.1%	17	0.1%	**17**	**0.1%**
Slippery road surface	5	6.6%	19	5.2%	546	4.9%	565	4.9%	**570**	**4.9%**
Snow drift	0	-	3	0.8%	22	0.2%	25	0.2%	**25**	**0.2%**
Obstruction/debris on roadway	0	-	0	-	20	0.2%	20	0.2%	**20**	**0.2%**
View obstructed/limited	3	3.9%	7	1.9%	94	0.8%	101	0.9%	**104**	**0.9%**
Glare/reflection	1	1.3%	3	0.8%	25	0.2%	28	0.2%	**29**	**0.2%**
Construction zone	0	-	0	-	4	<0.1%	4	<0.1%	**4**	**<0.1%**
Defective driving surface	0	-	5	1.4%	13	0.1%	18	0.2%	**18**	**0.2%**
Shoulders defective	0	-	0	-	0	-	0	-	**0**	**-**
Lane markings inadequate	0	-	0	-	2	<0.1%	2	<0.1%	**2**	**<0.1%**
Defective/inoperative traffic control device	0	-	1	0.3%	3	<0.1%	4	<0.1%	**4**	**<0.1%**
Weather	8	10.5%	7	1.9%	40	0.4%	47	0.4%	**55**	**0.5%**
Pedestrian corridor in use	1	1.3%	2	0.5%	19	0.2%	21	0.2%	**22**	**0.2%**
Uninvolved vehicle	1	1.3%	1	0.3%	5	<0.1%	6	<0.1%	**7**	**<0.1%**
Uninvolved pedestrian	0	-	1	0.3%	7	<0.1%	8	<0.1%	**8**	**<0.1%**
Presence of prior accident	0	-	0	-	1	<0.1%	1	<0.1%	**1**	**<0.1%**
No Contributing Factor(s) Identified	2	2.6%	14	3.8%	369	3.3%	383	3.3%	**385**	**3.3%**
Not Stated	0	-	0	-	5	<0.1%	5	<0.1%	**5**	**<0.1%**
Total	76	100%	368	100.0%	11,201	100.0%	11,569	100.0%	**11,645**	**100.0%**

*Note: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each casualty type will add to more than the total victims of that casualty type.
"Other Injuries" includes injuries defined as "Minor", Minimal" and "Other", or undefined in severity.

Table 9-2a Contributing Factors for Victims of a Collision by Casualty Type for Previous Five Years

Table 9-2a
Contributing Factors for Each Victim of a Collision by Casualty Type: 2014-2018 Average

Contributing Factor	2014-2018 Average Count of Casualties					
	Killed	Serious Injury	Other Injuries	Total Injuries	Total Casualties	% of Total Casualties
Driver Action - Driving Properly and Human Condition - Apparently Normal	36	244	9,936	10,180	10,216	83.7%
Driver Action - Driving properly	1	8	171	179	181	1.5%
Any Driver Action	60	327	8,667	8,994	9,054	74.1%
Following too closely	1	29	3,058	3,087	3,088	25.3%
Turning improperly	3	38	988	1,026	1,029	8.4%
Passing improperly	2	4	38	42	44	0.4%
Changing lanes improperly	<1	7	427	435	435	3.6%
Fail to yield right-of-way	8	50	1,090	1,140	1,148	9.4%
Disobey traffic control device/officer	5	22	339	361	366	3.0%
Drive wrong way on roadway	4	3	14	17	21	0.2%
Passing a vehicle at pedestrian X-walk	-	-	<1	<1	<1	<0.1%
Back unsafely	<1	3	259	261	262	2.1%
Parking improperly	<1	<1	13	14	14	0.1%
Lost control/Drive off road	11	48	357	405	417	3.4%
Driverless vehicle ran out of control	<1	<1	10	11	11	<0.1%
Leave stop sign before safe to do so	4	24	408	432	435	3.6%
Failed to signal	-	<1	8	9	9	<0.1%
Take avoiding action	1	8	96	104	105	0.9%
Driver inexperience	2	6	52	58	60	0.5%
Pedestrian error/confusion	4	5	24	30	34	0.3%
NET Speed	18	56	848	904	922	7.5%
Exceeding speed limit	8	8	12	20	28	0.2%
Driving too fast for conditions	7	45	823	868	875	7.2%
Unsafe operating speed (Too fast or too slow)	3	5	15	19	23	0.2%
NET Distracted driving	25	147	3,428	3,575	3,600	29.5%
Careless Driving	19	132	3,259	3,392	3,411	27.9%
Distraction/Inattention	7	23	288	311	318	2.6%
Human Condition - Apparently Normal	14	102	3,721	3,823	3,837	31.4%
Any Human Condition	29	44	127	171	200	1.6%
Loss of consciousness/Blackout prior to collision	2	10	21	31	33	0.3%
Extreme fatigue/Fell asleep	1	5	22	27	28	0.2%
Defective eyesight	<1	1	2	3	3	<0.1%
Defective hearing	<1	-	<1	<1	<1	<0.1%
Medical disability	-	2	10	11	11	<0.1%
Physical disability	<1	<1	<1	<1	1	<0.1%
Mental disability	<1	2	3	5	5	<0.1%
Mental confusion/Inability to remember	-	4	11	15	15	0.1%
Sudden illness	<1	1	4	5	5	<0.1%
Exceed hours of service (commercial drivers only)	-	-	-	-	-	-
NET Impaired	25	24	66	90	115	0.9%
Ability impaired alcohol	17	16	48	65	82	0.7%
Ability impaired drugs	3	2	5	7	9	<0.1%
Had been drinking/Suspected alcohol use	8	7	17	24	32	0.3%
No Apparent (Vehicle) Defect	37	280	10,614	10,894	10,931	89.5%
Any Vehicle Defect	2	3	39	42	44	0.4%
Defective brakes	<1	<1	9	9	10	<0.1%
Defective steering	-	-	3	3	3	<0.1%
Defective headlights	-	-	<1	<1	<1	<0.1%

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Contributing Factor	2014-2018 Average Count of Casualties					
	Killed	Serious Injury	Other Injuries	Total Injuries	Total Casualties	% of Total Casualties
Defective brake lights	<1	<1	2	2	2	<0.1%
Defective lighting (unspecified)	<1	-	1	1	2	<0.1%
Defective engine controls/drive train	-	<1	2	2	2	<0.1%
Defective suspension/wheels	-	-	4	4	4	<0.1%
Defective tires	<1	1	8	9	10	<0.1%
Tow hitch/yoke defective	-	<1	2	2	2	<0.1%
Defective exhaust system	-	-	-	-	-	-
Hood/tailgate/door/covering opened	<1	-	1	1	1	<0.1%
Defective glazing (obscured windows)	-	-	1	1	1	<0.1%
Vehicle modifications	-	-	<1	<1	<1	<0.1%
Fire	-	<1	1	1	1	<0.1%
Overloaded/oversized	-	-	<1	<1	<1	<0.1%
Load shifted/spilled	-	-	3	3	3	<0.1%
Jack-knife/trailer swing	<1	<1	2	2	2	<0.1%
Hydroplaning tires	<1	<1	1	1	2	<0.1%
Any Environmental Condition	10	54	821	876	886	7.3%
Animal action - Wild	<1	8	122	130	130	1.1%
Animal action - Domestic	-	<1	13	13	13	0.1%
Slippery road surface	3	24	468	492	495	4.0%
Snow drift	<1	2	14	16	16	0.1%
Obstruction/debris on roadway	<1	1	21	22	23	0.2%
View obstructed/limited	3	8	77	84	87	0.7%
Glare/reflection	<1	<1	15	16	16	0.1%
Construction zone	-	<1	5	6	6	<0.1%
Defective driving surface	<1	3	16	19	20	0.2%
Shoulders defective	<1	<1	3	3	4	<0.1%
Lane markings inadequate	-	<1	2	2	2	<0.1%
Defective/inoperative traffic control device	-	1	9	10	10	<0.1%
Weather	2	7	65	72	74	0.6%
Pedestrian corridor in use	<1	2	12	14	15	0.1%
Uninvolved vehicle	-	<1	9	10	10	<0.1%
Uninvolved pedestrian	-	-	4	4	4	<0.1%
Presence of prior accident	<1	-	3	3	3	<0.1%
No Contributing Factor(s) Identified	6	23	482	505	511	4.2%
Not Stated	<1	1	13	14	14	0.1%
Total	79	415	11,718	12,133	12,212	100%

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.
*Note: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each casualty type will add to more than the total victims of that casualty type.
"Other Injuries" includes injuries defined as "Minor", Minimal" and "Other", or undefined in severity.

Contributing factors recorded for each vehicle and/or driver involved in the collision are examined at the **victim level** in Table 9-2 and Table 9-2a. In this analysis, the contributing factors recorded for any driver involved in a fatal or injury collision is considered as contributing to the person being killed or injured.

In 2019, at-fault contributing factors are recorded for nearly 73% of all **casualties**. At-fault contributing factors are recorded for:

- 92% of people killed;
- Nearly 91% of people seriously injured; and,
- 72% of victims with other injuries (including minor, minimal and undefined injuries).

In 2019, driver actions are recorded for 71% of **all victims** (78% of people killed and 84% of people seriously injured) while human conditions are recorded for 1% of all victims (33% of people killed and 9% of people seriously injured). Environmental conditions are recorded as a contributing factor for 8% of all victims (22% of people killed and 12% of people seriously injured).

In the previous five year (2014 to 2018) annual average, driver actions are recorded for 74% of all victims (75% of people killed and 79% of people seriously injured), while human conditions are recorded for 2% of all victims (36% of people killed and 11% of people seriously injured). Environmental conditions are recorded as a contributing factor for 7% of all victims (13% of people killed and 13% of people seriously injured).

The most prevalent contributing factors recorded for collisions where **people are killed or seriously injured** in 2019 include:

- Distracted driving – 43% of people killed and nearly 38% of people seriously injured;
- Speed – 29% of people killed and 13% of people seriously injured;
- Impaired – 29% of people killed and 5% of people seriously injured;
- “Disobey traffic control device/officer” – 12% of people killed and 5% of people seriously injured;
- Weather – nearly 11% of people killed and 2% of people seriously injured;
- “Fail to yield right-of-way” – 9% of people killed and 18% of people seriously injured;
- “Lost control/Drive off the road” – 8% of people killed and 10% of people seriously injured;
- “Slippery road surface” – 7% of people killed and 5% of people seriously injured;
- “Take avoiding action” – 5% of people killed and 2% of people seriously injured;
- “Pedestrian error/confusion” – 5% of people killed and 2% of people seriously injured;
- “Turning improperly” – 4% of people killed and 11% of people seriously injured;
- “Passing improperly” – 4% of people killed and 2% of people seriously injured;
- “Leave stop sign before safe to do so” – 4% of people killed and 4% of people seriously injured;
- “Loss of consciousness” – 4% of people killed and 1% of people seriously injured;
- “Animal action – Wild” – 4% of people killed and 1% of people seriously injured; and,
- “View obstructed/limited” – 4% of people killed and 2% of people seriously injured.

NOTE: For a detailed count of contributing factors recorded for collisions occurring in each year from 2014 to 2019, please refer to “*Table 9-7 Historical Summary of Contributing Factors Recorded for Victims of Collisions*” at the end of this section.

Table 9-3 Drivers Involved in Traffic Collisions by Contributing Factor and Collision Severity

Table 9-3

Drivers Involved in Collisions by Contributing Factors and Collision Severity: 2019

Contributing Factor	2019 Collision Severity						**2019 Total Drivers**	**% of 2019 Total Drivers**
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Driver Action - Driving Properly and Human Condition - Apparently Normal	29	29.9%	8,379	55.5%	31,192	57.4%	**39,600**	**56.9%**
Driver Action - Driving properly	1	1.0%	24	0.2%	210	0.4%	**235**	**0.3%**
Any Driver Action	54	55.7%	6,269	41.5%	20,730	38.1%	**27,053**	**38.9%**
Following too closely	0	-	1,441	9.5%	2,863	5.3%	**4,304**	**6.2%**
Turning improperly	3	3.1%	700	4.6%	1,693	3.1%	**2,396**	**3.4%**
Passing improperly	3	3.1%	25	0.2%	74	0.1%	**102**	**0.1%**
Changing lanes improperly	2	2.1%	358	2.4%	1,634	3.0%	**1,994**	**2.9%**
Fail to yield right-of-way	6	6.2%	756	5.0%	1,323	2.4%	**2,085**	**3.0%**
Disobey traffic control device/officer	7	7.2%	220	1.5%	193	0.4%	**420**	**0.6%**
Drive wrong way on roadway	1	1.0%	3	<0.1%	7	<0.1%	**11**	**<0.1%**
Passing a vehicle at pedestrian X-walk	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Back unsafely	0	-	273	1.8%	2,808	5.2%	**3,081**	**4.4%**
Parking improperly	0	-	11	<0.1%	97	0.2%	**108**	**0.2%**
Lost control/Drive off road	5	5.2%	287	1.9%	1,392	2.6%	**1,684**	**2.4%**
Driverless vehicle ran out of control	0	-	2	<0.1%	15	<0.1%	**17**	**<0.1%**
Leave stop sign before safe to do so	3	3.1%	269	1.8%	494	0.9%	**766**	**1.1%**
Failed to signal	0	-	4	<0.1%	4	<0.1%	**8**	**<0.1%**
Take avoiding action	2	2.1%	59	0.4%	364	0.7%	**425**	**0.6%**
Driver inexperience	0	-	23	0.2%	85	0.2%	**108**	**0.2%**
Pedestrian error/confusion	1	1.0%	8	<0.1%	22	<0.1%	**31**	**<0.1%**
NET Speed	18	18.6%	604	4.0%	2,278	4.2%	**2,900**	**4.2%**
Exceeding speed limit	9	9.3%	1	<0.1%	2	<0.1%	**12**	**<0.1%**
Driving too fast for conditions	6	6.2%	597	4.0%	2,269	4.2%	**2,872**	**4.1%**
Unsafe operating speed (Too fast or too slow)	4	4.1%	7	<0.1%	10	<0.1%	**21**	**<0.1%**
NET Distracted driving	31	32.0%	2,917	19.3%	10,962	20.2%	**13,910**	**20.0%**
Careless Driving	28	28.9%	2,853	18.9%	10,834	19.9%	**13,715**	**19.7%**
Distraction/Inattention	7	7.2%	126	0.8%	274	0.5%	**407**	**0.6%**

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Contributing Factor	2019 Collision Severity						2019 Total Drivers	% of 2019 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Human Condition - Apparently Normal	17	17.5%	4,255	28.2%	15,358	28.2%	**19,630**	**28.2%**
Any Human Condition	18	18.6%	78	0.5%	95	0.2%	**191**	**0.3%**
Loss of consciousness/Blackout prior to collision	3	3.1%	8	<0.1%	8	<0.1%	**19**	**<0.1%**
Extreme fatigue/Fell asleep	0	-	18	0.1%	26	<0.1%	**44**	**<0.1%**
Defective eyesight	0	-	2	<0.1%	1	<0.1%	**3**	**<0.1%**
Defective hearing	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	7	<0.1%	2	<0.1%	**9**	**<0.1%**
Physical disability	0	-	0	-	0	-	**0**	**-**
Mental disability	0	-	0	-	0	-	**0**	**-**
Mental confusion/Inability to remember	1	1.0%	6	<0.1%	9	<0.1%	**16**	**<0.1%**
Sudden illness	1	1.0%	2	<0.1%	2	<0.1%	**5**	**<0.1%**
Exceed hours of service (commercial drivers only)	0	-	1	<0.1%	0	-	**1**	**<0.1%**
NET Impaired	15	15.5%	39	0.3%	51	<0.1%	**105**	**0.2%**
Ability impaired alcohol	12	12.4%	32	0.2%	41	<0.1%	**85**	**0.1%**
Ability impaired drugs	4	4.1%	5	<0.1%	2	<0.1%	**11**	**<0.1%**
Had been drinking/Suspected alcohol use	4	4.1%	4	<0.1%	8	<0.1%	**16**	**<0.1%**
No Apparent (Vehicle) Defect	46	47.4%	12,805	84.8%	47,020	86.5%	**59,871**	**86.1%**
Any Vehicle Defect	0	-	19	0.1%	218	0.4%	**237**	**0.3%**
Defective brakes	0	-	3	<0.1%	12	<0.1%	**15**	**<0.1%**
Defective steering	0	-	3	<0.1%	3	<0.1%	**6**	**<0.1%**
Defective headlights	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Defective brake lights	0	-	1	<0.1%	5	<0.1%	**6**	**<0.1%**
Defective lighting (unspecified)	0	-	0	-	0	-	**0**	**-**
Defective engine controls/drive train	0	-	0	-	3	<0.1%	**3**	**<0.1%**
Defective suspension/wheels	0	-	2	<0.1%	42	<0.1%	**44**	**<0.1%**
Defective tires	0	-	4	<0.1%	53	<0.1%	**57**	**<0.1%**
Tow hitch/yoke defective	0	-	0	-	6	<0.1%	**6**	**<0.1%**
Defective exhaust system	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Hood/tailgate/door/covering opened	0	-	0	-	8	<0.1%	**8**	**<0.1%**
Defective glazing (obscured windows)	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Vehicle modifications	0	-	3	<0.1%	1	<0.1%	**4**	**<0.1%**
Fire	0	-	0	-	3	<0.1%	**3**	**<0.1%**
Overloaded/oversized	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Load shifted/spilled	0	-	1	-	18	<0.1%	**3**	**<0.1%**

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Contributing Factor	2019 Collision Severity						2019 Total Drivers	% of 2019 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Jack-knife/trailer swing	0	-	2	<0.1%	56	0.1%	**58**	**<0.1%**
Hydroplaning tires	0	-	0	-	5	<0.1%	**5**	**<0.1%**
Any Environmental Condition	13	13.4%	663	4.4%	3,759	6.9%	**4,435**	**6.4%**
Animal action - Wild	3	3.1%	57	0.4%	1,243	2.3%	**1,303**	**1.9%**
Animal action - Domestic	0	-	10	<0.1%	44	<0.1%	**54**	**<0.1%**
Slippery road surface	3	3.1%	439	2.9%	1,824	3.4%	**2,266**	**3.3%**
Snow drift	0	-	15	<0.1%	108	0.2%	**123**	**0.2%**
Obstruction/debris on roadway	0	-	11	<0.1%	232	0.4%	**243**	**0.3%**
View obstructed/limited	2	2.1%	72	0.5%	137	0.3%	**211**	**0.3%**
Glare/reflection	1	1.0%	19	0.1%	27	<0.1%	**47**	**<0.1%**
Construction zone	0	-	1	<0.1%	12	<0.1%	**13**	**<0.1%**
Defective driving surface	0	-	14	<0.1%	69	0.1%	**83**	**0.1%**
Shoulders defective	0	-	0	-	3	<0.1%	**3**	**<0.1%**
Lane markings inadequate	0	-	1	<0.1%	3	<0.1%	**4**	**<0.1%**
Defective/inoperative traffic control device	0	-	2	<0.1%	8	<0.1%	**10**	**<0.1%**
Weather	5	5.2%	28	0.2%	72	0.1%	**105**	**0.2%**
Pedestrian corridor in use	0	-	5	<0.1%	9	<0.1%	**14**	**<0.1%**
Uninvolved vehicle	0	-	2	<0.1%	14	<0.1%	**16**	**<0.1%**
Uninvolved pedestrian	0	-	2	<0.1%	1	<0.1%	**3**	**<0.1%**
Presence of prior accident	0	-	1	<0.1%	6	<0.1%	**7**	**<0.1%**
No Contributing Factor(s) Identified	0	-	235	1.6%	496	0.9%	**731**	**1.1%**
Not Stated	0	-	2	<0.1%	19	<0.1%	**21**	**<0.1%**
Total	97	100%	15,095	100.0%	54,372	100.0%	**69,564**	**100.0%**

*Note: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-3a Drivers Involved in Traffic Collisions by Contributing Factor and Collision Severity for Previous Five Years

Table 9-3a

Drivers Involved in Collisions by Contributing Factors and Collision Severity: 2014-2018 Average

Contributing Factor	2014-2018 Average Count of Drivers				
	Fatal	Injury	PDO	Total Drivers	% of Total Drivers
Driver Action - Driving Properly and Human Condition - Apparently Normal	37	8,531	22,976	31,543	49.3%
Driver Action - Driving properly	1	124	309	434	0.7%
Any Driver Action	52	6,853	20,365	27,270	42.6%
Following too closely	<1	2,326	4,026	6,353	9.9%
Turning improperly	2	755	1,738	2,495	3.9%
Passing improperly	2	31	117	150	0.2%
Changing lanes improperly	<1	357	1,665	2,023	3.2%
Fail to yield right-of-way	6	807	1,498	2,311	3.6%
Disobey traffic control device/officer	4	231	257	492	0.8%
Drive wrong way on roadway	3	7	14	25	<0.1%
Passing a vehicle at pedestrian X-walk	-	<1	<1	<1	<0.1%
Back unsafely	<1	240	2,977	3,217	5.0%
Parking improperly	<1	11	141	152	0.2%
Lost control/Drive off road	11	325	1,047	1,383	2.2%
Driverless vehicle ran out of control	<1	8	26	35	<0.1%
Leave stop sign before safe to do so	3	314	536	854	1.3%
Failed to signal	-	7	13	20	<0.1%
Take avoiding action	<1	84	400	485	0.8%
Driver inexperience	2	44	123	169	0.3%
Pedestrian error/confusion	1	11	22	34	<0.1%
NET Speed	16	690	2,314	3,019	4.7%
Exceeding speed limit	7	10	18	35	<0.1%
Driving too fast for conditions	7	670	2,279	2,956	4.6%
Unsafe operating speed (Too fast or too slow)	3	12	19	33	<0.1%
NET Distracted driving	22	2,704	9,076	11,801	18.4%
Careless Driving	16	2,581	8,812	11,409	17.8%
Distraction/Inattention	7	208	483	698	1.1%
Human Condition - Apparently Normal	10	2,873	10,176	13,059	20.4%
Any Human Condition	23	109	136	268	0.4%
Loss of consciousness/Blackout prior to collision	2	25	17	44	<0.1%
Extreme fatigue/Fell asleep	1	22	45	68	0.1%
Defective eyesight	<1	1	1	3	<0.1%
Defective hearing	-	-	<1	<1	<0.1%
Medical disability	-	8	6	14	<0.1%
Physical disability	-	<1	1	2	<0.1%
Mental disability	<1	3	1	5	<0.1%
Mental confusion/Inability to remember	-	11	9	20	<0.1%
Sudden illness	<1	4	3	7	<0.1%
Exceed hours of service (commercial drivers only)	-	-	-	-	-
NET Impaired	20	45	60	125	0.2%
Ability impaired alcohol	14	34	49	97	0.2%
Ability impaired drugs	2	3	3	7	<0.1%
Had been drinking/Suspected alcohol use	6	11	11	27	<0.1%
No Apparent (Vehicle) Defect	45	11,394	32,885	44,323	69.3%
Any Vehicle Defect	2	31	253	286	0.4%
Defective brakes	<1	7	16	23	<0.1%
Defective steering	-	1	6	7	<0.1%

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Contributing Factor	2014-2018 Average Count of Drivers				
	Fatal	Injury	PDO	Total Drivers	% of Total Drivers
Defective headlights	-	<1	<1	<1	<0.1%
Defective brake lights	<1	1	4	6	<0.1%
Defective lighting (unspecified)	<1	<1	1	2	<0.1%
Defective engine controls/drive train	-	2	6	7	<0.1%
Defective suspension/wheels	-	3	47	50	<0.1%
Defective tires	<1	7	72	79	0.1%
Tow hitch/yoke defective	-	2	14	16	<0.1%
Defective exhaust system	-	-	-	-	-
Hood/tailgate/door/covering opened	<1	<1	5	6	<0.1%
Defective glazing (obscured windows)	-	<1	1	2	<0.1%
Vehicle modifications	-	<1	1	1	<0.1%
Fire	-	1	1	2	<0.1%
Overloaded/oversized	-	<1	4	4	<0.1%
Load shifted/spilled	-	2	20	22	<0.1%
Jack-knife/trailer swing	<1	2	56	58	<0.1%
Hydroplaning tires	<1	1	4	5	<0.1%
Any Environmental Condition	9	664	4,427	5,100	8.0%
Animal action - Wild	<1	110	2,424	2,535	4.0%
Animal action - Domestic	-	10	41	51	<0.1%
Slippery road surface	4	377	1,300	1,680	2.6%
Snow drift	<1	12	82	95	0.1%
Obstruction/debris on roadway	-	17	202	219	0.3%
View obstructed/limited	2	55	132	188	0.3%
Glare/reflection	<1	11	25	36	<0.1%
Construction zone	-	4	14	18	<0.1%
Defective driving surface	<1	14	100	115	0.2%
Shoulders defective	<1	1	5	7	<0.1%
Lane markings inadequate	-	1	4	5	<0.1%
Defective/inoperative traffic control device	-	6	7	13	<0.1%
Weather	2	52	130	185	0.3%
Pedestrian corridor in use	<1	5	7	13	<0.1%
Uninvolved vehicle	-	6	15	21	<0.1%
Uninvolved pedestrian	-	1	2	3	<0.1%
Presence of prior accident	<1	2	1	3	<0.1%
No Contributing Factor(s) Identified	2	329	680	1,011	1.6%
Not Stated	-	9	34	42	<0.1%
Total	102	16,249	47,629	63,980	100%

Note: Counts of drivers in the 2014-2018 average may not add to the total due to rounding.
*Note: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-3 and Table 9-3a examine the contributing factors recorded for each driver involved in a collision.

In 2019, more than half of the **drivers involved in traffic collisions** (57%) are recorded as not being at-fault in the collision. Almost all of these drivers are noted in the traffic accident report (TAR) as both "driving properly" and being "apparently normal" at the time of a collision. One percent of drivers have no contributing factors recorded for the collision.

- 35% of the drivers involved in a fatal collision are noted as not being at-fault.
- 56% of the drivers in an injury collision are noted as not being at-fault.
- 58% of the drivers in a PDO collision are noted as not being at-fault.

Driver actions are recorded for 39% of the **drivers involved in traffic collisions** in 2019. This is a slight decrease from the previous five year (2014 to 2018) annual average, where driver actions are recorded for 43% of the drivers involved. In 2019:

- 56% of the drivers involved in **fatal collisions** have a driver action recorded, including:
  - 32% who are driving while distracted (including "careless driving" and "distraction/ inattention");
  - 19% who had speed noted as a factor (including "exceeding speed limit", "driving too fast for conditions" and "unsafe operating speed");
  - 7% who "disobey traffic control device/officer"; and,
  - 6% who "fail to yield right-of-way".
- Nearly 42% of the drivers involved in **injury collisions** have a driver action recorded, including:
  - 19% who are driving while distracted;
  - Nearly 10% who are "following too closely";
  - 5% who "fail to yield right-of-way"; and,
  - 5% who are "turning improperly".
- 38% of the drivers involved in **PDO collisions** have a driver action recorded, including:
  - 20% who are driving while distracted;
  - 5% who are "following too closely"; and,
  - 5% who "back unsafely".

Human conditions are recorded for 0.3% of the **drivers involved in traffic collisions** in 2019, a slight decrease from the previous five year (2014 to 2018) annual average (0.4%). In 2019:

- 19% of the **drivers involved in fatal collisions** have a human condition recorded, including nearly 16% who are impaired (including "ability impaired by alcohol", "ability impaired by drugs" and "had been drinking/suspected alcohol use"); and,
- 0.5% of the **drivers involved in injury collisions** have a human condition recorded, including 0.3% who are impaired.

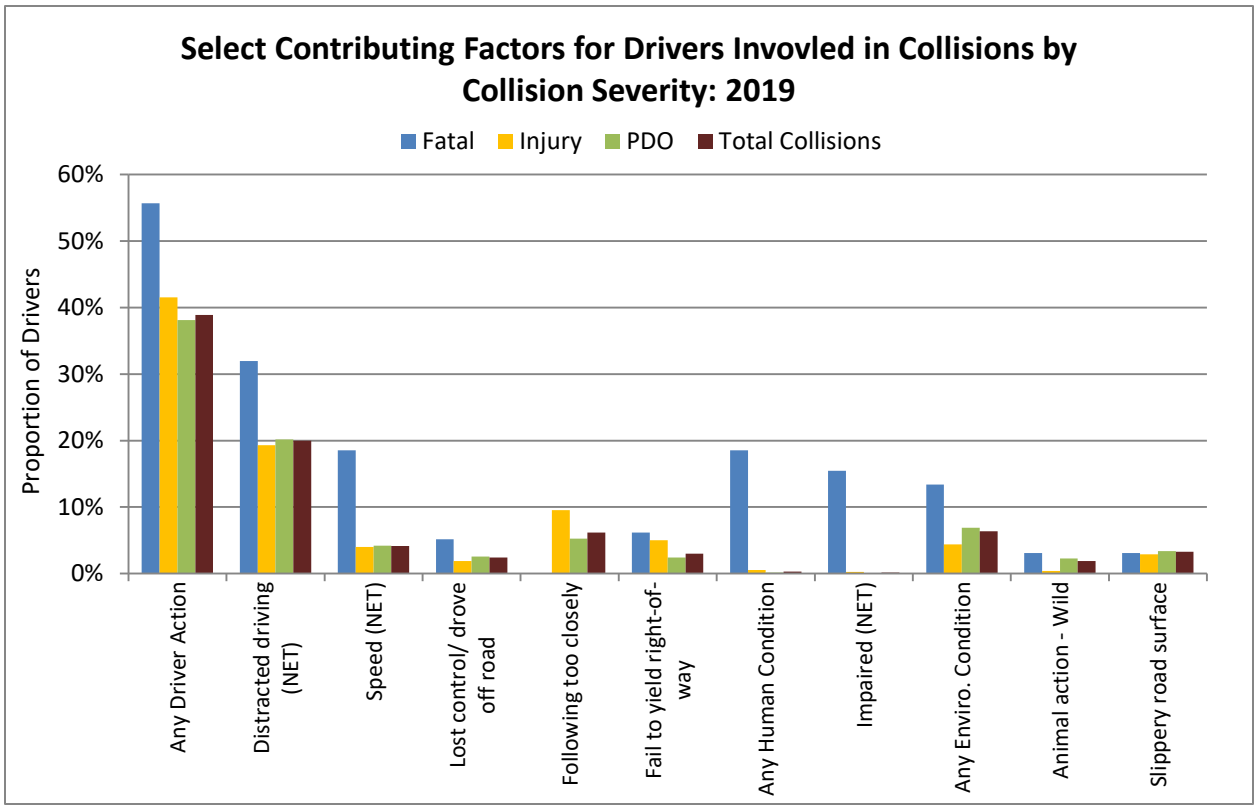
Some vehicle defect is recorded for 0.3% of drivers involved in traffic collisions in 2019 (0.4% in the previous five years, 2014 to 2018, annual average), with no drivers in a fatal collision.

Environmental conditions are recorded as contributing factors for 6% of **drivers involved in traffic collisions** (13% of fatal, 4% of injury, and 7% of PDO) in 2019; compared to 8% in the previous five year (2014 to 2018) annual average. In 2019:

- 3% of drivers have "slippery road surface" recorded as a contributing factor (3% of fatal; 3% of injury; 3% PDO); and,
- 2% of drivers have "animal action – wild" recorded as a contributing factor (3% fatal; 0.4% of injury; 2% of PDO).

NOTE: For a detailed count of contributing factors recorded for drivers involved in collisions occurring in each year from 2014 to 2019, please refer to "*Table 9-8 Historical Summary of Contributing Factors for Drivers Involved in Collisions*" at the end of this section.

Figure 9-1 Select Contributing Factors for Drivers Involved in Collisions by Collision Severity



While many contributing factors are recorded for the **drivers involved in traffic collisions**, generally there are only a few that account for a large proportion of traffic collisions in Manitoba. In 2019, driver actions and human conditions are most often recorded for fatal traffic collisions, with the most frequent of these being distracted driving, speed, impaired driving, failure to yield right-of-way, and losing control of the vehicle. Driver actions and environmental conditions (including distracted driving, following too closely, speed, and slippery road surface) are the most often recorded contributing factors for PDO collisions.

Table 9-4 Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Collisions Severity

Table 9-4

Driver Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Collision Severity: 2019, 2014-2018 Average

Contributing Factor	2019 Collision Severity			**2019 Total**	2014-2018 Average			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Any Driver Action	0.6	67.2	222.2	**289.9**	0.6	76.6	227.7	304.9
Following too closely	-	15.4	30.7	**46.1**	<0.1	26.0	45.0	71.0
Turning improperly	<0.1	7.5	18.1	**25.7**	<0.1	8.4	19.4	27.9
Passing improperly	<0.1	0.3	0.8	**1.1**	<0.1	0.3	1.3	1.7
Changing lanes improperly	<0.1	3.8	17.5	**21.4**	<0.1	4.0	18.6	22.6
Fail to yield right-of-way	<0.1	8.1	14.2	**22.3**	<0.1	9.0	16.7	25.8
Disobey traffic control device/officer	<0.1	2.4	2.1	**4.5**	<0.1	2.6	2.9	5.5
Drive wrong way on roadway	<0.1	<0.1	<0.1	**0.1**	<0.1	<0.1	0.2	0.3
Passing a vehicle at pedestrian X-walk	-	-	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Back unsafely	-	2.9	30.1	**33.0**	<0.1	2.7	33.3	36.0
Parking improperly	-	0.1	1.0	**1.2**	<0.1	0.1	1.6	1.7
Lost control/Drive off road	<0.1	3.1	14.9	**18.0**	0.1	3.6	11.7	15.5
Driverless vehicle ran out of control	-	<0.1	0.2	**0.2**	<0.1	<0.1	0.3	0.4
Leave stop sign before safe to do so	<0.1	2.9	5.3	**8.2**	<0.1	3.5	6.0	9.5
Failed to signal	-	<0.1	<0.1	**<0.1**	-	<0.1	0.1	0.2
Take avoiding action	<0.1	0.6	3.9	**4.6**	<0.1	0.9	4.5	5.4
Driver inexperience	-	0.2	0.9	**1.2**	<0.1	0.5	1.4	1.9
Pedestrian error/confusion	<0.1	<0.1	0.2	**0.3**	<0.1	0.1	0.2	0.4
NET Speed	0.2	6.5	24.4	**31.1**	0.2	7.7	25.9	33.8
Exceeding speed limit	<0.1	<0.1	<0.1	**0.1**	<0.1	0.1	0.2	0.4
Driving too fast for conditions	<0.1	6.4	24.3	**30.8**	<0.1	7.5	25.5	33.0
Unsafe operating speed (Too fast or too slow)	<0.1	<0.1	0.1	**0.2**	<0.1	0.1	0.2	0.4
NET Distracted driving	0.3	31.3	117.5	**149.1**	0.2	30.2	101.5	131.9
Careless Driving	0.3	30.6	116.1	**147.0**	0.2	28.9	98.5	127.6
Distraction/Inattention	<0.1	1.4	2.9	**4.4**	<0.1	2.3	5.4	7.8

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Contributing Factor	2019 Collision Severity			2019 Total	2014-2018 Average			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Any Human Condition	0.2	0.8	1.0	**2.0**	0.3	1.2	1.5	3.0
Loss of consciousness/Blackout prior to collision	<0.1	<0.1	<0.1	**0.2**	<0.1	0.3	0.2	0.5
Extreme fatigue/Fell asleep	-	0.2	0.3	**0.5**	<0.1	0.2	0.5	0.8
Defective eyesight	-	<0.1	<0.1	**<0.1**	<0.1	<0.1	<0.1	<0.1
Defective hearing	-	-	-	**-**	-	-	<0.1	<0.1
Medical disability	-	<0.1	<0.1	**<0.1**	-	<0.1	<0.1	0.2
Physical disability	-	-	-	**-**	-	<0.1	<0.1	<0.1
Mental disability	-	-	-	**-**	<0.1	<0.1	<0.1	<0.1
Mental confusion/Inability to remember	<0.1	<0.1	<0.1	**0.2**	-	0.1	0.1	0.2
Sudden illness	<0.1	<0.1	<0.1	**<0.1**	<0.1	<0.1	<0.1	<0.1
Exceed hours of service (commercial drivers only)	-	<0.1	-	**<0.1**	-	-	-	-
NET Impaired	0.2	0.4	0.5	**1.1**	0.2	0.5	0.7	1.4
Ability impaired alcohol	0.1	0.3	0.4	**0.9**	0.2	0.4	0.5	1.1
Ability impaired drugs	<0.1	<0.1	<0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Had been drinking/Suspected alcohol use	<0.1	<0.1	<0.1	**0.2**	<0.1	0.1	0.1	0.3
Any Vehicle Defect	-	0.2	2.3	**2.5**	<0.1	0.4	2.8	3.2
Defective brakes	-	<0.1	0.1	**0.2**	<0.1	<0.1	0.2	0.3
Defective steering	-	<0.1	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Defective headlights	-	-	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Defective brake lights	-	<0.1	<0.1	**<0.1**	<0.1	<0.1	<0.1	<0.1
Defective lighting (unspecified)	-	-	-	**-**	<0.1	<0.1	<0.1	<0.1
Defective engine controls/drive train	-	-	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Defective suspension/wheels	-	<0.1	0.5	**0.5**	-	<0.1	0.5	0.6
Defective tires	-	<0.1	0.6	**0.6**	<0.1	<0.1	0.8	0.9
Tow hitch/yoke defective	-	-	<0.1	**<0.1**	-	<0.1	0.2	0.2
Defective exhaust system	-	-	<0.1	**<0.1**	-	-	-	-
Hood/tailgate/door/covering opened	-	-	<0.1	**<0.1**	<0.1	<0.1	<0.1	<0.1
Defective glazing (obscured windows)	-	-	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Vehicle modifications	-	<0.1	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Fire	-	-	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Overloaded/oversized	-	-	<0.1	**<0.1**	-	<0.1	<0.1	<0.1

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Contributing Factor	2019 Collision Severity			2019 Total	2014-2018 Average			
	Fatal	Injury	PDO		Fatal	Injury	PDO	Total
Load shifted/spilled	-	<0.1	0.2	**<0.1**	-	<0.1	0.2	0.2
Jack-knife/trailer swing	-	<0.1	0.6	**0.6**	<0.1	<0.1	0.6	0.7
Hydroplaning tires	-	-	<0.1	**<0.1**	<0.1	<0.1	<0.1	<0.1
Any Environmental Condition	0.1	7.1	40.3	**47.5**	0.1	7.4	49.5	57.0
Animal action - Wild	<0.1	0.6	13.3	**14.0**	<0.1	1.2	27.1	28.3
Animal action - Domestic	-	0.1	0.5	**0.6**	-	0.1	0.5	0.6
Slippery road surface	<0.1	4.7	19.5	**24.3**	<0.1	4.2	14.5	18.8
Snow drift	-	0.2	1.2	**1.3**	<0.1	0.1	0.9	1.1
Obstruction/debris on roadway	-	0.1	2.5	**2.6**	-	0.2	2.3	2.4
View obstructed/limited	<0.1	0.8	1.5	**2.3**	<0.1	0.6	1.5	2.1
Glare/reflection	<0.1	0.2	0.3	**0.5**	<0.1	0.1	0.3	0.4
Construction zone	-	<0.1	0.1	**0.1**	-	<0.1	0.2	0.2
Defective driving surface	-	0.2	0.7	**0.9**	<0.1	0.2	1.1	1.3
Shoulders defective	-	-	<0.1	**<0.1**	<0.1	<0.1	<0.1	<0.1
Lane markings inadequate	-	<0.1	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Defective/inoperative traffic control device	-	<0.1	<0.1	**0.1**	-	<0.1	<0.1	0.1
Weather	<0.1	0.3	0.8	**1.1**	<0.1	0.6	1.5	2.1
Pedestrian corridor in use	-	<0.1	<0.1	**0.2**	<0.1	<0.1	<0.1	0.1
Uninvolved vehicle	-	<0.1	0.2	**0.2**	-	<0.1	0.2	0.2
Uninvolved pedestrian	-	<0.1	<0.1	**<0.1**	-	<0.1	<0.1	<0.1
Presence of prior accident	-	<0.1	<0.1	**<0.1**	<0.1	<0.1	<0.1	<0.1

Recognizing that counts of drivers involved in collisions could be impacted either positively or negatively by changing population statistics, relative involvement rates per 10,000 licensed drivers is examined to provide a standardized collision rate comparison. This eliminates the effect of changing population size and focuses on the rate at which drivers are involved in collisions instead of simply a raw count of the number of drivers involved overall.

In 2019, the **driver involvement rate** (per 10,000 licensed drivers) in traffic collisions where:

- Any driver action is a contributing factor is 289.9, decreased by 5% from the previous five years (304.9);
- Any human condition is a contributing factor is 2.0, decreased by 32% from the previous five years (3.0);
- Some environmental condition is a contributing factor is 47.5, decreased by 17% from the previous five years (57.0);
- Distracted driving is a contributing factor is 149.1, increased by 13% from the previous five years (131.9);
- “Following too closely” is a contributing factor is 46.1, decreased by 35% from the previous five years (71.0);
- “Backing unsafely” is a contributing factor is 33.0, decreased by 8% from the previous five years (36.0);
- Speed is a contributing factor is 31.1, decreased by 8% from the previous five years (33.8);
- “Turning improperly” is a contributing factor is 25.7, decreased by 8% from the previous five years (27.9);
- “Slippery road surface” is a contributing factor is 24.3, increased by 29% from the previous five years (18.8);
- “Fail to yield right-of-way” is a contributing factor is 22.3, decreased by nearly 14% from the previous five years (25.8);
- “Changing lanes improperly” is a contributing factor is 21.4, decreased by nearly 6% from the previous five years (22.6);
- “Lost control/Drove off road” is a contributing factor is 18.0, increased by 17% from the previous five years (15.5); and,
- “Animal action - wild” is a contributing factor is 14.0, decreased by 51% from the previous five years (28.3); and,
- Impaired is a contributing factor is 1.1, decreased by 20% from the previous five years (1.4).

In 2019, the **driver involvement rate** (per 10,000 licensed drivers) in **fatal traffic collisions** where:

- A driver action is a contributing factor is 0.6, relatively the same as in the previous five years (0.6);
- Distracted driving is a contributing factor is 0.3, up from 0.2 in the previous five years;
- Speed is a contributing factor is 0.2, relatively the same as in the previous five years (0.2);
- A human condition is a contributing factor is 0.2, down from 0.3 in the previous five years;
- Impaired is a contributing factor is 0.2, relatively the same as in the previous five years (0.2); and,
- An environmental condition is a contributing factor is 0.1, relatively the same as in the previous five years (0.1).

Table 9-5 Driver Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Age

Table 9-5

Driver Involvement Rate (per 10,000 Licensed Drivers) in All Collisions by Contributing Factors and Age Group: 2019

Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Any Driver Action	472.7	472.1	344.5	296.6	260.9	215.8	195.1
Following too closely	87.8	93.2	63.3	49.1	36.2	28.7	19.9
Turning improperly	41.7	39.4	30.2	24.8	22.8	19.6	19.8
Passing improperly	1.7	0.5	1.7	1.0	1.0	1.0	0.8
Changing lanes improperly	34.6	35.1	23.7	22.3	18.1	16.1	16.4
Fail to yield right-of-way	36.1	34.6	25.2	22.6	20.3	14.9	18.7
Disobey traffic control device/officer	5.2	6.5	5.3	5.6	4.2	2.8	3.5
Drive wrong way on roadway	0.2	0.3	0.2	-	<0.1	-	0.2
Passing a vehicle at pedestrian X-walk	-	-	<0.1	-	-	-	-
Back unsafely	28.8	28.5	27.5	32.9	37.4	37.3	33.8
Parking improperly	1.0	1.5	1.4	0.9	1.3	1.3	0.7
Lost control/Drive off road	39.4	34.2	24.7	19.1	15.2	10.5	7.2
Driverless vehicle ran out of control	-	0.5	0.2	0.2	0.1	0.1	0.1
Leave stop sign before safe to do so	10.8	13.1	8.4	9.3	6.7	6.5	7.0
Failed to signal	0.2	0.1	<0.1	<0.1	<0.1	<0.1	0.1
Take avoiding action	7.9	9.1	5.0	5.4	4.0	3.2	2.2
Driver inexperience	5.6	2.7	1.1	1.0	0.9	0.4	0.4
Pedestrian error/confusion	0.6	0.7	0.4	0.4	0.2	0.3	0.2
NET Speed	66.3	64.0	41.1	32.9	25.7	19.4	11.4
Exceeding speed limit	0.2	0.1	0.4	-	0.1	0.1	-
Driving too fast for conditions	65.9	63.8	40.3	32.7	25.5	19.1	11.4
Unsafe operating speed (Too fast or too slow)	0.4	0.1	0.6	0.3	<0.1	0.2	-
NET Distracted driving	243.5	235.8	176.2	147.8	130.9	114.4	107.5
Careless Driving	238.5	232.5	174.1	146.0	129.2	113.0	105.5
Distraction/Inattention	9.2	6.4	4.6	4.0	4.0	3.2	3.6
Any Human Condition	4.0	4.1	2.7	2.1	1.3	1.1	1.4
Loss of consciousness/Blackout prior to collision	0.2	0.1	0.1	<0.1	0.3	0.3	0.3
Extreme fatigue/Fell asleep	2.3	0.8	0.5	0.4	0.3	0.1	0.3
Defective eyesight	-	-	-	-	-	<0.1	0.1
Defective hearing	-	-	-	-	-	-	-
Medical disability	-	0.1	<0.1	-	0.2	0.1	0.1
Physical disability	-	-	-	-	-	-	-
Mental disability	-	-	-	-	-	-	-
Mental confusion/Inability to remember	-	0.1	0.1	<0.1	-	0.1	0.6
Sudden illness	-	0.1	0.1	-	-	<0.1	<0.1
Exceed hours of service (commercial drivers only)	-	-	-	<0.1	-	-	-
NET Impaired	1.5	2.9	1.9	1.6	0.7	0.4	0.1
Ability impaired alcohol	0.8	2.5	1.5	1.5	0.5	0.3	0.1
Ability impaired drugs	0.6	0.3	0.2	-	<0.1	<0.1	-
Had been drinking/Suspected alcohol use	0.2	0.4	0.3	0.2	<0.1	0.2	-
Any Vehicle Defect	3.1	2.5	1.5	1.5	0.5	0.3	0.1
Defective brakes	0.8	0.1	0.1	-	0.2	0.3	<0.1
Defective steering	-	-	<0.1	0.1	<0.1	<0.1	<0.1
Defective headlights	-	-	-	-	-	-	<0.1
Defective brake lights	-	0.3	-	0.2	<0.1	-	-
Defective lighting (unspecified)	-	-	-	-	-	-	-
Defective engine controls/drive train	0.2	-	-	-	-	-	0.1
Defective suspension/wheels	0.8	0.3	0.8	0.4	0.7	0.4	0.1
Defective tires	0.6	0.9	0.5	0.4	0.6	0.7	0.6
Tow hitch/yoke defective	-	-	-	-	0.1	0.2	<0.1

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Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective exhaust system	0.2	-	-	-	-	-	-
Hood/tailgate/door/covering opened	-	0.1	<0.1	<0.1	0.3	-	<0.1
Defective glazing (obscured windows)	0.2	-	-	-	-	-	-
Vehicle modifications	-	0.1	<0.1	<0.1	-	-	<0.1
Fire	-	0.1	-	-	-	<0.1	<0.1
Overloaded/oversized	-	-	-	-	-	-	<0.1
Load shifted/spilled	-	0.1	0.2	0.3	0.3	0.3	0.1
Jack-knife/trailer swing	0.2	0.7	0.4	0.8	0.8	0.6	0.7
Hydroplaning tires	-	0.3	<0.1	0.1	-	-	-
Any Environmental Condition	69.6	79.7	59.1	53.5	47.1	36.6	21.8
Animal action - Wild	15.0	17.5	14.9	15.2	17.2	14.6	6.8
Animal action - Domestic	0.8	0.7	0.5	0.9	0.5	0.5	0.3
Slippery road surface	42.9	45.3	31.9	27.8	21.4	15.6	10.1
Snow drift	1.7	3.0	1.6	1.7	1.0	1.0	0.4
Obstruction/debris on roadway	2.3	3.8	3.4	3.3	2.6	1.5	1.8
View obstructed/limited	3.3	4.0	3.1	2.3	2.2	1.5	1.1
Glare/reflection	0.4	0.9	0.6	0.6	0.4	0.4	0.3
Construction zone	0.2	-	<0.1	0.1	0.1	0.3	0.1
Defective driving surface	1.9	1.3	1.7	0.6	0.7	0.7	0.3
Shoulders defective	-	-	<0.1	0.1	-	-	-
Lane markings inadequate	-	0.1	<0.1	<0.1	-	-	<0.1
Defective/inoperative traffic control device	-	0.3	0.2	<0.1	<0.1	-	0.2
Weather	1.9	2.5	1.4	1.3	0.8	0.8	0.4
Pedestrian corridor in use	0.2	0.5	0.2	0.1	0.2	<0.1	-
Uninvolved vehicle	-	0.4	0.1	0.1	0.3	0.2	<0.1
Uninvolved pedestrian	-	0.1	-	-	<0.1	<0.1	-
Presence of prior accident	-	-	0.2	0.2	<0.1	-	-

Table 9-5a Driver Involvement Rate (per 10,000 Licensed Drivers) in Collisions by Contributing Factors and Age for Previous Five Years

Table 9-5a

Driver Involvement Rate (per 10,000 Licensed Drivers) in All Collisions by Contributing Factors and Age Group: 2014-2018 Average

Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Any Driver Action	564.5	518.6	368.3	304.4	259.1	212.8	194.0
Following too closely	148.0	144.1	95.3	71.9	57.5	42.3	29.4
Turning improperly	49.5	48.1	32.8	26.2	22.8	19.3	21.6
Passing improperly	3.3	2.9	2.1	1.5	1.4	1.0	1.3
Changing lanes improperly	37.1	36.6	26.0	21.5	18.4	16.8	18.7
Fail to yield right-of-way	45.0	38.8	30.3	24.4	21.8	18.8	21.3
Disobey traffic control device/officer	9.1	9.8	6.8	5.2	4.7	3.7	4.0
Drive wrong way on roadway	0.7	0.4	0.3	0.2	0.2	0.2	0.2
Passing a vehicle at pedestrian X-walk	<0.1	-	<0.1	-	-	-	-
Back unsafely	40.0	31.7	33.2	39.3	39.0	36.8	32.3
Parking improperly	1.6	1.8	2.0	1.7	1.4	1.5	1.8
Lost control/Drive off road	44.4	34.5	20.1	15.1	10.9	7.8	5.3
Driverless vehicle ran out of control	0.8	0.4	0.4	0.5	0.3	0.3	0.3
Leave stop sign before safe to do so	17.6	13.5	10.2	8.8	8.6	7.1	8.5
Failed to signal	0.3	0.3	0.2	0.2	0.2	0.1	0.2
Take avoiding action	10.5	11.0	7.9	5.6	4.3	2.9	2.1
Driver inexperience	12.6	4.7	1.8	1.0	0.6	0.6	0.4
Pedestrian error/confusion	0.6	0.4	0.4	0.5	0.3	0.3	0.2
NET Speed	83.3	68.9	45.2	35.0	26.0	18.3	12.2
Exceeding speed limit	0.9	0.9	0.6	0.5	0.2	0.2	<0.1
Driving too fast for conditions	81.1	67.4	44.2	34.3	25.6	17.9	11.9
Unsafe operating speed (Too fast or too slow)	1.6	0.9	0.4	0.3	0.2	0.2	0.1
NET Distracted driving	238.2	222.0	159.8	130.2	111.3	92.2	88.2
Careless Driving	228.5	214.7	154.5	126.2	107.6	89.6	85.1
Distraction/Inattention	16.3	12.8	9.6	7.2	6.3	5.2	5.5
Any Human Condition	5.6	6.8	4.2	2.5	2.0	1.7	1.9
Loss of consciousness/Blackout prior to collision	0.7	0.8	0.5	0.4	0.4	0.4	0.6
Extreme fatigue/Fell asleep	2.1	2.3	1.2	0.5	0.4	0.3	0.2
Defective eyesight	-	-	<0.1	<0.1	-	<0.1	0.1
Defective hearing	<0.1	-	-	-	-	-	<0.1
Medical disability	-	0.2	0.1	0.1	0.1	0.3	0.2
Physical disability	-	-	<0.1	<0.1	-	<0.1	<0.1
Mental disability	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mental confusion/Inability to remember	0.1	0.3	0.2	0.1	0.1	0.1	0.6
Sudden illness	<0.1	0.1	<0.1	<0.1	<0.1	0.1	0.1
Exceed hours of service (commercial drivers only)	-	-	-	-	-	-	-
NET Impaired	2.6	3.5	2.3	1.4	1.1	0.6	0.2
Ability impaired alcohol	2.0	2.7	1.8	1.1	0.9	0.5	0.2
Ability impaired drugs	0.1	0.1	0.1	0.1	<0.1	<0.1	<0.1
Had been drinking/Suspected alcohol use	0.6	0.8	0.5	0.3	0.2	0.1	<0.1
Any Vehicle Defect	4.0	4.8	3.7	3.4	3.4	2.9	1.6
Defective brakes	0.4	0.5	0.4	0.2	0.2	0.2	0.1
Defective steering	0.2	0.2	<0.1	<0.1	0.2	<0.1	-
Defective headlights	<0.1	<0.1	-	-	-	<0.1	-
Defective brake lights	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Defective lighting (unspecified)	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Defective engine controls/drive train	<0.1	0.3	<0.1	<0.1	<0.1	0.1	<0.1
Defective suspension/wheels	0.7	0.7	0.7	0.5	0.6	0.6	0.3
Defective tires	1.7	1.5	1.2	1.0	0.7	0.7	0.3
Tow hitch/yoke defective	<0.1	0.1	0.1	0.3	0.2	0.2	0.1

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Contributing Factor	Age Group						
	16-19	20-24	25-34	35-44	45-54	55-64	65+
Defective exhaust system	-	-	-	-	-	-	-
Hood/tailgate/door/covering opened	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Defective glazing (obscured windows)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vehicle modifications	-	-	<0.1	<0.1	-	<0.1	-
Fire	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Overloaded/oversized	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Load shifted/spilled	0.1	0.4	0.3	0.2	0.4	0.2	<0.1
Jack-knife/trailer swing	0.3	0.6	0.7	0.7	0.8	0.7	0.4
Hydroplaning tires	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Any Environmental Condition	89.7	95.2	69.3	62.2	55.9	42.6	27.0
Animal action - Wild	33.5	41.2	32.4	32.5	31.3	24.4	13.8
Animal action - Domestic	1.0	1.1	0.8	0.7	0.4	0.3	0.3
Slippery road surface	41.2	36.9	25.1	19.0	15.5	11.3	7.5
Snow drift	1.8	2.0	1.3	1.4	0.9	0.8	0.4
Obstruction/debris on roadway	3.1	3.5	2.8	2.5	2.4	2.2	1.6
View obstructed/limited	3.3	3.2	2.7	2.3	1.9	1.2	1.5
Glare/reflection	0.6	0.6	0.4	0.3	0.4	0.3	0.4
Construction zone	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Defective driving surface	2.7	2.3	1.3	1.3	1.2	1.2	0.4
Shoulders defective	0.2	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lane markings inadequate	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Defective/inoperative traffic control device	0.2	0.3	0.2	<0.1	0.1	0.1	0.1
Weather	3.1	4.5	2.6	2.3	1.8	1.3	0.9
Pedestrian corridor in use	0.2	0.2	0.1	0.2	0.1	0.1	0.1
Uninvolved vehicle	0.4	0.5	0.3	0.3	0.2	<0.1	0.2
Uninvolved pedestrian	-	<0.1	<0.1	<0.1	<0.1	<0.1	-
Presence of prior accident	-	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Younger drivers, especially those under the age of 25, tend to have higher **driver involvement rates** in traffic collisions overall and in collisions where specific contributing factors are noted.

In 2019, the involvement rate in collisions for drivers aged 16 to 19 with:

- Any at-fault contributing factor is:
  - 1.0 times that of drivers aged 20 to 24;
  - 1.3 times that of drivers aged 25 to 34;
  - 1.6 times that of drivers aged 35 to 44; and,
  - 2.0 times that of drivers aged 45 and older.
- A driver action as a contributing factor is:
  - 1.0 times that of drivers aged 20 to 24;
  - 1.4 times that of drivers aged 25 to 34;
  - 1.6 times that of drivers aged 35 to 44; and,
  - 2.1 times that of drivers aged 45 and older.
- A human condition as a contributing factor is:
  - 1.0 times that of drivers aged 20 to 24;
  - 1.5 times that of drivers aged 25 to 34;
  - 1.8 times that of drivers aged 35 to 44; and,
  - 3.1 times that of drivers aged 45 and older.
- “Driver inexperience” as a contributing factor is:
  - 2.1 times that of drivers aged 20 to 24;
  - 5.2 times that of drivers aged 25 to 34;
  - 5.6 times that of drivers aged 35 to 44; and,
  - 9.9 times that of drivers aged 45 and older.

In 2019, the involvement rate in collisions for drivers aged 20 to 24 with:

- Any at-fault contributing factor is:
  - 1.4 times that of drivers aged 25 to 34;
  - 1.6 times that of drivers aged 35 to 44; and,
  - 2.1 times that of drivers aged 45 and older.
- A driver action as a contributing factor is:
  - 1.4 times that of drivers aged 25 to 34;
  - 1.6 times that of drivers aged 35 to 44; and,
  - 2.1 times that of drivers aged 45 and older.
- A human condition as a contributing factor is:
  - 1.5 times that of drivers aged 25 to 34;
  - 1.9 times that of drivers aged 35 to 44; and,
  - 3.2 times that of drivers aged 45 and older.
- "Driver inexperience" as a contributing factor is:
  - 2.5 times that of drivers aged 25 to 34;
  - 2.6 times that of drivers aged 35 to 44; and,
  - 4.6 times that of drivers aged 45 and older.

Table 9-6 Historical Summary of Contributing Factors to a Collision Overall

Table 9-6

Summary of Contributing Factors to a Collision: 2014 to 2019

Contributing Factor	2014 Total Collisions	% of 2014 Total Collisions	2015 Total Collisions	% of 2015 Total Collisions	2016 Total Collisions	% of 2016 Total Collisions	2017 Total Collisions	% of 2017 Total Collisions	2018 Total Collisions	% of 2018 Total Collisions	**2019 Total Collisions**	**% of 2019 Total Collisions**
Driver Action - Driving Properly and Human Condition - Apparently Normal	24,166	59.4%	28,316	68.2%	32,255	71.2%	35,635	68.7%	38,772	74.9%	**41,092**	**75.0%**
Driver Action - Driving properly	789	1.9%	530	1.3%	429	0.9%	214	0.4%	210	0.4%	**238**	**0.4%**
Any Driver Action	26,734	65.7%	25,877	62.3%	26,859	59.3%	28,998	55.9%	26,597	51.4%	**26,801**	**48.9%**
Following too closely	6,581	16.2%	6,958	16.7%	6,763	14.9%	6,280	12.1%	5,090	9.8%	**4,300**	**7.9%**
Turning improperly	2,247	5.5%	2,564	6.2%	2,486	5.5%	2,762	5.3%	2,371	4.6%	**2,397**	**4.4%**
Passing improperly	149	0.4%	151	0.4%	164	0.4%	156	0.3%	124	0.2%	**100**	**0.2%**
Changing lanes improperly	1,770	4.4%	1,914	4.6%	2,080	4.6%	2,149	4.1%	1,977	3.8%	**1,962**	**3.6%**
Fail to yield right-of-way	2,174	5.3%	2,272	5.5%	2,358	5.2%	2,610	5.0%	2,142	4.1%	**2,102**	**3.8%**
Disobey traffic control device/officer	433	1.1%	500	1.2%	527	1.2%	558	1.1%	458	0.9%	**421**	**0.8%**
Drive wrong way on roadway	38	<0.1%	28	<0.1%	18	<0.1%	25	<0.1%	19	<0.1%	**11**	**<0.1%**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	3	<0.1%	0	-	**1**	**<0.1%**
Back unsafely	2,930	7.2%	3,040	7.3%	3,383	7.5%	3,496	6.7%	3,057	5.9%	**3,036**	**5.5%**
Parking improperly	155	0.4%	152	0.4%	181	0.4%	212	0.4%	111	0.2%	**126**	**0.2%**
Lost control/Drive off road	1,415	3.5%	1,589	3.8%	1,403	3.1%	1,347	2.6%	1,168	2.3%	**1,686**	**3.1%**
Driverless vehicle ran out of control	33	<0.1%	38	<0.1%	37	<0.1%	53	0.1%	28	<0.1%	**19**	**<0.1%**
Leave stop sign before safe to do so	1,006	2.5%	844	2.0%	861	1.9%	869	1.7%	661	1.3%	**760**	**1.4%**
Failed to signal	17	<0.1%	21	<0.1%	17	<0.1%	31	<0.1%	14	<0.1%	**8**	**<0.1%**
Take avoiding action	458	1.1%	488	1.2%	522	1.2%	544	1.0%	437	0.8%	**431**	**0.8%**
Driver inexperience	122	0.3%	176	0.4%	176	0.4%	235	0.5%	141	0.3%	**108**	**0.2%**
Pedestrian error/confusion	49	0.1%	55	0.1%	65	0.1%	71	0.1%	78	0.2%	**65**	**0.1%**
NET Speed	3,076	7.6%	3,092	7.4%	2,964	6.5%	3,692	7.1%	2,283	4.4%	**2,903**	**5.3%**
Exceeding speed limit	26	<0.1%	48	0.1%	39	<0.1%	31	<0.1%	34	<0.1%	**12**	**<0.1%**
Driving too fast for conditions	3,018	7.4%	3,005	7.2%	2,890	6.4%	3,643	7.0%	2,227	4.3%	**2,875**	**5.3%**
Unsafe operating speed (Too fast or too slow)	36	<0.1%	48	0.1%	42	<0.1%	23	<0.1%	24	<0.1%	**21**	**<0.1%**
NET Distracted driving	8,468	20.8%	9,463	22.8%	11,086	24.5%	15,403	29.7%	14,618	28.3%	**13,922**	**25.4%**
Careless Driving	8,136	20.0%	8,943	21.5%	10,560	23.3%	15,024	29.0%	14,388	27.8%	**13,710**	**25.0%**
Distraction/Inattention	464	1.1%	716	1.7%	787	1.7%	1,068	2.1%	512	1.0%	**433**	**0.8%**

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Contributing Factor	2014 Total Collisions	% of 2014 Total Collisions	2015 Total Collisions	% of 2015 Total Collisions	2016 Total Collisions	% of 2016 Total Collisions	2017 Total Collisions	% of 2017 Total Collisions	2018 Total Collisions	% of 2018 Total Collisions	**2019 Total Collisions**	**% of 2019 Total Collisions**
Human Condition - Apparently Normal	3,792	9.3%	7,580	18.2%	15,621	34.5%	20,107	38.8%	18,209	35.2%	**19,561**	**35.7%**
Any Human Condition	237	0.6%	297	0.7%	301	0.7%	278	0.5%	279	0.5%	**208**	**0.4%**
Loss of consciousness/Blackout prior to collision	37	<0.1%	43	0.1%	40	<0.1%	54	0.1%	44	<0.1%	**19**	**<0.1%**
Extreme fatigue/Fell asleep	59	0.1%	66	0.2%	79	0.2%	70	0.1%	68	0.1%	**44**	**<0.1%**
Defective eyesight	5	<0.1%	5	<0.1%	4	<0.1%	2	<0.1%	0	-	**4**	**<0.1%**
Defective hearing	0	-	1	<0.1%	2	<0.1%	0	-	1	<0.1%	**0**	**-**
Medical disability	10	<0.1%	20	<0.1%	11	<0.1%	15	<0.1%	15	<0.1%	**11**	**<0.1%**
Physical disability	1	<0.1%	5	<0.1%	4	<0.1%	3	<0.1%	0	-	**0**	**-**
Mental disability	4	<0.1%	5	<0.1%	4	<0.1%	3	<0.1%	7	<0.1%	**1**	**<0.1%**
Mental confusion/Inability to remember	15	<0.1%	28	<0.1%	24	<0.1%	19	<0.1%	18	<0.1%	**16**	**<0.1%**
Sudden illness	5	<0.1%	8	<0.1%	12	<0.1%	6	<0.1%	6	<0.1%	**5**	**<0.1%**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	0	-	**1**	**<0.1%**
NET Impaired	115	0.3%	140	0.3%	145	0.3%	133	0.3%	139	0.3%	**119**	**0.2%**
Ability impaired alcohol	75	0.2%	109	0.3%	110	0.2%	109	0.2%	118	0.2%	**93**	**0.2%**
Ability impaired drugs	7	<0.1%	7	<0.1%	8	<0.1%	8	<0.1%	10	<0.1%	**14**	**<0.1%**
Had been drinking/Suspected alcohol use	38	<0.1%	36	<0.1%	34	<0.1%	27	<0.1%	18	<0.1%	**22**	**<0.1%**
No Apparent (Vehicle) Defect	25,414	62.5%	32,283	77.7%	38,760	85.5%	45,902	88.5%	47,017	90.9%	**50,370**	**92.0%**
Any Vehicle Defect	283	0.7%	300	0.7%	278	0.6%	342	0.7%	238	0.5%	**239**	**0.4%**
Defective brakes	23	<0.1%	22	<0.1%	30	<0.1%	31	<0.1%	14	<0.1%	**15**	**<0.1%**
Defective steering	10	<0.1%	15	<0.1%	2	<0.1%	5	<0.1%	5	<0.1%	**6**	**<0.1%**
Defective headlights	0	-	0	-	0	-	2	<0.1%	1	<0.1%	**1**	**<0.1%**
Defective brake lights	6	<0.1%	5	<0.1%	10	<0.1%	3	<0.1%	5	<0.1%	**6**	**<0.1%**
Defective lighting (unspecified)	3	<0.1%	0	-	2	<0.1%	4	<0.1%	2	<0.1%	**0**	**-**
Defective engine controls/drive train	7	<0.1%	6	<0.1%	9	<0.1%	7	<0.1%	8	<0.1%	**3**	**<0.1%**
Defective suspension/wheels	40	<0.1%	49	0.1%	52	0.1%	58	0.1%	52	0.1%	**44**	**<0.1%**
Defective tires	80	0.2%	74	0.2%	70	0.2%	100	0.2%	70	0.1%	**57**	**0.1%**
Tow hitch/yoke defective	12	<0.1%	25	<0.1%	15	<0.1%	15	<0.1%	13	<0.1%	**6**	**<0.1%**
Defective exhaust system	0	-	0	-	0	-	0	-	0	-	**1**	**<0.1%**
Hood/tailgate/door/covering opened	4	<0.1%	4	<0.1%	13	<0.1%	5	<0.1%	4	<0.1%	**8**	**<0.1%**
Defective glazing (obscured windows)	3	<0.1%	3	<0.1%	2	<0.1%	1	<0.1%	1	<0.1%	**1**	**<0.1%**
Vehicle modifications	1	<0.1%	2	<0.1%	1	<0.1%	1	<0.1%	1	<0.1%	**4**	**<0.1%**
Fire	6	<0.1%	1	<0.1%	3	<0.1%	1	<0.1%	0	-	**3**	**<0.1%**

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Contributing Factor	2014 Total Collisions	% of 2014 Total Collisions	2015 Total Collisions	% of 2015 Total Collisions	2016 Total Collisions	% of 2016 Total Collisions	2017 Total Collisions	% of 2017 Total Collisions	2018 Total Collisions	% of 2018 Total Collisions	**2019 Total Collisions**	**% of 2019 Total Collisions**
Overloaded/oversized	1	<0.1%	4	<0.1%	4	<0.1%	4	<0.1%	7	<0.1%	**2**	**<0.1%**
Load shifted/spilled	21	<0.1%	23	<0.1%	16	<0.1%	37	<0.1%	16	<0.1%	**19**	**<0.1%**
Jack-knife/trailer swing	67	0.2%	63	0.2%	51	0.1%	71	0.1%	40	<0.1%	**59**	**0.1%**
Hydroplaning tires	3	<0.1%	12	<0.1%	6	<0.1%	1	<0.1%	4	<0.1%	**5**	**<0.1%**
Any Environmental Condition	6,823	16.8%	4,000	9.6%	4,556	10.1%	6,528	12.6%	3,726	7.2%	**4,490**	**8.2%**
Animal action - Wild	4,017	9.9%	1,892	4.6%	1,892	4.2%	3,437	6.6%	1,436	2.8%	**1,302**	**2.4%**
Animal action - Domestic	52	0.1%	33	<0.1%	51	0.1%	67	0.1%	52	0.1%	**55**	**0.1%**
Slippery road surface	1,859	4.6%	1,357	3.3%	1,700	3.8%	2,029	3.9%	1,448	2.8%	**2,269**	**4.1%**
Snow drift	163	0.4%	45	0.1%	96	0.2%	98	0.2%	70	0.1%	**123**	**0.2%**
Obstruction/debris on roadway	202	0.5%	191	0.5%	255	0.6%	280	0.5%	172	0.3%	**244**	**0.4%**
View obstructed/limited	190	0.5%	155	0.4%	185	0.4%	235	0.5%	223	0.4%	**230**	**0.4%**
Glare/reflection	27	<0.1%	41	<0.1%	52	0.1%	35	<0.1%	36	<0.1%	**51**	**<0.1%**
Construction zone	19	<0.1%	15	<0.1%	23	<0.1%	21	<0.1%	19	<0.1%	**17**	**<0.1%**
Defective driving surface	118	0.3%	82	0.2%	121	0.3%	137	0.3%	119	0.2%	**83**	**0.2%**
Shoulders defective	10	<0.1%	9	<0.1%	8	<0.1%	3	<0.1%	4	<0.1%	**3**	**<0.1%**
Lane markings inadequate	6	<0.1%	4	<0.1%	7	<0.1%	4	<0.1%	5	<0.1%	**4**	**<0.1%**
Defective/inoperative traffic control device	10	<0.1%	18	<0.1%	13	<0.1%	17	<0.1%	13	<0.1%	**11**	**<0.1%**
Weather	189	0.5%	205	0.5%	198	0.4%	213	0.4%	138	0.3%	**119**	**0.2%**
Pedestrian corridor in use	16	<0.1%	11	<0.1%	26	<0.1%	45	<0.1%	33	<0.1%	**37**	**<0.1%**
Uninvolved vehicle	18	<0.1%	27	<0.1%	32	<0.1%	19	<0.1%	30	<0.1%	**20**	**<0.1%**
Uninvolved pedestrian	3	<0.1%	4	<0.1%	8	<0.1%	13	<0.1%	5	<0.1%	**9**	**<0.1%**
Presence of prior accident	1	<0.1%	3	<0.1%	2	<0.1%	1	<0.1%	10	<0.1%	**7**	**<0.1%**
No Contributing Factor(s) Identified	2,144	5.3%	1,572	3.8%	1,463	3.2%	427	0.8%	442	0.9%	**837**	**1.5%**
Not Stated	14	<0.1%	73	0.2%	74	0.2%	52	0.1%	39	<0.1%	**28**	**<0.1%**
Total	40,672	100%	41,548	100%	45,316	100%	51,844	100%	51,732	100%	**54,755**	**100%**

*Note: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-7 Historical Summary of Contributing Factors Recorded for Victims of Collisions

Table 9-7

Summary of Contributing Factors for Victims (Killed and Injured, Combined) of Collisions: 2014 to 2019

Contributing Factor	2014 Total Victims	% of 2014 Total Victims	2015 Total Victims	% of 2015 Total Victims	2016 Total Victims	% of 2016 Total Victims	2017 Total Victims	% of 2017 Total Victims	2018 Total Victims	% of 2018 Total Victims	**2019 Total Victims**	**% of 2019 Total Victims**
Driver Action - Driving Properly and Human Condition - Apparently Normal	9,367	80.2%	10,041	83.6%	10,726	84.8%	10,639	84.0%	10,309	85.5%	**9,941**	**85.4%**
Driver Action - Driving properly	366	3.1%	255	2.1%	147	1.2%	74	0.6%	61	0.5%	**46**	**0.4%**
Any Driver Action	8,625	73.9%	8,932	74.3%	9,171	72.5%	9,657	76.3%	8,883	73.7%	**8,241**	**70.8%**
Following too closely	3,061	26.2%	3,386	28.2%	3,302	26.1%	3,170	25.0%	2,519	20.9%	**1,946**	**16.7%**
Turning improperly	875	7.5%	1,081	9.0%	1,097	8.7%	1,122	8.9%	970	8.0%	**948**	**8.1%**
Passing improperly	32	0.3%	37	0.3%	63	0.5%	41	0.3%	48	0.4%	**42**	**0.4%**
Changing lanes improperly	366	3.1%	391	3.3%	452	3.6%	522	4.1%	445	3.7%	**458**	**3.9%**
Fail to yield right-of-way	1,081	9.3%	1,142	9.5%	1,120	8.9%	1,281	10.1%	1,116	9.3%	**1,076**	**9.2%**
Disobey traffic control device/officer	307	2.6%	393	3.3%	373	2.9%	409	3.2%	349	2.9%	**355**	**3.0%**
Drive wrong way on roadway	21	0.2%	22	0.2%	17	0.1%	26	0.2%	17	0.1%	**7**	**<0.1%**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	1	<0.1%	0	-	**0**	**-**
Back unsafely	252	2.2%	231	1.9%	259	2.0%	293	2.3%	273	2.3%	**283**	**2.4%**
Parking improperly	12	0.1%	12	<0.1%	19	0.2%	14	0.1%	14	0.1%	**13**	**0.1%**
Lost control/Drive off road	421	3.6%	480	4.0%	439	3.5%	403	3.2%	340	2.8%	**365**	**3.1%**
Driverless vehicle ran out of control	1	<0.1%	11	<0.1%	16	0.1%	19	0.2%	8	<0.1%	**4**	**<0.1%**
Leave stop sign before safe to do so	490	4.2%	450	3.7%	441	3.5%	436	3.4%	360	3.0%	**360**	**3.1%**
Failed to signal	5	<0.1%	11	<0.1%	8	<0.1%	14	0.1%	7	<0.1%	**4**	**<0.1%**
Take avoiding action	92	0.8%	92	0.8%	111	0.9%	133	1.1%	95	0.8%	**76**	**0.7%**
Driver inexperience	46	0.4%	58	0.5%	62	0.5%	87	0.7%	46	0.4%	**29**	**0.2%**
Pedestrian error/confusion	25	0.2%	26	0.2%	34	0.3%	41	0.3%	42	0.3%	**31**	**0.3%**
NET Speed	881	7.5%	993	8.3%	977	7.7%	1,092	8.6%	665	5.5%	**815**	**7.0%**
Exceeding speed limit	19	0.2%	24	0.2%	54	0.4%	19	0.2%	26	0.2%	**16**	**0.1%**
Driving too fast for conditions	834	7.1%	953	7.9%	899	7.1%	1,064	8.4%	626	5.2%	**786**	**6.7%**
Unsafe operating speed (Too fast or too slow)	30	0.3%	24	0.2%	34	0.3%	11	<0.1%	14	0.1%	**16**	**0.1%**
NET Distracted driving	2,369	20.3%	3,101	25.8%	3,367	26.6%	4,662	36.8%	4,501	37.3%	**3,820**	**32.8%**
Careless Driving	2,173	18.6%	2,838	23.6%	3,142	24.8%	4,490	35.5%	4,411	36.6%	**3,719**	**31.9%**
Distraction/Inattention	270	2.3%	365	3.0%	350	2.8%	404	3.2%	203	1.7%	**206**	**1.8%**

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Contributing Factor	2014 Total Victims	% of 2014 Total Victims	2015 Total Victims	% of 2015 Total Victims	2016 Total Victims	% of 2016 Total Victims	2017 Total Victims	% of 2017 Total Victims	2018 Total Victims	% of 2018 Total Victims	**2019 Total Victims**	**% of 2019 Total Victims**
Human Condition - Apparently Normal	1,394	11.9%	2,217	18.4%	4,564	36.1%	5,380	42.5%	5,630	46.7%	**5,630**	**48.3%**
Any Human Condition	208	1.8%	226	1.9%	206	1.6%	174	1.4%	184	1.5%	**156**	**1.3%**
Loss of consciousness/Blackout prior to collision	36	0.3%	39	0.3%	24	0.2%	34	0.3%	30	0.2%	**15**	**0.1%**
Extreme fatigue/Fell asleep	26	0.2%	28	0.2%	27	0.2%	24	0.2%	34	0.3%	**23**	**0.2%**
Defective eyesight	9	<0.1%	4	<0.1%	1	<0.1%	2	<0.1%	0	-	**3**	**<0.1%**
Defective hearing	0	-	2	<0.1%	0	-	0	-	0	-	**0**	**-**
Medical disability	7	<0.1%	14	0.1%	10	<0.1%	12	<0.1%	14	0.1%	**10**	**<0.1%**
Physical disability	0	-	4	<0.1%	1	<0.1%	0	-	0	-	**0**	**-**
Mental disability	10	<0.1%	4	<0.1%	2	<0.1%	2	<0.1%	8	<0.1%	**0**	**-**
Mental confusion/Inability to remember	12	0.1%	27	0.2%	8	<0.1%	13	0.1%	15	0.1%	**9**	**<0.1%**
Sudden illness	2	<0.1%	4	<0.1%	10	<0.1%	4	<0.1%	6	<0.1%	**4**	**<0.1%**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	0	-	**1**	**<0.1%**
NET Impaired	116	1.0%	121	1.0%	139	1.1%	104	0.8%	93	0.8%	**99**	**0.9%**
Ability impaired alcohol	68	0.6%	97	0.8%	93	0.7%	71	0.6%	79	0.7%	**81**	**0.7%**
Ability impaired drugs	10	<0.1%	9	<0.1%	16	0.1%	2	<0.1%	10	<0.1%	**19**	**0.2%**
Had been drinking/Suspected alcohol use	44	0.4%	27	0.2%	41	0.3%	38	0.3%	9	<0.1%	**14**	**0.1%**
No Apparent (Vehicle) Defect	9,664	82.8%	10,488	87.3%	11,462	90.6%	11,639	91.9%	11,402	94.6%	**10,976**	**94.3%**
Any Vehicle Defect	44	0.4%	35	0.3%	59	0.5%	52	0.4%	32	0.3%	**23**	**0.2%**
Defective brakes	10	<0.1%	8	<0.1%	9	<0.1%	18	0.1%	3	<0.1%	**4**	**<0.1%**
Defective steering	7	<0.1%	2	<0.1%	0	-	2	<0.1%	3	<0.1%	**3**	**<0.1%**
Defective headlights	0	-	0	-	0	-	1	<0.1%	0	-	**0**	**-**
Defective brake lights	2	<0.1%	0	-	8	<0.1%	0	-	1	<0.1%	**1**	**<0.1%**
Defective lighting (unspecified)	1	<0.1%	0	-	4	<0.1%	2	<0.1%	1	<0.1%	**0**	**-**
Defective engine controls/drive train	2	<0.1%	2	<0.1%	1	<0.1%	2	<0.1%	3	<0.1%	**0**	**-**
Defective suspension/wheels	4	<0.1%	4	<0.1%	7	<0.1%	3	<0.1%	2	<0.1%	**2**	**<0.1%**
Defective tires	7	<0.1%	8	<0.1%	15	0.1%	8	<0.1%	11	<0.1%	**4**	**<0.1%**
Tow hitch/yoke defective	0	-	0	-	2	<0.1%	6	<0.1%	3	<0.1%	**0**	**-**
Defective exhaust system	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	1	<0.1%	4	<0.1%	1	<0.1%	0	-	**0**	**-**
Defective glazing (obscured windows)	2	<0.1%	0	-	2	<0.1%	0	-	1	<0.1%	**0**	**-**
Vehicle modifications	1	<0.1%	0	-	0	-	0	-	0	-	**4**	**<0.1%**
Fire	2	<0.1%	1	<0.1%	2	<0.1%	2	<0.1%	0	-	**0**	**-**

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Contributing Factor	2014 Total Victims	% of 2014 Total Victims	2015 Total Victims	% of 2015 Total Victims	2016 Total Victims	% of 2016 Total Victims	2017 Total Victims	% of 2017 Total Victims	2018 Total Victims	% of 2018 Total Victims	**2019 Total Victims**	**% of 2019 Total Victims**
Overloaded/oversized	0	-	1	<0.1%	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	3	<0.1%	2	<0.1%	2	<0.1%	5	<0.1%	1	<0.1%	**1**	**<0.1%**
Jack-knife/trailer swing	3	<0.1%	3	<0.1%	1	<0.1%	2	<0.1%	1	<0.1%	**4**	**<0.1%**
Hydroplaning tires	0	-	3	<0.1%	3	<0.1%	0	-	2	<0.1%	**0**	**-**
Any Environmental Condition	957	8.2%	764	6.4%	942	7.4%	1,035	8.2%	731	6.1%	**909**	**7.8%**
Animal action - Wild	219	1.9%	130	1.1%	100	0.8%	131	1.0%	71	0.6%	**70**	**0.6%**
Animal action - Domestic	9	<0.1%	12	<0.1%	14	0.1%	18	0.1%	12	<0.1%	**17**	**0.1%**
Slippery road surface	495	4.2%	412	3.4%	560	4.4%	602	4.8%	404	3.4%	**570**	**4.9%**
Snow drift	27	0.2%	6	<0.1%	24	0.2%	13	0.1%	9	<0.1%	**25**	**0.2%**
Obstruction/debris on roadway	14	0.1%	24	0.2%	25	0.2%	36	0.3%	14	0.1%	**20**	**0.2%**
View obstructed/limited	77	0.7%	75	0.6%	96	0.8%	95	0.8%	92	0.8%	**104**	**0.9%**
Glare/reflection	15	0.1%	15	0.1%	18	0.1%	9	<0.1%	22	0.2%	**29**	**0.2%**
Construction zone	6	<0.1%	5	<0.1%	7	<0.1%	6	<0.1%	6	<0.1%	**4**	**<0.1%**
Defective driving surface	15	0.1%	12	<0.1%	22	0.2%	30	0.2%	19	0.2%	**18**	**0.2%**
Shoulders defective	7	<0.1%	2	<0.1%	1	<0.1%	1	<0.1%	9	<0.1%	**0**	**-**
Lane markings inadequate	3	<0.1%	2	<0.1%	4	<0.1%	0	-	0	-	**2**	**<0.1%**
Defective/inoperative traffic control device	6	<0.1%	9	<0.1%	15	0.1%	14	0.1%	6	<0.1%	**4**	**<0.1%**
Weather	74	0.6%	81	0.7%	72	0.6%	88	0.7%	56	0.5%	**55**	**0.5%**
Pedestrian corridor in use	9	<0.1%	6	<0.1%	7	<0.1%	33	0.3%	20	0.2%	**22**	**0.2%**
Uninvolved vehicle	5	<0.1%	11	<0.1%	13	0.1%	8	<0.1%	14	0.1%	**7**	**<0.1%**
Uninvolved pedestrian	0	-	2	<0.1%	7	<0.1%	7	<0.1%	3	<0.1%	**8**	**<0.1%**
Presence of prior accident	2	<0.1%	1	<0.1%	5	<0.1%	0	-	8	<0.1%	**1**	**<0.1%**
No Contributing Factor(s) Identified	971	8.3%	650	5.4%	589	4.7%	172	1.4%	172	1.4%	**385**	**3.3%**
Not Stated	4	<0.1%	16	0.1%	18	0.1%	18	0.1%	15	0.1%	**5**	**<0.1%**
Total	11,676	100%	12,017	100%	12,653	100%	12,659	100%	12,057	100%	**11,645**	**100%**

*Note: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each year will add to more than the total victims for that year.

Table 9-8 Historical Summary of Contributing Factors Recorded for Drivers Involved in Collisions

Table 9-8
Summary of Contributing Factors for Drivers Involved in Collisions: 2014 to 2019

Contributing Factor	2014 Total Drivers	% of 2014 Total Drivers	2015 Total Drivers	% of 2015 Total Drivers	2016 Total Drivers	% of 2016 Total Drivers	2017 Total Drivers	% of 2017 Total Drivers	2018 Total Drivers	% of 2018 Total Drivers	**2019 Total Drivers**	**% of 2019 Total Drivers**
Driver Action - Driving Properly and Human Condition - Apparently Normal	25,040	40.9%	28,516	47.8%	32,598	51.1%	34,281	50.1%	37,280	56.0%	**39,600**	**56.9%**
Driver Action - Driving properly	790	1.3%	535	0.9%	429	0.7%	211	0.3%	205	0.3%	**235**	**0.3%**
Any Driver Action	26,978	44.0%	26,147	43.8%	27,122	42.5%	29,307	42.8%	26,798	40.2%	**27,053**	**38.9%**
Following too closely	6,607	10.8%	6,999	11.7%	6,776	10.6%	6,292	9.2%	5,090	7.6%	**4,304**	**6.2%**
Turning improperly	2,258	3.7%	2,577	4.3%	2,496	3.9%	2,769	4.0%	2,374	3.6%	**2,396**	**3.4%**
Passing improperly	150	0.2%	152	0.3%	165	0.3%	158	0.2%	124	0.2%	**102**	**0.1%**
Changing lanes improperly	1,794	2.9%	1,953	3.3%	2,121	3.3%	2,224	3.2%	2,021	3.0%	**1,994**	**2.9%**
Fail to yield right-of-way	2,188	3.6%	2,278	3.8%	2,368	3.7%	2,603	3.8%	2,117	3.2%	**2,085**	**3.0%**
Disobey traffic control device/officer	437	0.7%	499	0.8%	525	0.8%	542	0.8%	456	0.7%	**420**	**0.6%**
Drive wrong way on roadway	38	<0.1%	27	<0.1%	18	<0.1%	24	<0.1%	17	<0.1%	**11**	**<0.1%**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	3	<0.1%	0	-	**1**	**<0.1%**
Back unsafely	2,960	4.8%	3,083	5.2%	3,418	5.4%	3,536	5.2%	3,090	4.6%	**3,081**	**4.4%**
Parking improperly	147	0.2%	146	0.2%	172	0.3%	200	0.3%	96	0.1%	**108**	**0.2%**
Lost control/Drive off road	1,414	2.3%	1,587	2.7%	1,402	2.2%	1,346	2.0%	1,166	1.8%	**1,684**	**2.4%**
Driverless vehicle ran out of control	28	<0.1%	37	<0.1%	37	<0.1%	45	<0.1%	26	<0.1%	**17**	**<0.1%**
Leave stop sign before safe to do so	1,013	1.7%	849	1.4%	870	1.4%	872	1.3%	664	1.0%	**766**	**1.1%**
Failed to signal	17	<0.1%	21	<0.1%	17	<0.1%	30	<0.1%	14	<0.1%	**8**	**<0.1%**
Take avoiding action	458	0.7%	488	0.8%	521	0.8%	528	0.8%	431	0.6%	**425**	**0.6%**
Driver inexperience	122	0.2%	174	0.3%	176	0.3%	235	0.3%	138	0.2%	**108**	**0.2%**
Pedestrian error/confusion	28	<0.1%	45	<0.1%	41	<0.1%	29	<0.1%	28	<0.1%	**31**	**<0.1%**
NET Speed	3,081	5.0%	3,090	5.2%	2,959	4.6%	3,687	5.4%	2,280	3.4%	**2,900**	**4.2%**
Exceeding speed limit	26	<0.1%	48	<0.1%	38	<0.1%	31	<0.1%	34	<0.1%	**12**	**<0.1%**
Driving too fast for conditions	3,024	4.9%	3,005	5.0%	2,887	4.5%	3,638	5.3%	2,224	3.3%	**2,872**	**4.1%**
Unsafe operating speed (Too fast or too slow)	34	<0.1%	46	<0.1%	41	<0.1%	23	<0.1%	23	<0.1%	**21**	**<0.1%**
NET Distracted driving	8,471	13.8%	9,462	15.8%	11,093	17.4%	15,398	22.5%	14,582	21.9%	**13,910**	**20.0%**
Careless Driving	8,140	13.3%	8,947	15.0%	10,573	16.6%	15,025	22.0%	14,362	21.6%	**13,715**	**19.7%**
Distraction/Inattention	460	0.8%	706	1.2%	776	1.2%	1,054	1.5%	496	0.7%	**407**	**0.6%**

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Contributing Factor	2014 Total Drivers	% of 2014 Total Drivers	2015 Total Drivers	% of 2015 Total Drivers	2016 Total Drivers	% of 2016 Total Drivers	2017 Total Drivers	% of 2017 Total Drivers	2018 Total Drivers	% of 2018 Total Drivers	**2019 Total Drivers**	**% of 2019 Total Drivers**
Human Condition - Apparently Normal	3,826	6.2%	7,594	12.7%	15,605	24.4%	20,136	29.4%	18,134	27.2%	**19,630**	**28.2%**
Any Human Condition	230	0.4%	291	0.5%	294	0.5%	262	0.4%	262	0.4%	**191**	**0.3%**
Loss of consciousness/Blackout prior to collision	36	<0.1%	43	<0.1%	41	<0.1%	54	<0.1%	44	<0.1%	**19**	**<0.1%**
Extreme fatigue/Fell asleep	59	<0.1%	66	0.1%	79	0.1%	70	0.1%	68	0.1%	**44**	**<0.1%**
Defective eyesight	4	<0.1%	5	<0.1%	4	<0.1%	1	<0.1%	0	-	**3**	**<0.1%**
Defective hearing	0	-	0	-	2	<0.1%	0	-	0	-	**0**	**-**
Medical disability	10	<0.1%	20	<0.1%	11	<0.1%	14	<0.1%	15	<0.1%	**9**	**<0.1%**
Physical disability	1	<0.1%	4	<0.1%	4	<0.1%	1	<0.1%	0	-	**0**	**-**
Mental disability	4	<0.1%	5	<0.1%	4	<0.1%	3	<0.1%	7	<0.1%	**0**	**-**
Mental confusion/Inability to remember	15	<0.1%	28	<0.1%	23	<0.1%	18	<0.1%	18	<0.1%	**16**	**<0.1%**
Sudden illness	5	<0.1%	8	<0.1%	12	<0.1%	6	<0.1%	6	<0.1%	**5**	**<0.1%**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	0	-	**1**	**<0.1%**
NET Impaired	110	0.2%	135	0.2%	138	0.2%	120	0.2%	123	0.2%	**105**	**0.2%**
Ability impaired alcohol	72	0.1%	105	0.2%	104	0.2%	100	0.1%	105	0.2%	**85**	**0.1%**
Ability impaired drugs	7	<0.1%	7	<0.1%	7	<0.1%	7	<0.1%	9	<0.1%	**11**	**<0.1%**
Had been drinking/Suspected alcohol use	36	<0.1%	35	<0.1%	32	<0.1%	20	<0.1%	14	<0.1%	**16**	**<0.1%**
No Apparent (Vehicle) Defect	28,156	45.9%	36,356	60.9%	47,046	73.7%	54,268	79.3%	55,791	83.8%	**59,871**	**86.1%**
Any Vehicle Defect	282	0.5%	299	0.5%	276	0.4%	337	0.5%	237	0.4%	**237**	**0.3%**
Defective brakes	22	<0.1%	22	<0.1%	29	<0.1%	29	<0.1%	14	<0.1%	**15**	**<0.1%**
Defective steering	10	<0.1%	14	<0.1%	2	<0.1%	4	<0.1%	5	<0.1%	**6**	**<0.1%**
Defective headlights	0	-	0	-	0	-	2	<0.1%	1	<0.1%	**1**	**<0.1%**
Defective brake lights	6	<0.1%	5	<0.1%	10	<0.1%	3	<0.1%	5	<0.1%	**6**	**<0.1%**
Defective lighting (unspecified)	3	<0.1%	0	-	2	<0.1%	4	<0.1%	2	<0.1%	**0**	**-**
Defective engine controls/drive train	7	<0.1%	6	<0.1%	9	<0.1%	7	<0.1%	8	<0.1%	**3**	**<0.1%**
Defective suspension/wheels	40	<0.1%	49	<0.1%	52	<0.1%	58	<0.1%	52	<0.1%	**44**	**<0.1%**
Defective tires	80	0.1%	74	0.1%	70	0.1%	100	0.1%	70	0.1%	**57**	**<0.1%**
Tow hitch/yoke defective	12	<0.1%	25	<0.1%	15	<0.1%	15	<0.1%	12	<0.1%	**6**	**<0.1%**
Defective exhaust system	0	-	0	-	0	-	0	-	0	-	**1**	**<0.1%**
Hood/tailgate/door/covering opened	4	<0.1%	4	<0.1%	13	<0.1%	5	<0.1%	4	<0.1%	**8**	**<0.1%**
Defective glazing (obscured windows)	3	<0.1%	3	<0.1%	2	<0.1%	1	<0.1%	1	<0.1%	**1**	**<0.1%**
Vehicle modifications	1	<0.1%	2	<0.1%	1	<0.1%	1	<0.1%	1	<0.1%	**4**	**<0.1%**
Fire	6	<0.1%	1	<0.1%	3	<0.1%	1	<0.1%	0	-	**3**	**<0.1%**

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Contributing Factor	2014 Total Drivers	% of 2014 Total Drivers	2015 Total Drivers	% of 2015 Total Drivers	2016 Total Drivers	% of 2016 Total Drivers	2017 Total Drivers	% of 2017 Total Drivers	2018 Total Drivers	% of 2018 Total Drivers	**2019 Total Drivers**	**% of 2019 Total Drivers**
Overloaded/oversized	1	<0.1%	4	<0.1%	3	<0.1%	4	<0.1%	7	<0.1%	**1**	**<0.1%**
Load shifted/spilled	21	<0.1%	23	<0.1%	16	<0.1%	35	<0.1%	16	<0.1%	**19**	**<0.1%**
Jack-knife/trailer swing	67	0.1%	63	0.1%	51	<0.1%	71	0.1%	40	<0.1%	**58**	**<0.1%**
Hydroplaning tires	3	<0.1%	12	<0.1%	6	<0.1%	1	<0.1%	4	<0.1%	**5**	**<0.1%**
Any Environmental Condition	6,829	11.1%	4,000	6.7%	4,535	7.1%	6,460	9.4%	3,675	5.5%	**4,435**	**6.4%**
Animal action - Wild	4,017	6.6%	1,891	3.2%	1,893	3.0%	3,437	5.0%	1,435	2.2%	**1,303**	**1.9%**
Animal action - Domestic	52	<0.1%	33	<0.1%	51	<0.1%	67	<0.1%	51	<0.1%	**54**	**<0.1%**
Slippery road surface	1,862	3.0%	1,361	2.3%	1,703	2.7%	2,029	3.0%	1,447	2.2%	**2,266**	**3.3%**
Snow drift	164	0.3%	45	<0.1%	96	0.2%	98	0.1%	70	0.1%	**123**	**0.2%**
Obstruction/debris on roadway	202	0.3%	190	0.3%	254	0.4%	278	0.4%	170	0.3%	**243**	**0.3%**
View obstructed/limited	191	0.3%	155	0.3%	177	0.3%	211	0.3%	206	0.3%	**211**	**0.3%**
Glare/reflection	27	<0.1%	41	<0.1%	50	<0.1%	30	<0.1%	33	<0.1%	**47**	**<0.1%**
Construction zone	20	<0.1%	15	<0.1%	20	<0.1%	17	<0.1%	18	<0.1%	**13**	**<0.1%**
Defective driving surface	118	0.2%	82	0.1%	120	0.2%	136	0.2%	119	0.2%	**83**	**0.1%**
Shoulders defective	11	<0.1%	9	<0.1%	7	<0.1%	3	<0.1%	4	<0.1%	**3**	**<0.1%**
Lane markings inadequate	6	<0.1%	4	<0.1%	8	<0.1%	4	<0.1%	5	<0.1%	**4**	**<0.1%**
Defective/inoperative traffic control device	10	<0.1%	17	<0.1%	13	<0.1%	15	<0.1%	12	<0.1%	**10**	**<0.1%**
Weather	191	0.3%	204	0.3%	192	0.3%	209	0.3%	127	0.2%	**105**	**0.2%**
Pedestrian corridor in use	13	<0.1%	10	<0.1%	18	<0.1%	14	<0.1%	10	<0.1%	**14**	**<0.1%**
Uninvolved vehicle	18	<0.1%	27	<0.1%	27	<0.1%	11	<0.1%	22	<0.1%	**16**	**<0.1%**
Uninvolved pedestrian	2	<0.1%	3	<0.1%	3	<0.1%	3	<0.1%	2	<0.1%	**3**	**<0.1%**
Presence of prior accident	1	<0.1%	3	<0.1%	2	<0.1%	0	-	9	<0.1%	**7**	**<0.1%**
No Contributing Factor(s) Identified	1,953	3.2%	1,260	2.1%	1,196	1.9%	305	0.4%	341	0.5%	**731**	**1.1%**
Not Stated	13	<0.1%	68	0.1%	61	<0.1%	44	<0.1%	26	<0.1%	**21**	**<0.1%**
Total	61,294	100%	59,716	100%	63,839	100%	68,447	100%	66,606	100%	**69,564**	**100%**

*Note: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

Table 9-9 Summary of 'Speed', 'Distracted driving' and 'Impaired' as Contributing Factors

Table 9-9
Summary of 'Speed', 'Distracted driving' and 'Impaired' as Contributing Factors: 2014 to 2019

		2014	2015	2016	2017	2018	2014-2018 average	**2019**
NET Speed ('Exceeding speed limit', 'Driving too fast for conditions' and 'Unsafe operating speed (too fast or too slow)' combined)								
Collisions	All collisions	3,076	3,092	2,964	3,692	2,283	3,021	**2,903**
		7.6%	7.4%	6.5%	7.1%	4.4%	6.5%	**5.3%**
	Fatal collisions	11	13	26	12	15	15	**18**
		17.2%	18.8%	27.1%	18.5%	23.1%	21.4%	**26.5%**
	Injury collisions	683	745	722	830	477	691	**604**
		7.6%	8.2%	7.5%	8.6%	5.1%	7.4%	**6.7%**
Victims	All victims (killed or injured)	881	993	977	1,092	665	922	**815**
		7.5%	8.3%	7.7%	8.6%	5.5%	7.5%	**7.0%**
	People killed	12	13	33	13	18	18	**22**
		17.6%	16.7%	30.8%	17.8%	25.7%	22.5%	**28.9%**
	People seriously injured	36	60	73	69	43	56	**48**
		11.9%	14.5%	15.3%	15.6%	9.8%	13.5%	**13.0%**
Driver Involvement (/10,000 drivers)	All collisions	35.4	35.1	33.0	40.7	24.8	33.8	**31.1**
	Fatal collisions	0.1	0.1	0.3	0.1	0.2	0.2	**0.2**
	Injury collisions	7.9	8.4	8.0	9.1	5.2	7.7	**6.5**
NET Distracted driving ('Distraction/ inattention' and 'Careless driving' combined)								
Collisions	All collisions	8,468	9,463	11,086	15,403	14,618	11,808	**13,922**
		20.8%	22.8%	24.5%	29.7%	28.3%	25.5%	**25.4%**
	Fatal collisions	17	25	23	26	18	22	**32**
		26.6%	36.2%	24.0%	40.0%	27.7%	30.4%	**47.1%**
	Injury collisions	1,810	2,260	2,535	3,495	3,408	2,702	**2,911**
		20.1%	24.8%	26.5%	36.1%	36.5%	28.9%	**32.4%**
Victims	All victims (killed or injured)	2,369	3,101	3,367	4,662	4,501	3,600	**3,820**
		20.3%	25.8%	26.6%	36.8%	37.3%	29.5%	**32.8%**
	People killed	18	28	29	30	19	25	**33**
		26.5%	35.9%	27.1%	41.1%	27.1%	31.3%	**43.4%**
	People seriously injured	84	133	138	184	195	147	**138**
		27.7%	32.0%	28.9%	41.6%	44.6%	35.4%	**37.5%**
Driver Involvement (/10,000 drivers)	All collisions	97.5	107.4	123.8	170.1	158.4	131.9	**149.1**
	Fatal collisions	0.2	0.3	0.3	0.3	0.2	0.2	**0.3**
	Injury collisions	20.9	25.7	28.4	38.5	37.1	30.2	**31.3**
NET Impaired ('Impaired by alcohol', 'Impaired by drugs' and 'Had been drinking/Suspected alcohol use' combined)								
Collisions	All collisions	115	140	145	133	139	134	**119**
		0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	**0.2%**
	Fatal collisions	19	15	31	21	25	22	**19**
		29.7%	21.7%	32.3%	32.3%	38.5%	30.9%	**27.9%**
	Injury collisions	45	61	49	42	41	48	**42**
		0.5%	0.7%	0.5%	0.4%	0.4%	0.5%	**0.5%**
Victims	All victims (killed or injured)	116	121	139	104	93	115	**99**
		1.0%	1.0%	1.1%	0.8%	0.8%	0.9%	**0.9%**
	People killed	19	16	38	23	28	25	**22**
		27.9%	20.5%	35.5%	31.5%	40.0%	31.3%	**28.9%**
	People seriously injured	22	24	36	27	10	24	**18**
		7.3%	5.8%	7.5%	6.1%	2.3%	5.7%	**4.9%**
Driver Involvement (/10,000 drivers)	All collisions	1.3	1.5	1.5	1.3	1.3	1.4	**1.1**
	Fatal collisions	0.2	0.1	0.3	0.2	0.2	0.2	**0.2**
	Injury collisions	0.5	0.7	0.5	0.4	0.4	0.5	**0.4**

Note: Proportions provided for each contributing factor in a specific category are for the count of contributing factor as a portion of all collisions in the specific category. E.g., the proportion of fatal collisions where speed is a factor is derived from the count of fatal collisions in the specific year where speed is a factor divided by the total fatal collisions in that year.

SECTION 10 - National Safety Code Monitoring Report

Introduction

This section counts the number of commercial vehicles involved in collisions, the severity of those collisions and the victims killed and injured in those collisions. This section includes only commercial vehicles with a National Safety Code (NSC).

Key Highlights

In 2019, there are 2,098 commercial vehicles involved in traffic collisions. Of these:

- 13 are involved in fatal collisions;
- 379 are involved in injury collisions; and,
- 1,706 are involved in PDO collisions.

Traffic collisions where at least one commercial vehicle is involved resulted in a total of 483 victims in 2019, including:

- 13 people killed;
- 27 people seriously injured; and,
- 443 people where the injury is minor, minimal or unspecified.

Major Elements Examined

Counts of NSC commercial vehicles involved in collisions in Manitoba for 2019 and previous years are taken from Traffic Accident Reports (TARs) completed by Manitoba Public Insurance and law enforcement agencies, and compiled by Manitoba Public Insurance. These counts are presented for all reportable collisions, fatal collisions, injury collisions, and property damage only (PDO) collisions.

It is important to note that the number of collisions is not equal to the number of vehicles involved in those collisions, nor does it equal the number of victims in those collisions. All collisions reported involve at least one vehicle, but may involve more than one as well. Likewise, a single collision could involve no victims, or one or more victims.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2014 to 2018. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

Due to the small numbers of fatal collisions, fluctuations year-over-year could be dramatic; a small change in the total count of these types of collisions could have a significant effect on statistics such as percentage change to previous years and involvement rates. Therefore, the reader is strongly cautioned when interpreting results regarding fatal collisions.

The reader is cautioned that not all victims in a collision involving an NSC commercial vehicle will be a driver or passenger in the commercial vehicle. This section counts the number of total victims resulting from a collision where a commercial vehicle was involved, not just the victims in the commercial vehicle.

Terms and Definitions

“Collision Severity”

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

“Fatal Collision”

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed. Levels of injury include: 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required).

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Light Duty Vehicles"

- A classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: passenger vehicles (automobile), mini/multi-purpose van, van under 4,500 kg and pick-up under 4,500 kg.

"NSC Commercial Vehicles"

- The National Safety Code (NSC) is a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Truck greater than 4,500 kilograms (unit chassis)", "Power Unit for Semi-Trailer", "Truck (Other)" (where the type and size of truck is unknown), "School Bus", "Transit Bus (Urban)", "Inter-City Bus", and "Bus (Other)". These vehicles bear a National Safety Code Number and are entered onto the National Safety Code Collision Monitoring Report.

"Truck greater than 4,500 kilograms (unit chassis)"

- A vehicle category that includes all straight trucks with a gross vehicle mass 4,500 kg and over on the vehicle registration. This does not include truck tractors with a fifth wheel assembly.

"Power Unit for Semi-Trailer"

- A vehicle category that includes truck tractors used for the moving of cargo in or on a trailer by means of a fifth wheel connection. This does not include pickups equipped with a fifth wheel.

"Truck (Other)"

- A vehicle category used if the type and size of truck is unknown.

"School Bus"

- A vehicle category that includes a bus authorized for the transportation of students to or from school and related school activities.

"Transit Bus (Urban)"

- A vehicle category that includes a bus used for commercial carrying of passengers within an urban area.

"Inter-City Bus"

- A vehicle category that includes a bus licensed for inter-city or provincial travel.

"Bus (Other)"

- A vehicle category that includes personal use of buses and bus type conversions, but does not include original equipment manufacturer type; for example, buses converted to motor homes.

"Contributing Factor"

- Those circumstances or factors recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environmental condition. The TAR allows for up to three contributing factors to be recorded for each driver or vehicle involved in the collision.

"At-fault Contributing Factor"

- A contributing factor where some action or condition other than "driving properly" and "apparently normal" has been noted.

"Driver Action"

- A category of contributing factors attributed to actions taken or performed by a driver immediately prior to a collision.

"Human Condition"

- A category of contributing factors attributed to the physical or mental condition of a driver immediately prior to a collision, most often that limit the driver's ability to drive safely or properly.

"Vehicle Condition"

- A category of contributing factors attributed to the physical condition of a vehicle immediately prior to a collision.

"Environmental Condition"

- A category of contributing factors attributed to environmental conditions (i.e., weather, road surface and animal actions) immediately prior to a collision.

"Pre-collision activity"

- The action of a vehicle immediately prior to involvement in a collision. This is an indication of what the vehicle was doing prior to the accident or to the driver realizing that a collision may occur and does not include vehicle maneuver to avoid the collision.

Table 10-1 NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type and Collision Severity

Table 10-1

NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type and Collision Severity: 2019, 2014-2018 Average

Vehicle Category	2019 Collision Severity						**2019 Total**	% of 2019 Total	2014-2018 Average Count of Vehicles				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Truck >4,500 kgs Unit Chassis	1	7.7%	179	47.2%	1,033	60.6%	**1,213**	57.8%	5	194	905	1,104	55.8%
Power Unit (Semi-Trailer)	11	84.6%	111	29.3%	399	23.4%	**521**	24.8%	9	117	395	520	26.3%
Truck - Other	1	7.7%	16	4.2%	54	3.2%	**71**	3.4%	1	25	69	95	4.8%
School Bus	0	-	11	2.9%	61	3.6%	**72**	3.4%	-	9	33	42	2.1%
Transit Bus - Urban	0	-	44	11.6%	60	3.5%	**104**	5.0%	<1	50	53	103	5.2%
Para-Transit Bus	0	-	2	0.5%	1	<0.1%	**3**	0.1%	-	3	6	9	0.4%
Inter-City Bus	0	-	3	0.8%	16	0.9%	**19**	0.9%	-	2	10	12	0.6%
Bus - Other	0	-	13	3.4%	82	4.8%	**95**	4.5%	<1	19	75	95	4.8%
Total	13	100%	379	100%	1,706	100%	**2,098**	100%	16	418	1,546	1,979	100%

Note: Counts of vehicles in the 2014-2018 average may not add to the total due to rounding.

In 2019, there are 2,098 commercial vehicles involved in traffic collisions. Of these:

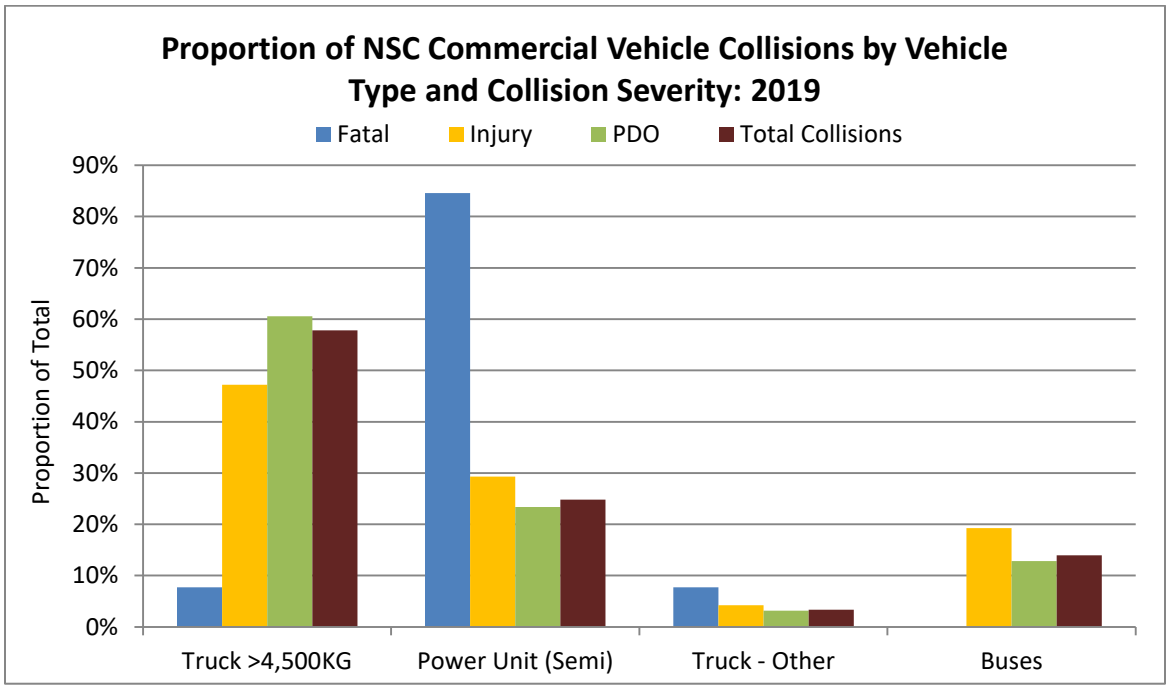
- 13 are involved in fatal collisions;
- 379 are involved in injury collisions; and,
- 1,706 are involved in PDO collisions.

The number of NSC commercial vehicles involved in collisions in 2019 has increased by 6% (a count of 119) compared to the previous five year (2014 to 2018) annual average. Compared to the previous five years, the number of NSC commercial vehicles in 2019 involved in:

- Fatal collisions decreased by a count of 3;
- Injury collisions decreased by 9% (a count of 39); and,
- PDO collisions increased by 10% (a count of 160).

NOTE: For a detailed historical count of NSC Commercial Vehicles involved in traffic collisions occurring in each year from 2014 to 2019, please refer to "*Table 10-5 Historical Summary of NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type*" at the end of this section.

Figure 10-1 Proportion of NSC Commercial Vehicles by Vehicle Type and Collision Severity



In 2019, trucks with a unit chassis greater than 4,500 kilograms and power units for semi-trailers combined account for 83% of the commercial vehicles involved in traffic collisions.

- Power units for semi-trailers account for 11 of the 13 commercial vehicles involved in fatal collisions; and,
- Trucks with unit chassis greater than 4,500 kilograms account for 1 of the 13 commercial vehicles involved in fatal collisions.

Table 10-2 Traffic Collision Victims by NSC Commercial Vehicle Type and Casualty Type

Table 10-2
Traffic Collision Victims by NSC Commercial Vehicle Type and Casualty Type: 2019

Vehicle Type	2019 Casualty Type												**2019 Total Victims**	% of 2019 Total Victims
	Killed	% of Total Killed	Serious Injury	% of Total Serious Injury	Minor Injury	% of Total Minor Injury	Minimal Injury	% of Total Minimal Injury	Other Injury	% of Total Other Injury	Total Injured	% of Total Injured		
Truck >4,500 kgs Unit Chassis	1	7.7%	10	37.0%	64	46.7%	152	50.0%	0	-	226	48.1%	**227**	47.0%
Power Unit (Semi-Trailer)	11	84.6%	13	48.1%	48	35.0%	77	25.3%	1	50.0%	139	29.6%	**150**	31.1%
Truck - Other	1	7.7%	1	3.7%	4	2.9%	13	4.3%	1	50.0%	19	4.0%	**20**	4.1%
School Bus	0	-	0	-	2	1.5%	11	3.6%	0	-	13	2.8%	**13**	2.7%
Transit Bus - Urban	0	-	3	11.1%	12	8.8%	35	11.5%	0	-	50	10.6%	**50**	10.4%
Para-Transit Bus	0	-	0	-	2	1.5%	1	0.3%	0	-	3	0.6%	**3**	0.6%
Inter-City Bus	0	-	0	-	1	0.7%	4	1.3%	0	-	5	1.1%	**5**	1.0%
Bus - Other	0	-	0	-	4	2.9%	11	3.6%	0	-	15	3.2%	**15**	3.1%
Total	13	100%	27	100%	137	100%	304	100%	2	100%	470	100%	**483**	100%

Table 10-2a Traffic Collision Victims by NSC Commercial Vehicle Type and Casualty Type for Previous Five Years

Table 10-2a
Traffic Collision Victims by NSC Commercial Vehicle Type and Casualty Type: 2014-2018 Average

Vehicle Type	2014-2018 Average Count of Victims							
	Killed	Serious Injury	Minor Injury	Minimal Injury	Other Injury	Total Injured	Total Victims	% of Total Victims
Truck >4,500 kgs Unit Chassis	5	14	55	171	4	244	250	45.4%
Power Unit (Semi-Trailer)	9	15	49	81	4	149	158	28.7%
Truck - Other	<1	3	7	20	2	32	33	6.0%
School Bus	-	<1	3	9	<1	12	12	2.2%
Transit Bus - Urban	<1	1	13	47	<1	62	63	11.4%
Para-Transit Bus	-	<1	<1	2	-	3	3	0.6%
Inter-City Bus	-	-	1	2	-	3	3	0.5%
Bus - Other	<1	<1	9	17	<1	28	28	5.1%
Total	16	35	139	349	11	535	550	100%

Note: Counts of victims in the 2014-2018 average may not add to the total due to rounding.

Traffic collisions where at least one commercial vehicle is involved resulted in a total of 483 victims in 2019, including:

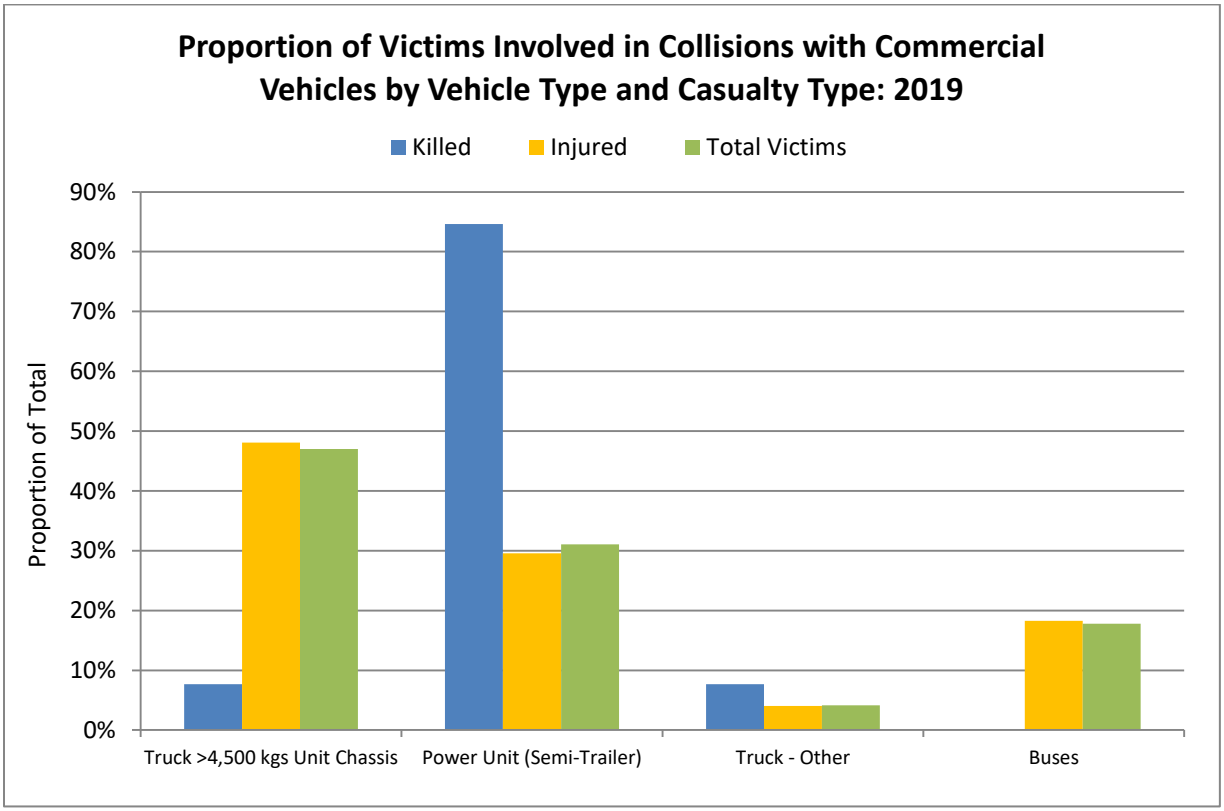
- 13 people killed;
- 27 people seriously injured; and,
- 443 people where the injury is minor, minimal or unspecified.

Collisions involving commercial vehicles in 2019 resulted in fewer people injured overall when compared to the previous five year (2014 to 2018) annual average. In 2019:

- The number of people killed decreased by a count of 3 compared to the previous five years;
- The number of people seriously injured decreased by a count of 8 (a 23% decrease) compared to the previous five years; and,
- The number of people injured overall decreased by a count of 65 (a 12% decrease) compared to the previous five years.

NOTE: For a detailed historical count of traffic collision victims where an NSC Commercial Vehicle was involved in each year from 2014 to 2019, please refer to "*Table 10-6 Historical Summary of Traffic Collision Victims where an NSC Commercial Vehicle is Involved by Vehicle Type*" at the end of this section.

Figure 10-2 Proportion of Victims Involved in Collisions with NSC Commercial Vehicles by Vehicle Type and Casualty Type



In 2019, collisions involving trucks with unit chassis greater than 4,500 kilograms along with power units for semi-trailers make up the largest proportions of NSC vehicles involved where someone is killed (12 of 13 people killed) or seriously injured (85%).

Table 10-3 Commercial Vehicle Involvement in Traffic Collisions by Pre-Collision Activity and Collision Severity

Table 10-3

NSC Commercial Vehicles Involved in Traffic Collisions by Pre-Collision Activity and Collision Severity: 2019, 2014-2018 Average

Pre-Collision Activity	2019 Collision Severity						**2019 Total**	**% of 2019 Total**	2014-2018 Average Count of Vehicles				
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO			Fatal	Injury	PDO	Total	% of Total
Going Straight Ahead	5	38.5%	197	52.0%	781	45.8%	**983**	46.9%	11	160	592	763	38.6%
Turning Left	0	-	28	7.4%	104	6.1%	**132**	6.3%	2	20	75	97	4.9%
Turning Right	1	7.7%	8	2.1%	83	4.9%	**92**	4.4%	<1	10	50	61	3.1%
Making U Turn	0	-	2	0.5%	1	<0.1%	**3**	0.1%	-	<1	4	5	0.3%
Changing Lanes – Left	0	-	6	1.6%	14	0.8%	**20**	1.0%	<1	3	16	19	1.0%
Changing Lanes – Right	0	-	3	0.8%	20	1.2%	**23**	1.1%	<1	8	20	28	1.4%
Merging	0	-	3	0.8%	5	0.3%	**8**	0.4%	-	2	5	7	0.3%
Reversing	0	-	8	2.1%	115	6.7%	**123**	5.9%	-	7	128	135	6.8%
Overtaking	1	7.7%	1	0.3%	0	-	**2**	<0.1%	-	-	2	2	<0.1%
Slowing/Stopping on Roadway	1	7.7%	22	5.8%	56	3.3%	**79**	3.8%	<1	15	42	57	2.9%
Stopped in Traffic	1	7.7%	40	10.6%	119	7.0%	**160**	7.6%	-	26	86	112	5.7%
Starting in Traffic	0	-	10	2.6%	27	1.6%	**37**	1.8%	<1	6	14	20	1.0%
Leave Parking Position/Roadside	0	-	4	1.1%	12	0.7%	**16**	0.8%	-	1	6	7	0.4%
Enter Parking Position/Roadside	0	-	0	-	6	0.4%	**6**	0.3%	-	1	7	9	0.4%
Parked Legally	0	-	2	0.5%	51	3.0%	**53**	2.5%	-	1	38	40	2.0%
Parked Illegally	0	-	0	-	0	-	**0**	-	-	<1	<1	<1	<0.1%
Swerving	1	7.7%	2	0.5%	9	0.5%	**12**	0.6%	<1	3	8	12	0.6%
Other	0	-	5	1.3%	56	3.3%	**61**	2.9%	<1	7	50	57	2.9%
Not Applicable/Unknown	3	23.1%	38	10.0%	247	14.5%	**288**	13.7%	2	148	401	550	27.8%
Total	13	100%	379	100%	1,706	100%	**2,098**	100%	16	418	1,546	1,979	100%

Note: Counts of vehicles in the 2014-2018 average may not add to the total due to rounding.

In 2019, most NSC commercial vehicles involved in a collision were “going straight ahead” when the collision occurred (47% of NSC vehicles involved in collisions; nearly 39% of NSC vehicles involved in fatal collisions; 52% of NSC vehicles involved in injury collisions; and 46% of NSC vehicles involved in PDO collisions). In the previous five year (2014 to 2018) annual average, “going straight ahead” was noted as the pre-collision action for 39% of all commercial vehicles involved in a collision.

Other noteworthy pre-collision actions for commercial vehicles involved in collisions in 2019 include:

- Stopped or stopping (“stopped in traffic” and “slowing/stopping on roadway” combined) – 11%;
- Turning (“turning left” and “turning right” combined) – 11%; and,
- Reversing – 6% of all collisions.

Considering fatal collisions, there are very few pre-collision actions noted in 2019. “Going straight ahead” was noted for 5 of 13 NSC vehicles (nearly 39%) involved in a fatal collision.

Commercial vehicles involved in injury collisions in 2019 were noted most often as “going straight ahead” (52%). Other pre-collision actions of commercial vehicles involved in injury collisions include:

- Stopped or stopping (“stopped in traffic” and “slowing/stopping on roadway” combined) – 16%; and,
- Turning (“turning left” and “turning right” combined) – nearly 10%.

Table 10-4 NSC Commercial Vehicles Involved in Traffic Collisions by Contributing Factors and Collision Severity

Table 10-4

NSC Commercial Vehicles Involved in Traffic Collisions by Contributing Factors and Collision Severity: 2019

Contributing Factor	2019 Collision Severity						2019 Total	% of 2019 Total
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Driver Action - Driving Properly and Human Condition - Apparently Normal	4	30.8%	187	49.3%	884	51.8%	**1,075**	**51.2%**
Driver Action - Driving properly	1	7.7%	4	1.1%	31	1.8%	**36**	**1.7%**
Any Driver Action	4	30.8%	158	41.7%	617	36.2%	**779**	**37.1%**
Follow too closely	0	-	49	12.9%	68	4.0%	**117**	**5.6%**
Turning improperly	0	-	6	1.6%	66	3.9%	**72**	**3.4%**
Passing improperly	1	7.7%	1	0.3%	5	0.3%	**7**	**0.3%**
Changing lanes improperly	0	-	16	4.2%	60	3.5%	**76**	**3.6%**
Fail to yield right of way	0	-	4	1.1%	21	1.2%	**25**	**1.2%**
Disobey traffic control device/officer	1	7.7%	5	1.3%	2	0.1%	**8**	**0.4%**
Drive wrong way on roadway	0	-	0	-	0	-	**0**	**-**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	**0**	**-**
Back unsafely	0	-	7	1.8%	111	6.5%	**118**	**5.6%**
Parking improperly	0	-	0	-	5	0.3%	**5**	**0.2%**
Lost control/Drive off road	0	-	4	1.1%	13	0.8%	**17**	**0.8%**
Driverless vehicle ran out of control	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Leave stop sign before safe to do so	0	-	7	1.8%	13	0.8%	**20**	**1.0%**
Failed to signal	0	-	0	-	0	-	**0**	**-**
Take avoiding action	1	7.7%	0	-	5	0.3%	**6**	**0.3%**
Driver inexperience	0	-	4	1.1%	14	0.8%	**18**	**0.9%**
Pedestrian error/confusion	0	-	0	-	2	0.1%	**2**	**<0.1%**
NET Speed	1	7.7%	14	3.7%	44	2.6%	**59**	**2.8%**
Exceeding speed limit	1	7.7%	0	-	0	-	**1**	**<0.1%**
Driving too fast for conditions	0	-	13	3.4%	44	2.6%	**57**	**2.7%**
Unsafe operating speed (Too fast or too slow)	0	-	1	0.3%	0	-	**1**	**<0.1%**
NET Distracted driving	2	15.4%	61	16.1%	275	16.1%	**338**	**16.1%**
Careless Driving	2	15.4%	57	15.0%	263	15.4%	**322**	**15.3%**
Distraction/Inattention	1	7.7%	8	2.1%	14	0.8%	**23**	**1.1%**

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Contributing Factor	2019 Collision Severity						2019 Total	% of 2019 Total
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Human Condition - Apparently Normal	5	38.5%	86	22.7%	475	27.8%	**566**	**27.0%**
Any Human Condition	0	-	1	0.3%	1	<0.1%	**2**	**<0.1%**
Loss of consciousness/Blackout prior to collision	0	-	0	-	0	-	**0**	**-**
Extreme fatigue/Fell asleep	0	-	0	-	0	-	**0**	**-**
Defective eyesight	0	-	0	-	0	-	**0**	**-**
Defective hearing	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Physical disability	0	-	0	-	0	-	**0**	**-**
Mental disability	0	-	0	-	0	-	**0**	**-**
Mental confusion/Inability to remember	0	-	0	-	0	-	**0**	**-**
Sudden illness	0	-	0	-	0	-	**0**	**-**
Exceed hours of service (commercial drivers only)	0	-	1	0.3%	0	-	**1**	**<0.1%**
NET Impaired	0	-	0	-	0	-	**0**	**-**
Ability impaired alcohol	0	-	0	-	0	-	**0**	**-**
Ability impaired drugs	0	-	0	-	0	-	**0**	**-**
Had been drinking/Suspected alcohol use	0	-	0	-	0	-	**0**	**-**
No apparent (vehicle) defect	8	61.5%	261	68.9%	1,245	73.0%	**1,514**	**72.2%**
Any Vehicle Defect	0	-	1	0.3%	29	1.7%	**30**	**1.4%**
Defective brakes	0	-	0	-	0	-	**0**	**-**
Defective steering	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Defective headlights	0	-	0	-	0	-	**0**	**-**
Defective brakelights	0	-	0	-	0	-	**0**	**-**
Defective lighting (unspecified)	0	-	0	-	0	-	**0**	**-**
Defective engine controls/drive train	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Defective suspension/wheels	0	-	0	-	2	0.1%	**2**	**<0.1%**
Defective tires	0	-	0	-	5	0.3%	**5**	**0.2%**
Tow hitch/yoke defective	0	-	0	-	0	-	**0**	**-**
Defective exhaust system	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Defective glazing (obscured windows)	0	-	0	-	0	-	**0**	**-**
Vehicle modifications	0	-	0	-	0	-	**0**	**-**
Fire	0	-	0	-	0	-	**0**	**-**
Overloaded/oversized	0	-	0	-	0	-	**0**	**-**

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Contributing Factor	2019 Collision Severity						2019 Total	% of 2019 Total
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Load shifted/spilled	0	-	1	0.3%	4	0.2%	**5**	**0.2%**
Jack-knife/trailer swing	0	-	0	-	15	0.9%	**15**	**0.7%**
Hydroplaning tires	0	-	0	-	0	-	**0**	**-**
Any Environmental Condition	1	7.7%	17	4.5%	93	5.5%	**111**	**5.3%**
Animal action - Wild	0	-	0	-	32	1.9%	**32**	**1.5%**
Animal action - Domestic	0	-	0	-	0	-	**0**	**-**
Slippery road surface	0	-	9	2.4%	27	1.6%	**36**	**1.7%**
Snow drift	0	-	0	-	2	0.1%	**2**	**<0.1%**
Obstruction/debris on roadway	0	-	0	-	7	0.4%	**7**	**0.3%**
View obstructed/limited	0	-	4	1.1%	8	0.5%	**12**	**0.6%**
Glare/reflection	0	-	0	-	0	-	**0**	**-**
Construction zone	0	-	0	-	4	0.2%	**4**	**0.2%**
Defective driving surface	0	-	1	0.3%	3	0.2%	**4**	**0.2%**
Shoulders defective	0	-	0	-	0	-	**0**	**-**
Lane markings inadequate	0	-	0	-	0	-	**0**	**-**
Defective/inoperative traffic control device	0	-	0	-	1	<0.1%	**1**	**<0.1%**
Weather	1	7.7%	4	1.1%	4	0.2%	**9**	**0.4%**
Pedestrian corridor in use	0	-	0	-	3	0.2%	**3**	**0.1%**
Uninvolved vehicle	0	-	0	-	4	0.2%	**4**	**0.2%**
Uninvolved pedestrian	0	-	0	-	0	-	**0**	**-**
Presence of prior accident	0	-	0	-	0	-	**0**	**-**
No Contributing Factor(s) Identified	0	-	10	2.6%	37	2.2%	**47**	**2.2%**
Not Applicable/Not Stated	0	-	0	-	3	0.2%	**3**	**0.1%**
Total	13	100.0%	379	100.0%	1,706	100%	**2,098**	**100.0%**

*Note: Each vehicle and/or driver involved in a collision can have up to three contributing factors noted. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total. An exception to this is the factors “Driver Action – Driving Properly and Human Condition – Apparently Normal”, "Driver Action – Driving Properly” and “Human Condition – Apparently Normal”, which are mutually exclusive and can be added to determine a “Driver not at-fault” total.

Table 10-4a NSC Commercial Vehicles Involved in Traffic Collisions by Contributing Factors and Collision Severity for the Previous Five Years

Table 10-4a

NSC Commercial Vehicles Involved in Traffic Collisions by Contributing Factors and Collision Severity: 2014-2018 Average

Contributing Factor	2014-2018 Average Count of Vehicles				
	Fatal	Injury	PDO	Total Vehicles	% of Total Vehicles
Driver Action - Driving Properly and Human Condition - Apparently Normal	7	179	694	880	44.5%
Driver Action - Driving properly	<1	7	28	36	1.8%
Any Driver Action	6	163	551	720	36.4%
Follow too closely	-	56	68	124	6.3%
Turning improperly	<1	16	58	75	3.8%
Passing improperly	-	2	4	7	0.3%
Changing lanes improperly	-	13	49	62	3.1%
Fail to yield right of way	<1	15	27	42	2.1%
Disobey traffic control device/officer	1	5	4	10	0.5%
Drive wrong way on roadway	<1	<1	<1	1	<0.1%
Passing a vehicle at pedestrian X-walk	-	-	-	-	-
Back unsafely	-	7	136	142	7.2%
Parking improperly	-	<1	6	6	0.3%
Lost control/Drive off road	1	6	18	25	1.3%
Driverless vehicle ran out of control	-	-	<1	<1	<0.1%
Leave stop sign before safe to do so	1	4	11	16	0.8%
Failed to signal	-	-	-	-	-
Take avoiding action	<1	2	7	10	0.5%
Driver inexperience	<1	<1	5	6	0.3%
Pedestrian error/confusion	<1	-	<1	<1	<0.1%
NET Speed	1	14	44	60	3.0%
Exceeding speed limit	-	-	-	-	-
Driving too fast for conditions	1	14	43	58	2.9%
Unsafe operating speed (Too fast or too slow)	-	<1	<1	2	<0.1%
NET Distracted driving	2	49	217	269	13.6%
Careless Driving	2	43	199	243	12.3%
Distraction/Inattention	<1	9	23	32	1.6%
Human Condition - Apparently Normal	2	82	340	424	21.4%
Any Human Condition	1	2	2	5	0.2%
Loss of consciousness/Blackout prior to collision	-	<1	1	1	<0.1%
Extreme fatigue/Fell asleep	<1	1	<1	2	0.1%
Defective eyesight	-	-	-	-	-
Defective hearing	-	-	-	-	-
Medical disability	-	-	-	-	-
Physical disability	-	-	-	-	-
Mental disability	-	-	-	-	-
Mental confusion/Inability to remember	-	-	-	-	-
Sudden illness	-	-	<1	<1	<0.1%
Exceed hours of service (commercial drivers only)	-	-	-	-	-
NET Impaired	<1	<1	-	1	<0.1%
Ability impaired alcohol	<1	<1	-	1	<0.1%
Ability impaired drugs	-	-	-	-	-
Had been drinking/Suspected alcohol use	-	-	-	-	-

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Contributing Factor	2013-2017 Average Count of Vehicles				
	Fatal	Injury	PDO	Total Vehicles	% of Total Vehicles
No apparent (vehicle) defect	7	246	951	1,204	60.9%
Any Vehicle Defect	<1	4	35	39	2.0%
Defective brakes	-	<1	1	2	<0.1%
Defective steering	-	<1	<1	<1	<0.1%
Defective headlights	-	-	-	-	-
Defective brakelights	<1	-	-	<1	<0.1%
Defective lighting (unspecified)	<1	<1	<1	<1	<0.1%
Defective engine controls/drive train	-	-	<1	<1	<0.1%
Defective suspension/wheels	-	-	2	2	0.1%
Defective tires	-	<1	8	8	0.4%
Tow hitch/yoke defective	-	-	2	2	<0.1%
Defective exhaust system	-	-	-	-	-
Hood/tailgate/door/covering opened	-	<1	1	1	<0.1%
Defective glazing (obscured windows)	-	-	-	-	-
Vehicle modifications	-	-	-	-	-
Fire	-	-	-	-	-
Overloaded/oversized	-	<1	3	3	0.1%
Load shifted/spilled	-	1	6	7	0.4%
Jack-knife/trailer swing	<1	<1	11	12	0.6%
Hydroplaning tires	-	<1	<1	<1	<0.1%
Any Environmental Condition	1	16	111	128	6.5%
Animal action - Wild	-	1	66	67	3.4%
Animal action - Domestic	-	<1	1	1	<0.1%
Slippery road surface	<1	9	21	31	1.6%
Snow drift	-	<1	2	2	0.1%
Obstruction/debris on roadway	-	<1	7	7	0.3%
View obstructed/limited	<1	2	5	7	0.3%
Glare/reflection	-	<1	<1	1	<0.1%
Construction zone	-	<1	<1	1	<0.1%
Defective driving surface	-	<1	4	4	0.2%
Shoulders defective	-	<1	<1	<1	<0.1%
Lane markings inadequate	-	-	-	-	-
Defective/inoperative traffic control device	-	-	<1	<1	<0.1%
Weather	<1	2	4	7	0.3%
Pedestrian corridor in use	-	-	<1	<1	<0.1%
Uninvolved vehicle	-	<1	1	2	<0.1%
Uninvolved pedestrian	-	-	-	-	-
Presence of prior accident	-	<1	-	<1	<0.1%
No Contributing Factor(s) Identified	-	44	93	137	6.9%
Not Applicable/Not Stated	-	1	4	5	0.3%
Total	16	418	1,546	1,979	100%

Note: Counts of vehicles in the 2014-2018 average may not add to the total due to rounding.
*Note: Each vehicle and/or driver involved in a collision can have up to three contributing factors noted. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total. An exception to this is the factors “Driver Action – Driving Properly and Human Condition – Apparently Normal”, "Driver Action – Driving Properly” and “Human Condition – Apparently Normal”, which are mutually exclusive and can be added to determine a “Driver not at-fault” total.

In 2019, eight in ten drivers of NSC vehicles involved in a collision are noted as driving properly and being in a normal human condition, including 51% as both “driving properly” and “apparently normal”, 2% as “driving properly” and 27% as “apparently normal” human condition. Over the previous five year (2014 to 2018) annual average, two thirds (68%) of commercial drivers involved in collisions are noted as driving properly and being in a normal human condition.

A driver action is recorded for 37% of the drivers of NSC commercial vehicles involved in traffic collisions in 2019, a slight increase from the previous five year (2014 to 2018) annual average (36%). Specific driver actions noted most often as contributing factors for drivers of NSC commercial vehicles involved a traffic collision in 2019 include:

- Distracted driving (including "careless driving" and "distraction/inattention") – 16%;
- "Back unsafely" – 6%;
- "Following too closely" – 6%;
- "Change lanes improperly" – 4%;
- "Turning improperly" – 3%;
- Speed (including "exceeding speed limit" "driving too fast for conditions" and "unsafe operating speed (too fast or too slow)") – 3%; and,
- "Fail to yield right of way" – 1%.

Human conditions are not often noted for commercial vehicle drivers. In 2019, one driver is noted as having "medical disability" and another is noted as "exceed hours of service" as a contributing factors to a collision. In the previous five years, on average, 2 drivers are noted as "extreme fatigue/fell asleep", one is noted as "loss of consciousness/blackout prior to collision" and one is noted as "impaired".

Some vehicle defect is recorded as a contributing factor for 1% of the commercial vehicles involved in a traffic collision in 2019. This is consistent with the previous five year (2014 to 2018) annual average.

Environmental conditions are recorded as a contributing factor for 5% of the commercial vehicles involved in traffic collisions in 2019 (a slight decrease from 2014 to 2018 annual average of nearly 7%). The two most common environmental conditions recorded for commercial vehicles involved in a traffic collision in 2019 are "slippery road surface" (2%) and "the action of a wild animal" (nearly 2%).

Figure 10-3 Select At-fault Contributing Factors for Commercial Vehicles and Drivers by Collision Severity

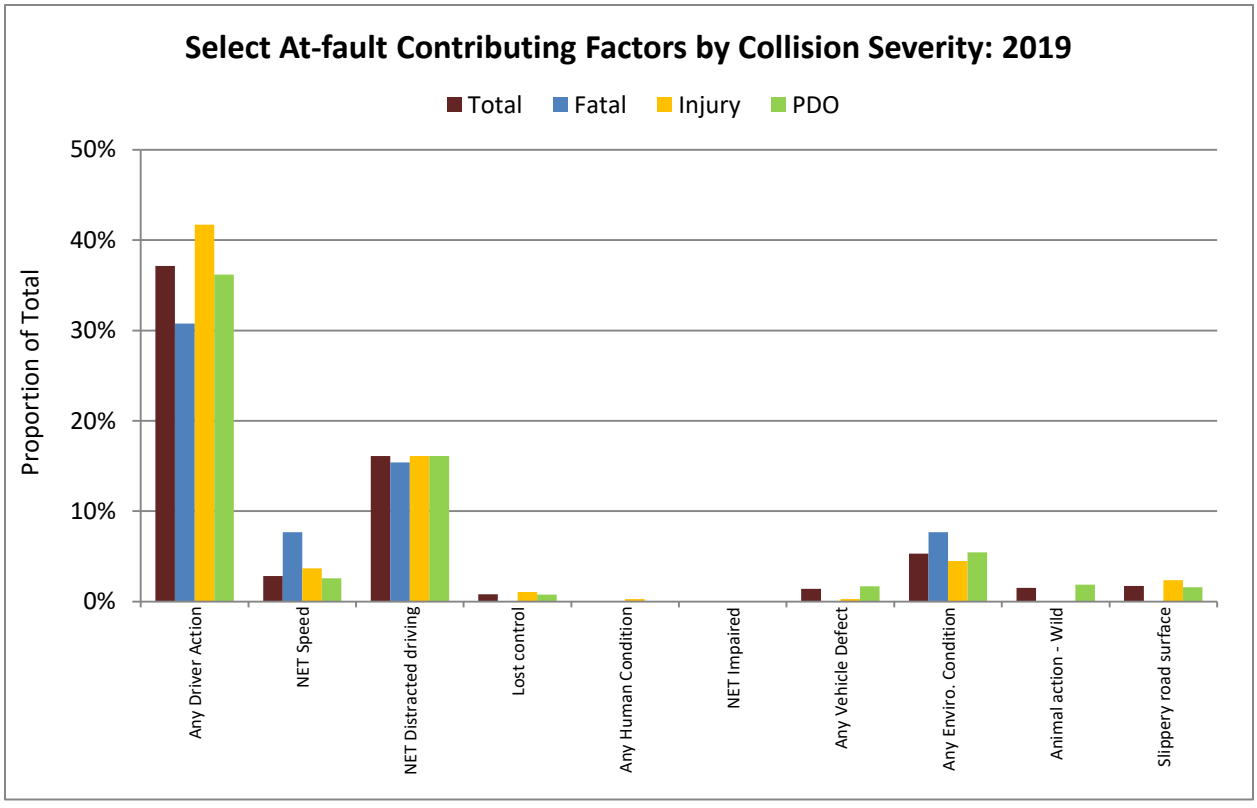


Table 10-5 Historical Summary of NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type

Table 10-5

Historical Summary of NSC Commercial Vehicles Involved in Traffic Collisions by Vehicle Type: 2014 to 2019

Vehicle Category	2014 Total	% of 2014 Total	2015 Total	% of 2015 Total	2016 Total	% of 2016 Total	2017 Total	% of 2017 Total	2018 Total	% of 2018 Total	**2019 Total**	**% of 2019 Total**
Truck >4,500 kgs Unit Chassis	1,082	57.0%	1,026	57.7%	1,100	56.3%	1,155	53.0%	1,158	55.5%	**1,213**	**57.8%**
Power Unit (Semi-Trailer)	500	26.4%	415	23.4%	496	25.4%	645	29.6%	546	26.2%	**521**	**24.8%**
Truck - Other	80	4.2%	76	4.3%	112	5.7%	94	4.3%	114	5.5%	**71**	**3.4%**
School Bus	1	<0.1%	10	0.6%	52	2.7%	71	3.3%	74	3.5%	**72**	**3.4%**
Transit Bus - Urban	98	5.2%	110	6.2%	102	5.2%	118	5.4%	87	4.2%	**104**	**5.0%**
Para-Transit Bus	5	0.3%	13	0.7%	10	0.5%	6	0.3%	9	0.4%	**3**	**0.1%**
Inter-City Bus	10	0.5%	7	0.4%	12	0.6%	13	0.6%	16	0.8%	**19**	**0.9%**
Bus - Other	121	6.4%	120	6.8%	71	3.6%	79	3.6%	82	3.9%	**95**	**4.5%**
Total	1,897	100%	1,777	100%	1,955	100%	2,181	100%	2,086	100%	**2,098**	**100%**

Table 10-6 Historical Summary of Traffic Collision Victims by NSC Commercial Vehicle Type

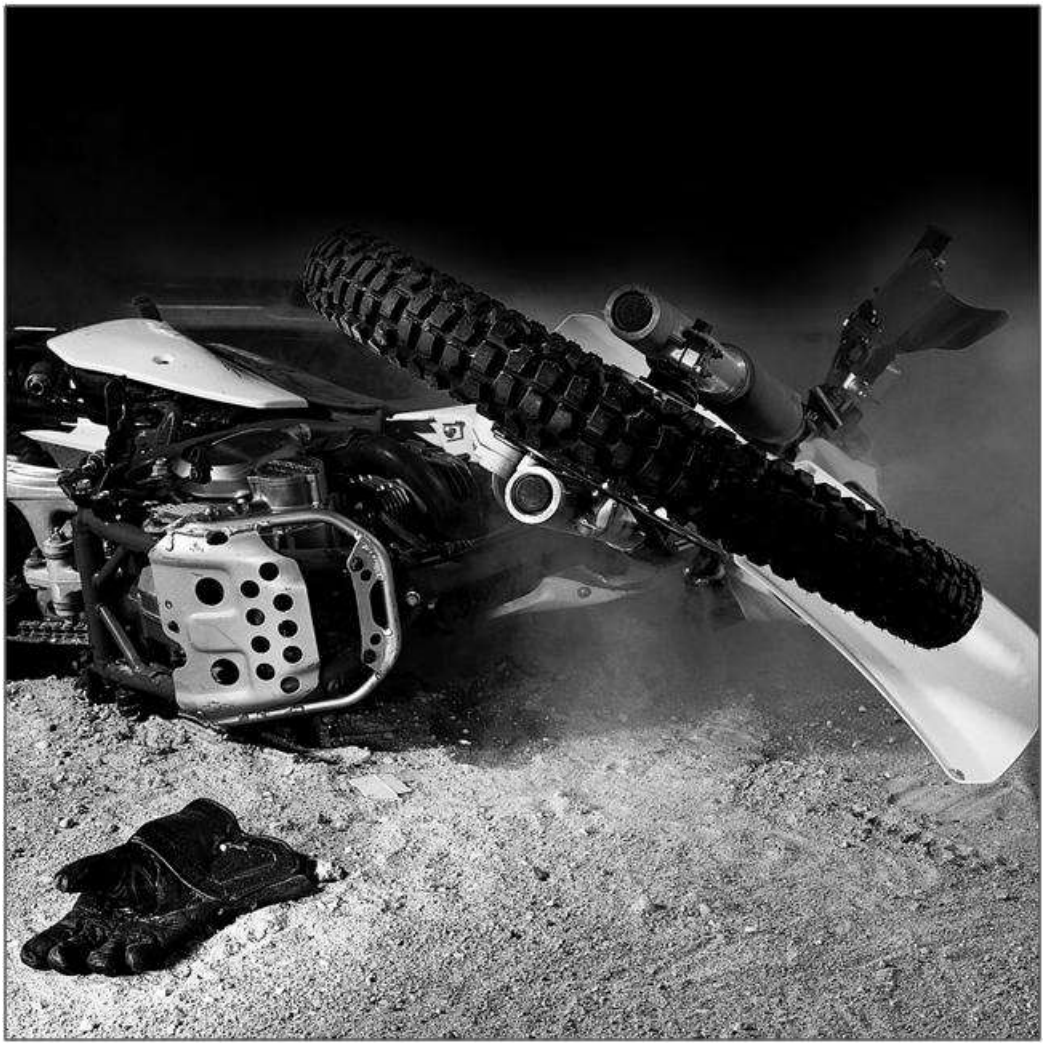
Table 10-6

Historical Summary of Traffic Collision Victims (Killed and Injured, Combined) by NSC Commercial Vehicle Type: 2014 to 2019

Vehicle Category	2014 Total	% of 2014 Total	2015 Total	% of 2015 Total	2016 Total	% of 2016 Total	2017 Total	% of 2017 Total	2018 Total	% of 2018 Total	**2019 Total**	**% of 2019 Total**
Truck >4,500 kgs Unit Chassis	260	48.6%	232	41.7%	251	45.4%	249	44.2%	257	47.2%	**227**	**47.0%**
Power Unit (Semi-Trailer)	162	30.3%	148	26.6%	163	29.5%	162	28.8%	156	28.7%	**150**	**31.1%**
Truck - Other	35	6.5%	37	6.6%	42	7.6%	25	4.4%	26	4.8%	**20**	**4.1%**
School Bus	1	0.2%	14	2.5%	19	3.4%	13	2.3%	14	2.6%	**13**	**2.7%**
Transit Bus - Urban	38	7.1%	58	10.4%	50	9.0%	100	17.8%	68	12.5%	**50**	**10.4%**
Para-Transit Bus	1	0.2%	4	0.7%	6	1.1%	0	-	5	0.9%	**3**	**0.6%**
Inter-City Bus	1	0.2%	4	0.7%	3	0.5%	0	-	7	1.3%	**5**	**1.0%**
Bus - Other	37	6.9%	60	10.8%	19	3.4%	14	2.5%	11	2.0%	**15**	**3.1%**
Total	535	100%	557	100%	553	100%	563	100%	544	100%	**483**	**100%**

Note: Information in Table 10-6 includes all victims of collisions where an NSC commercial vehicle is involved, not only victims from the NSC vehicle.

SECTION 11 – Off-Road Vehicle Collisions



Introduction

This section counts the number of off-road vehicle (ORV) collisions in Manitoba and provides detail for collisions of different severity: fatal, injury and property damage only (PDO). Information regarding the number of ORV collisions, victims, vehicles and drivers involved over the six year period 2014 to 2019 is presented. Details are provided for 2019 ORV collisions in terms of the month of occurrence, day of the week, time of day, weather and light conditions, location, and region of collision.

Data for ORV collisions are drawn from Traffic Accident Reports (TARs) generated by Manitoba Public Insurance as part of the claim process and from law enforcement agencies when they complete an accident report.

Key Highlights
In 2019, there are 145 off-road vehicle collisions, involving 49 victims, 154 vehicles and 149 drivers. Of these:

- 8 are fatal collisions, involving 8 vehicles and drivers, resulting in 8 people killed and none injured;
- 34 are injury collisions, involving 38 vehicles and 37 drivers, resulting in 41 people injured; and,
- 103 are PDO collisions, involving 108 vehicles and 104 drivers.

In 2019, ORV collisions occur most often:

- During the months of February, March and July, representing 66 of 145 collisions (nearly 46% combined).
- On weekends (Friday, Saturday and Sunday), representing 101 of 145 (70%) collisions.
- During daylight, representing 107 of 145 (74%) collisions.
- In the Eastern Region of Manitoba, representing 74 of 145 (51%) collisions.
- With drivers under the age of 45, 108 of 149 drivers (where age is known) involved in ORV collisions (nearly 73%).

Notwithstanding the overall collision trends, **fatal** ORV collisions in 2019 occur most often:

- On weekends (Friday, Saturday and Sunday), representing 5 of 8 fatal collisions (nearly 63%).
- Between noon and midnight, 5 of 8 fatal collisions (nearly 63%).
- On public roadway, accounting for 4 of 8 fatal collisions (50%).

Major Elements Examined
Counts of off-road vehicle (ORV) collisions in Manitoba for 2019 and previous years are taken from Traffic Accident Reports compiled by Manitoba Public Insurance. These counts are presented for all reportable ORV collisions, fatal collisions, injury collisions and property damage only (PDO) collisions. ORV collisions are maintained in a separate database from roadway collisions. As ORV collisions occur primarily outside of roadways and road rights-of-way, most of them are not valid for inclusion in the public roadway Traffic Accident Database. However, some ORV collisions are included in the Traffic Accident Database (if they occur on a public roadway and involve a vehicle that normally operates on public roadways); therefore, statistics between this and other sections of this report are not additive.

Collisions, victims, vehicles and drivers are presented separately at the beginning of this section with counts provided for the years 2014 through 2019. The remainder of this section explores ORV collisions occurring in 2019 and provides average counts of collisions for the time period of 2014 to 2018 as a comparison.

It is important to note that the number of fatal or injury collisions is not equal to the number of fatal or injured victims as each collision can result in multiple victims. Likewise, the number of vehicles involved is not necessarily equal to the number of drivers involved as a driverless vehicle could be involved in a collision.

No statistics are calculated for off-road vehicle involvement rates due to the fact that no reliable base population count of off-road vehicles is available. Similarly, it is difficult to establish a base count of actual riders/operators, making it difficult to calculate driver involvement rates.

"Drivers" in this section refers to the number of drivers of off-road vehicles involved in collisions. It excludes pedestrians and driverless vehicles (parked). In ORV collisions, there are few driverless vehicles involved, but still some.

The terms 'crash', 'collision' and 'accident' are used interchangeably in this report. The terms 'fatality' and 'killed' are used interchangeably in this report.

The reader is cautioned that not all percentages and calculations in the following tables will add to 100% of the total noted. Rounding error will often produce a difference of one or two percentage points. Likewise, average calculations are presented for historical data from the years 2014 to 2018. Rounding error in these calculations will cause individual average counts not to add to total average counts in some cases.

When reviewing the "Contributing Factors" for a traffic collision, the reader is cautioned to note that more than one contributing factor can be recorded for each collision. The total count of contributing factors noted will add to more than the number of collisions, vehicles or victims in those crashes.

Terms and Definitions

"Off-road Vehicle (ORV)"

- One of several vehicle types designed for off-road use. It includes snowmobiles, off-road motorcycles, all-terrain vehicles (ATVs), amphibious vehicles, dune/sport buggies, and 4-wheel drive vehicles operated off-road.

"Reportable ORV Collision"

- ORV collisions resulting in a fatality, injury or property damage in excess of $1,000 are required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completes a Traffic Accident Report (TAR) for the collision. This report deals with these reportable ORV collisions and the TARs arising from them.

"ATV"

- All Terrain Vehicle; includes vehicles with 3, 4 and 6 wheels.

"Collision Severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed.

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"Casualty Type"

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal (i.e., people injured but not killed) injury sustained.

"Killed"

- The casualty type "killed" indicates where the victim involved in the traffic collision died as a result of their injuries within thirty days of the collision occurrence.

"Injured"

- The casualty type "injured" indicates where the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: 'serious' or 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required). 'Other' injury is noted when the severity of the victim's injuries is not known or recorded in the TAR.

"Collision Type"

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

"Light Condition"

- Describes the light conditions at the scene of the accident, including:
    - Day – the light conditions which normally occur between one half hour after sunrise and one half hour before sunset;
    - Dawn – the light conditions which normally occur between one half hour before sunrise and one half hour after sunrise;
    - Dusk – the light conditions which normally occur between one half hour before sunset and one half hour after sunset;
    - Dark – the light conditions which normally occur between one half hour after sunset and one half hour before sunrise; and,
    - Artificial lighting – artificial illumination devices were functioning at the accident site under light conditions which normally occur between one half hour after sunset and one half hour before sunrise.

"Weather Condition"

- Describes the weather conditions prevalent at the time of the accident, including:
    - Clear – bright conditions, without precipitation or airborne matter, are recorded as clear;
    - Cloudy – dull, overcast conditions, without precipitation or airborne matter, are recorded as cloudy;
    - Raining;
    - Snowing;
    - Fog or Mist – airborne matter, of natural origin, which obscures visibility;
    - Smoke or Dust – airborne matter, of a natural or artificial origin, which obscures visibility;
    - Freezing Rain / Sleet / Hail – freezing rain, sleet or hail (self explanatory);
    - Drifting Snow – snow drifting on or above roadway, which obscures visibility of the roadway, road markings, traffic devices or roadway fixtures; and,
    - Strong Winds – used if wind was a contributing factor in the accident.

"Region"

- Manitoba Infrastructure is served by five regional office locations, each responsible for a geographic region (for boundaries, see Map 1-1). "Regions" are used to indicate the region in which a collision occurred.

"Contributing Factor"

- Those circumstances or factors recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environmental condition. The TAR allows for up to three contributing factors to be recorded for each driver or vehicle involved in the collision.

"At-fault Contributing Factor"

- A contributing factor where some action or condition other than "driving properly" and "apparently normal" has been noted.

Table 11-1 Historical Summary of Off-Road Vehicle Collisions

Table 11-1
Historical Summary of Off-Road Vehicle Collisions: 2014 to 2019

	2014	2015	2016	2017	2018	**2019**	2014-2018 Average
Total Collisions	295	269	268	168	163	**145**	233
Fatal	11	7	18	6	15	**8**	11
Injury	49	53	66	32	33	**34**	47
PDO	235	209	184	130	115	**103**	175
Total Victims	69	67	94	43	50	**49**	65
Killed	14	7	20	6	16	**8**	13
Injured	55	60	74	37	34	**41**	52
Total Vehicles Involved	327	303	297	182	173	**154**	256
Fatal	16	8	19	7	15	**8**	13
Injury	57	63	77	34	36	**38**	53
PDO	254	232	201	141	122	**108**	190
Total Drivers Involved	325	300	295	177	170	**149**	253
Fatal	16	8	19	7	15	**8**	13
Injury	57	63	76	34	36	**37**	53
PDO	252	229	200	136	119	**104**	187

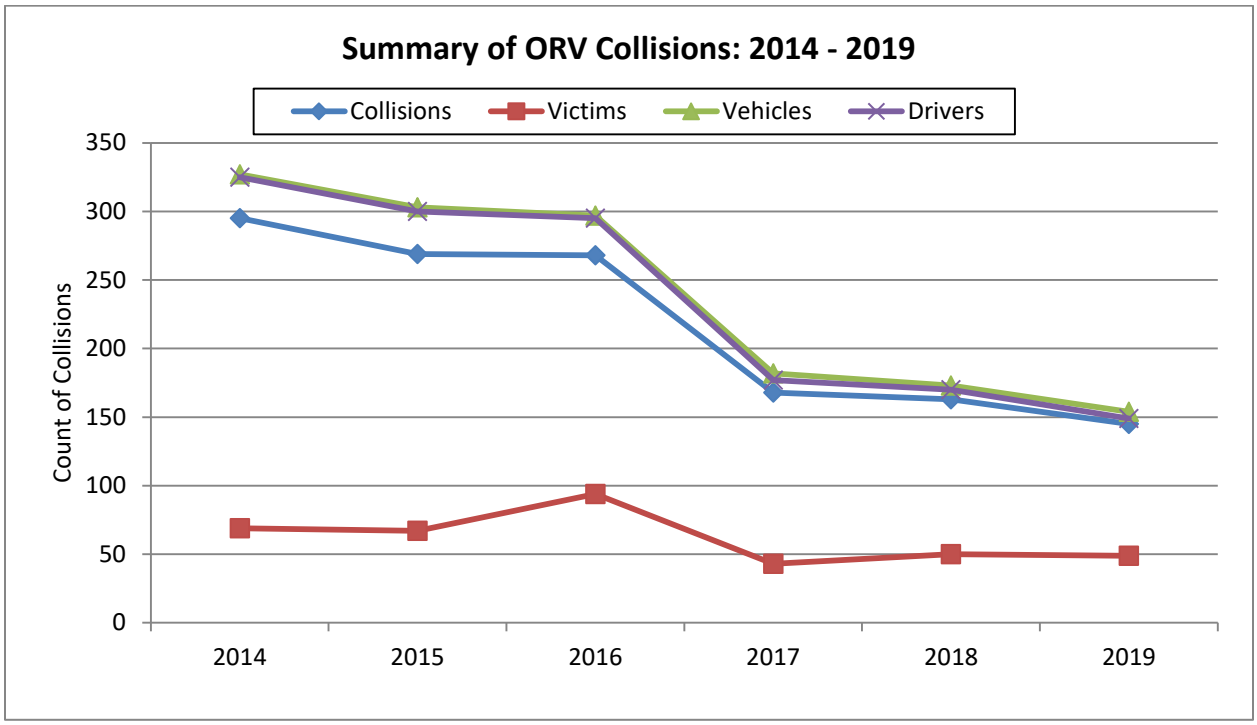
In 2019, there are 145 off-road vehicle collisions, involving 49 victims, 154 vehicles and 149 drivers. Of these:

- 8 are fatal collisions, involving 8 vehicles and drivers, resulting in 8 people killed and none injured;
- 34 are injury collisions, involving 38 vehicles and 37 drivers, resulting in 41 people injured; and,
- 103 are PDO collisions, involving 108 vehicles and 104 drivers.

Total ORV collisions in 2019 are 11% lower than 2018 and 38% lower than the average number of collisions in the previous five year (2014 to 2018) period. Compared to the previous five years, in 2019:

- ORV collision victims decreased by 24%;
- The number of people killed decreased by nearly 37%;
- The number of vehicles involved decreased by 40%; and,
- The number of drivers involved decreased by 41%.

Figure 11-1 Historical Summary of ORV Collisions



The counts of ORV collisions, victims, and vehicles and drivers involved in those collisions in 2019 are slightly lower than the counts in 2018.

Table 11-2 Victims, Vehicles and Drivers Involved in Off-Road Vehicle Collisions by ORV Type

Table 11-2
Victims, Vehicles and Drivers Involved in Off-Road Vehicle Collisions by ORV Type: 2019, 2014-2018 Average

	2019					2014-2018 Average					% Change 2019 to 2014-2018 Average				
	Snowmobile	ATV	Motorcycle	Other*	**Total**	Snowmobile	ATV	Motorcycle	Other*	Total	Snowmobile	ATV	Motorcycle	Other*	Total
Total Victims	11	28	3	7	**49**	27	33	1	3	65	-59.0%	-15.7%	150.0%	105.9%	-24.1%
Killed	3	4	1	0	**8**	5	7	<1	<1	13	-42.3%	-42.9%	400.0%	-100.0%	-36.5%
Injured	8	24	2	7	**41**	22	26	1	3	52	-63.0%	-8.4%	100.0%	118.8%	-21.2%
Total Vehicles Involved	64	58	3	29	**154**	117	104	2	34	256	-45.3%	-44.0%	66.7%	-14.7%	-39.9%
Fatal	3	4	1	0	**8**	5	7	<1	1	13	-42.3%	-39.4%	400.0%	-100.0%	-38.5%
Injury	8	20	2	8	**38**	22	24	1	6	53	-64.3%	-16.0%	100.0%	29.0%	-28.8%
PDO	53	34	0	21	**108**	89	73	<1	27	190	-40.7%	-53.6%	-100.0%	-21.6%	-43.2%
Total Drivers Involved	63	56	3	27	**149**	116	103	2	32	253	-45.9%	-45.5%	66.7%	-16.7%	-41.2%
Fatal	3	4	1	0	**8**	5	7	<1	1	13	-42.3%	-39.4%	400.0%	-100.0%	-38.5%
Injury	8	20	2	7	**37**	22	24	1	6	53	-64.3%	-15.3%	100.0%	12.9%	-30.5%
PDO	52	32	0	20	**104**	89	73	<1	25	187	-41.4%	-55.9%	-100.0%	-20.6%	-44.4%

* 'Other' includes: vehicles not registered as an off-road vehicle, dune/sport buggy, 4 wheel drive motor vehicle (operated off-road), amphibious vehicle, pedestrians and those listed under “not stated” category.

In 2019, a total of 154 vehicles were involved in off-road collisions, including:

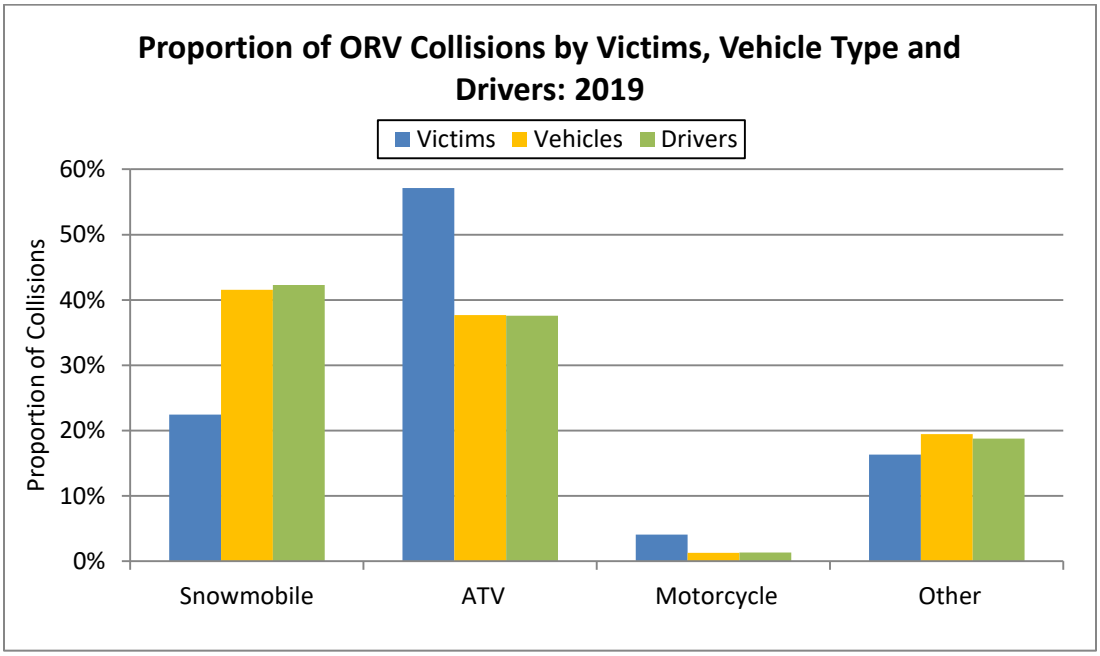
- 64 snowmobiles and 63 snowmobile drivers, resulting in 11 victims including 3 people killed;
- 58 ATVs and 56 ATV drivers, resulting in 28 victims including 4 people killed;
- 3 motorcycles and motorcycle drivers, resulting in 3 victims and one killed; and,
- 29 'Other' vehicles and 27 drivers of those vehicles, resulting in 7 victims including none killed.

Compared to the previous five year (2014 to 2018) annual average, in 2019:

- Total vehicles and drivers involved in snowmobile collisions are down by 45% and 46%, respectively. Victim counts are down 59%; the number of people killed in snowmobile collisions has decreased by a count of 2;
- Total vehicles and drivers involved in ATV collisions are down by 44% and nearly 46%, respectively. Victim counts are down 16%; the number of people killed and injured in ATV collisions decreased by a count of 3 and a count of 2, respectively;
- Total vehicles and drivers involved in motorcycle collisions increased by a count of 1. Victim counts increased by a count of 2; and,
- Total vehicles and drivers involved in 'other' vehicle collisions are down by 15% and 17%, respectively. Victim counts have increased by a count of 4.

Note: Due to low annual counts of people killed and injured in ORV collisions, relatively small changes in these counts year-over-year can produce dramatic changes in percentage terms. Please use caution when interpreting these results.

Figure 11-2 Proportion of ORV Collisions by Victims, Vehicle Type and Drivers



In 2019, snowmobiles account for the largest proportion of drivers and vehicles involved in ORV collisions, while ATVs account for the largest proportion of victims involved in ORV collisions.

Table 11-3 Off-Road Vehicle Collisions by Month of Occurrence and Collision Severity

Table 11-3
ORV Collisions by Month of Occurrence and Collision Severity: 2019, 2014-2018 Average

Month	2019 Collision Severity						**2019 Total**	**% of 2019 Total**	2014-2018 Average	% Change 2019 to 2014-2018 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
January	0	-	1	2.9%	11	10.7%	**12**	**8.3%**	34	-64.9%
February	0	-	2	5.9%	21	20.4%	**23**	**15.9%**	35	-34.7%
March	1	12.5%	2	5.9%	23	22.3%	**26**	**17.9%**	30	-12.8%
April	0	-	3	8.8%	8	7.8%	**11**	**7.6%**	19	-40.9%
May	0	-	4	11.8%	7	6.8%	**11**	**7.6%**	17	-36.0%
June	2	25.0%	4	11.8%	3	2.9%	**9**	**6.2%**	13	-30.8%
July	0	-	7	20.6%	10	9.7%	**17**	**11.7%**	17	2.4%
August	2	25.0%	3	8.8%	7	6.8%	**12**	**8.3%**	13	-9.1%
September	1	12.5%	2	5.9%	6	5.8%	**9**	**6.2%**	15	-41.6%
October	0	-	0	-	2	1.9%	**2**	**1.4%**	11	-82.5%
November	1	12.5%	2	5.9%	3	2.9%	**6**	**4.1%**	7	-18.9%
December	1	12.5%	4	11.8%	2	1.9%	**7**	**4.8%**	21	-66.0%
Total	8	100%	34	100%	103	100%	**145**	**100%**	233	-37.7%

The ORV collisions in 2019 occur more often in the months of February (16%), March (18%) and July (12%).

The 2019 proportional distribution of ORV collisions by month is similar to the previous five year (2014 to 2018) annual average.

- Winter (December/January/February/March) – 47% in 2019; nearly 52% in the previous five years.
- Spring (April/May) – 15% in 2019; 15% in the previous five years.
- Summer (June/July/August) – 26% in 2019; 18% in the previous five years.
- Fall (September/October/November) – 12% in 2019; 15% in the previous five years.

NOTE: For a detailed count of ORV collisions by month of occurrence in each year from 2014 to 2019, please refer to "*Table 11-16 Historical Summary of ORV Collisions by Month of Occurrence*" at the end of this section.

Table 11-4 Off-Road Vehicle Collisions by Day of Occurrence and Collision Severity

Table 11-4
ORV Collisions by Day of Occurrence and Collision Severity: 2019, 2014-2018 Average

Day	2019 Collision Severity						**2019 Total**	**% of 2019 Total**	2014-2018 Average	% Change 2019 to 2014-2018 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Sunday	3	37.5%	10	29.4%	28	27.2%	**41**	**28.3%**	51	-19.6%
Monday	0	-	5	14.7%	10	9.7%	**15**	**10.3%**	17	-13.8%
Tuesday	1	12.5%	0	-	8	7.8%	**9**	**6.2%**	17	-48.3%
Wednesday	2	25.0%	2	5.9%	7	6.8%	**11**	**7.6%**	18	-38.2%
Thursday	0	-	1	2.9%	8	7.8%	**9**	**6.2%**	17	-45.8%
Friday	1	12.5%	5	14.7%	14	13.6%	**20**	**13.8%**	28	-28.6%
Saturday	1	12.5%	11	32.4%	28	27.2%	**40**	**27.6%**	84	-52.6%
Total	8	100%	34	100%	103	100%	**145**	**100%**	233	-37.7%

The majority of ORV collisions happen on weekends (Friday, Saturday and Sunday). In 2019, 70% of ORV collisions occurred on Friday (14%), Saturday (28%) and Sunday (28%). Monday through Thursday account for 30% of ORV collisions.

In 2019, 5 of 8 fatal ORV collisions (nearly 63%) occur on weekends (Friday, Saturday and Sunday combined).

Figure 11-3 Proportion of ORV Collisions by Collision Severity and Day of Occurrence

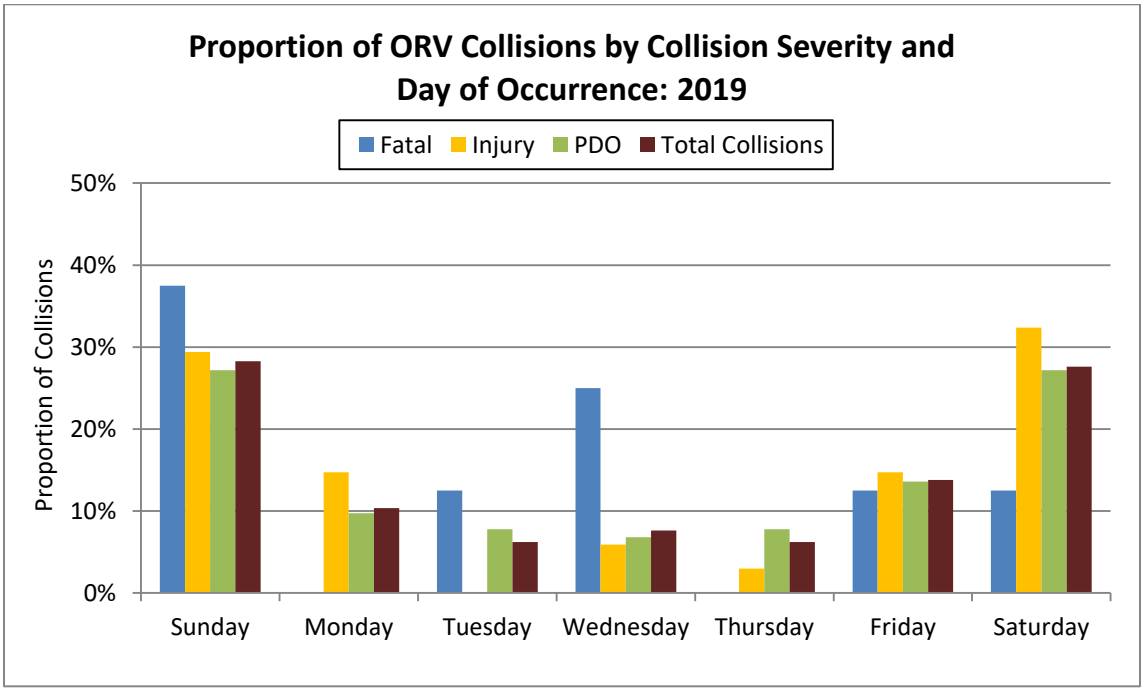


Table 11-5 Off-Road Vehicle Collisions by Time of Occurrence and Collision Severity

Table 11-5
ORV Collisions by Time of Occurrence and Collision Severity: 2019, 2014-2018 Average

Time	2019 Collision Severity						**2019 Total**	**% of 2019 Total**	2014-2018 Average	% Change 2019 to 2014-2018 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
00:00 - 02:59	0	-	0	-	1	1.0%	**1**	**0.7%**	6	-83.3%
03:00 - 05:59	0	-	0	-	0	-	**0**	**-**	1	-100.0%
06:00 - 08:59	2	25.0%	0	-	0	-	**2**	**1.4%**	3	-42.9%
09:00 - 11:59	1	12.5%	3	8.8%	13	12.6%	**17**	**11.7%**	23	-31.3%
12:00 - 14:59	2	25.0%	10	29.4%	33	32.0%	**45**	**31.0%**	68	-38.8%
15:00 - 17:59	1	12.5%	7	20.6%	36	35.0%	**44**	**30.3%**	69	-40.7%
18:00 - 20:59	0	-	9	26.5%	16	15.5%	**25**	**17.2%**	44	-47.6%
21:00 - 23:59	2	25.0%	5	14.7%	4	3.9%	**11**	**7.6%**	17	-38.9%
Not Stated	0	-	0	-	0	-	**0**	**-**	<1	-100.0%
Total	8	100%	34	100%	103	100%	**145**	**100%**	233	-42.0%

The majority of off-road collisions occur in the afternoon and evening. In 2019, 86% of all ORV vehicle collisions occurred between noon and midnight (12:00 to 14:59 – 31%; 15:00 to 17:59 – 30%; 18:00 to 20:59 – 17%; 21:00 to 23:59 – 8%).

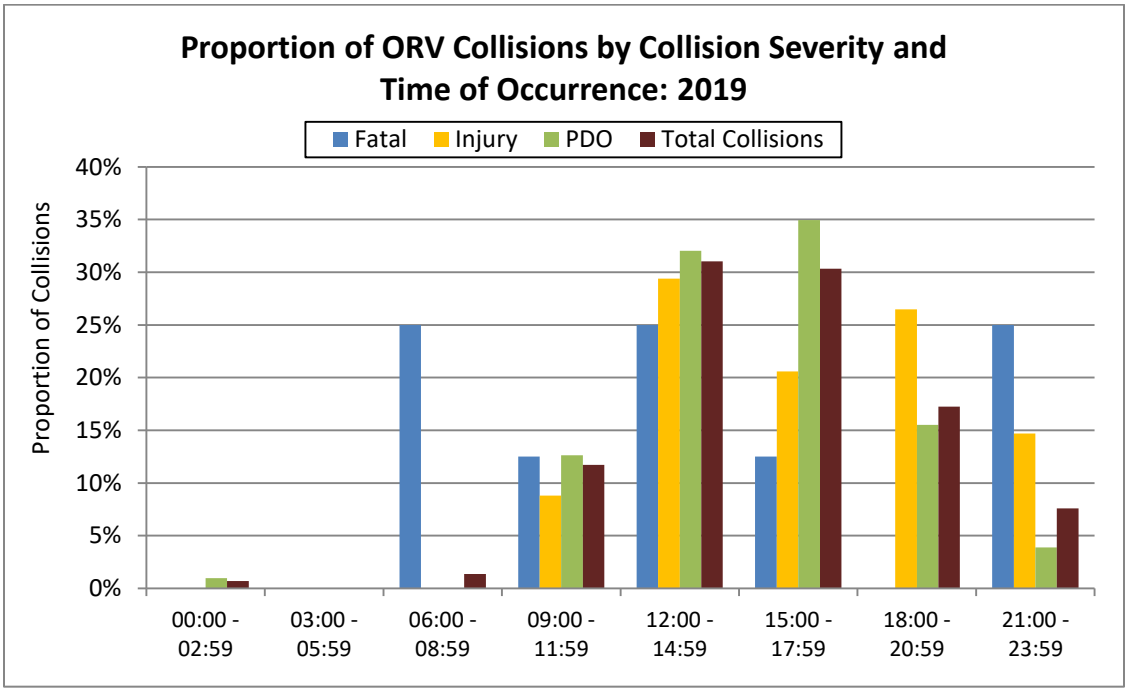
The proportional distribution of ORV collisions by time of day in 2019 is similar to the previous five year (2014 to 2018) annual average.

- Morning (06:00 to 11:59) – 13% in 2019; 11% in the previous five years.
- Afternoon (12:00 to 17:59) – 61% in 2019; 59% in the previous five years.
- Evening (18:00 to 20:59) – 17% in 2019; 19% in the previous five years.
- Overnight (21:00 to 05:59) – 8% in 2019; nearly 11% in the previous five years.

In 2019, the majority of fatal ORV collisions occurred between noon and midnight (5 of 8 fatal collisions).

In 2019, 17 of 34 injury ORV collisions occurred between noon and 6 p.m. and 14 of 34 injury ORV collisions occurred between 6 p.m. and midnight.

Figure 11-4 Proportion of Total ORV Collisions by Collision Severity and Time of Occurrence



In 2019, the majority of all ORV collisions occurred between noon and midnight (86%), while 12% occurred between 9 a.m. and noon.

Table 11-6 Off-Road Vehicle Collisions by Light Condition and Collision Severity

Table 11-6
ORV Collisions by Light Condition and Collision Severity: 2019, 2014-2018 Average

Light Condition	2019 Collision Severity						**2019 Total**	**% of 2019 Total**	2014-2018 Average	% Change 2019 to 2014-2018 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Day	3	37.5%	24	70.6%	80	77.7%	**107**	**73.8%**	152	-33.5%
Dawn	0	-	1	2.9%	0	-	**1**	**0.7%**	<1	33.3%
Dusk	2	25.0%	2	5.9%	8	7.8%	**12**	**8.3%**	14	-18.6%
Dark	3	37.5%	5	14.7%	8	7.8%	**16**	**11.0%**	32	-54.3%
Artificial Light	0	-	0	-	0	-	**0**	**-**	1	-100.0%
Not Stated	0	-	2	5.9%	7	6.8%	**9**	**6.2%**	33	-76.0%
Total	8	100%	34	100%	103	100%	**145**	**100%**	233	-42.0%

The majority of ORV collisions occur during daylight conditions, from a half hour after sunrise to a half hour before sunset. In 2019, daylight conditions account for 74% of ORV collisions. An additional 11% occurred during darkness.

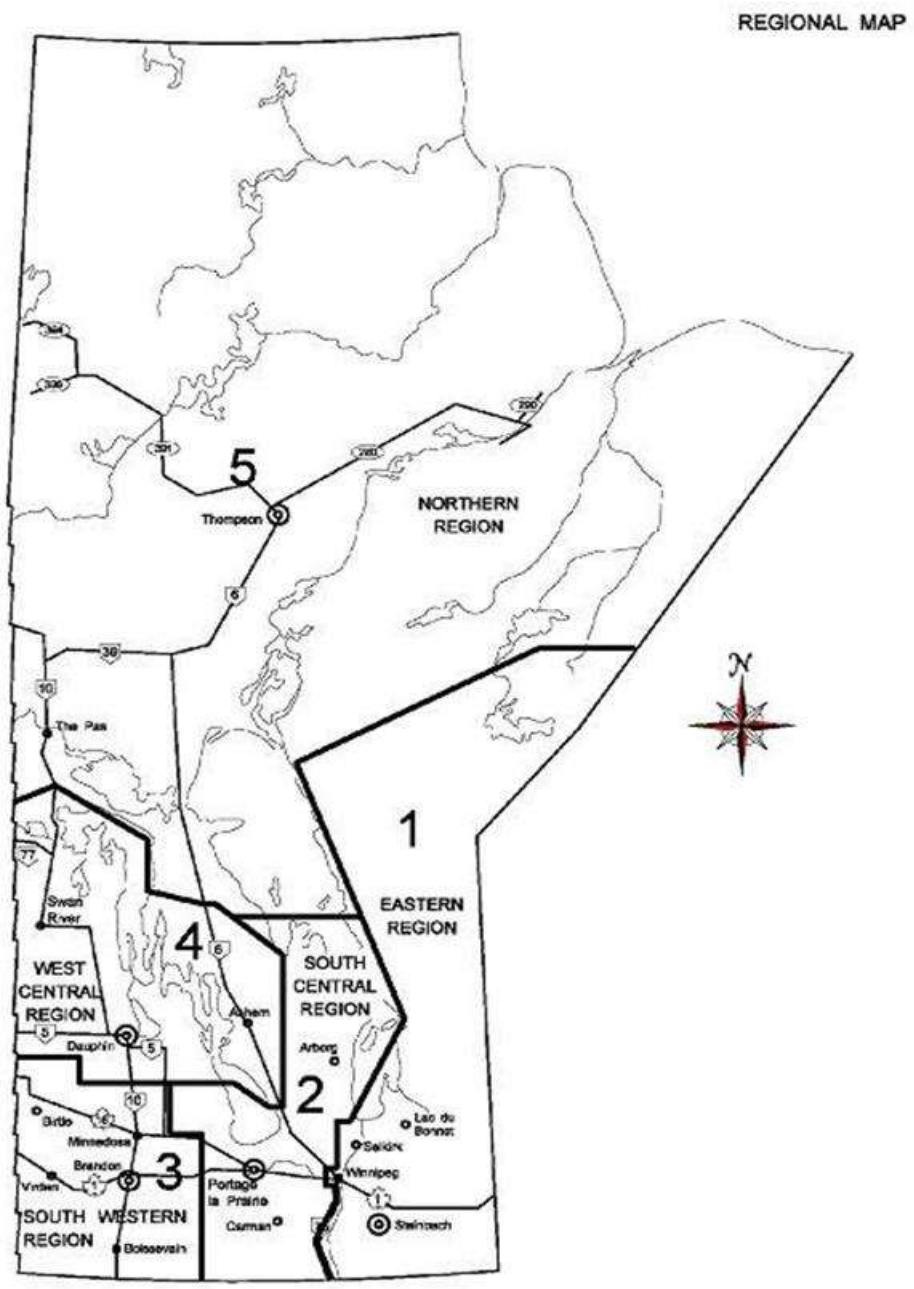
Table 11-7 ORV Collisions by Weather Condition and Collision Severity

Table 11-7
ORV Collisions by Weather Condition and Collision Severity: 2019, 2014-2018 Average

Weather Condition	2019 Collision Severity						**2019 Total**	**% of 2019 Total**	2014-2018 Average	% Change 2019 to 2014-2018 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Clear	4	50.0%	20	58.8%	65	63.1%	**89**	**61.4%**	145	-41.3%
Cloudy	2	25.0%	7	20.6%	17	16.5%	**26**	**17.9%**	26	-8.0%
Raining	0	-	1	2.9%	2	1.9%	**3**	**2.1%**	4	-33.3%
Snowing	0	-	1	2.9%	3	2.9%	**4**	**2.8%**	8	-55.6%
Fog/Mist	0	-	0	-	0	-	**0**	**-**	3	-100.0%
Smoke/Dust	0	-	1	2.9%	0	-	**1**	**0.7%**	<1	33.3%
Freezing Rain/Sleet/Hail	0	-	0	-	0	-	**0**	**-**	<1	-100.0%
Drifting Snow	0	-	0	-	2	1.9%	**2**	**1.4%**	3	-42.9%
Strong Winds	1	12.5%	0	-	1	1.0%	**2**	**1.4%**	1	14.3%
Not Stated	1	12.5%	4	11.8%	13	12.6%	**18**	**12.4%**	41	-61.7%
Total	8	100%	34	100%	103	100%	**145**	**100%**	233	-42.0%

The majority of ORV collisions occur when weather conditions are clear. In 2019, 61% of ORV collisions occurred in clear weather conditions. Another 18% occurred in cloudy weather.

Map 1-1 Manitoba Infrastructure (MI) Regions



Source: Manitoba Infrastructure, Traffic Engineering

This map shows the boundaries of Manitoba Infrastructure (MI) regions and regional office locations. Regional Offices are responsible for service delivery and management of MI programs, as indicated in the department's annual report.[3] Off-road vehicle collisions are reported by location within these regions.

[3] 2018/2019 Annual Report for Manitoba Infrastructure: https://www.gov.mb.ca/mit/reports/annual/pdf/2018_2019_annual.pdf

Table 11-8 ORV Collisions by MI Regions and Collision Severity

Table 11-8
ORV Collisions by MI Regions and Collision Severity: 2019, 2014-2018 Average

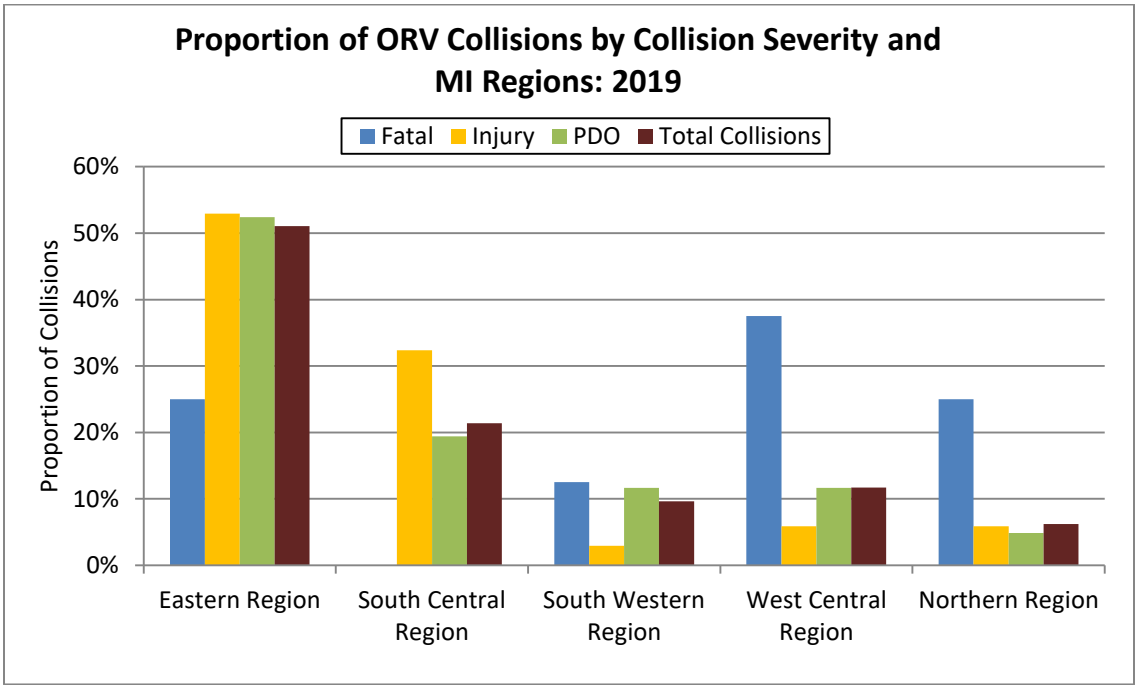
Region	2019 Collision Severity						**2019 Total**	**% of 2019 Total**	2014-2018 Average	% Change 2019 to 2014-2018 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Eastern Region	2	25.0%	18	52.9%	54	52.4%	**74**	**51.0%**	117	-41.0%
South Central Region	0	-	11	32.4%	20	19.4%	**31**	**21.4%**	46	-33.7%
South Western Region	1	12.5%	1	2.9%	12	11.7%	**14**	**9.7%**	34	-63.9%
West Central Region	3	37.5%	2	5.9%	12	11.7%	**17**	**11.7%**	20	-22.7%
Northern Region	2	25.0%	2	5.9%	5	4.9%	**9**	**6.2%**	15	-47.1%
Total	8	100%	34	100%	103	100%	**145**	**100%**	233	-42.0%

The Eastern Region of Manitoba historically accounts for a large share of off-road vehicle accidents. In 2019, 51% of ORV collisions occurred in the Eastern Region. The South Central Region follows with 21%, while the West Central Region accounts for 12% of the total collisions.

While the overall count of ORV collisions in 2019 is down across all regions in Manitoba (compared to the 2014 to 2018 annual average), the proportional distribution of collisions by region in 2019 is similar to the previous five year annual average.

- Eastern Region – 51% of ORV collisions in 2019; nearly 51% in previous five years.
- South Central Region – 21% of ORV collisions in 2019; 20% in previous five years.
- South Western Region – 10% of ORV collisions in 2019; 15% in previous five years.
- West Central Region – 12% of ORV collisions in 2019; 9% in previous five years.
- Northern Region – 6% of ORV collisions in 2019; nearly 7% in previous five years.

Figure 11-5 Proportion of ORV Collisions by Collision Severity and MI Regions



Fatal ORV collisions in 2019 occur most often in the West Central Region of Manitoba (3 of 8 fatal collisions).

Table 11-9 Off-Road Vehicle Collisions by Location and Collision Severity

Table 11-9

ORV Collisions by Location and Collision Severity: 2019, 2014-2018 Average

Location	2019 Collision Severity						**2019 Total**	**% of 2019 Total**	2014-2018 Average	% Change 2019 to 2014-2018 Average
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO				
Public Roadway	4	50.0%	8	23.5%	7	6.8%	**19**	**13.1%**	36	-52.8%
Ditches	0	-	3	8.8%	6	5.8%	**9**	**6.2%**	19	-56.1%
River/Lake	0	-	1	2.9%	10	9.7%	**11**	**7.6%**	19	-44.3%
Field	0	-	3	8.8%	2	1.9%	**5**	**3.4%**	14	-67.7%
Farm Yard/Private Property	2	25.0%	3	8.8%	19	18.4%	**24**	**16.6%**	30	-27.8%
Parking Lot	0	-	0	-	0	-	**0**	**-**	1	-100.0%
Embankment	0	-	0	-	0	-	**0**	**-**	3	-100.0%
Gravel Road	0	-	1	2.9%	2	1.9%	**3**	**2.1%**	4	-33.3%
Trail*	1	12.5%	4	11.8%	33	32.0%	**38**	**26.2%**	58	-38.5%
Other**	1	12.5%	11	32.4%	22	21.4%	**34**	**23.4%**	45	-27.3%
Not Stated	0	-	0	-	2	1.9%	**2**	**1.4%**	3	-42.9%
Total	8	100%	34	100%	103	100%	**145**	**100%**	233	-42.0%

*Includes marked groomed trail, bush trail/winter road, and snowmobile trail.

**Includes park, forest, bush, camp site, mountain, valley, hill, railroad and floodway/diversion.

Note: Historical averages are rounded off to the nearest integer. Computations of percentage changes from the historical trend to the current year are based on actual averages and not on the rounded numbers presented in the table.

In 2019, “trail” was the most common location for ORV collisions (26% of total) followed by “other” locations (23%).

The proportion of ORV collisions happening at specific locations in 2019 is similar to the previous five year (2014 to 2018) annual average.

- “Trail” – 26% in 2019; 25% in the previous five years.
- “Other” – 23% in 2019; 19% in the previous five years.
- “Farm Yard/Private Property” – 17% in 2019; 13% in the previous five years.
- “Public Roadway” – 13% in 2019; 16% in the previous five years.

NOTE: For a detailed count of ORV collisions by location in each year from 2014 to 2019, please refer to “*Table 11-17 Historical Summary of ORV Collisions by Location*” at the end of this section.

Table 11-10 ORV Collision Victims by Age Group and Casualty Type

Table 11-10
ORV Collision Victims by Age Group and Casualty Type: 2019, 2014-2018 Average

Age Group	2019 Casualty Type				2019 Total Victims	% of 2019 Total Victims	2014-2018 Average			
	Killed	% of Total Killed	Injured	% of Total Injured			Killed	Injured	Total Victims	% of Total Victims
0-4	0	-	0	-	**0**	**-**	<1	<1	<1	0.6%
5-9	0	-	0	-	**0**	**-**	0	<1	<1	0.9%
10-14	0	-	2	4.9%	**2**	**4.1%**	<1	<1	1	1.9%
15-19	1	12.5%	6	14.6%	**7**	**14.3%**	<1	4	4	6.5%
20-24	2	25.0%	2	4.9%	**4**	**8.2%**	1	5	6	9.6%
25-34	2	25.0%	15	36.6%	**17**	**34.7%**	4	11	15	22.6%
35-44	1	12.5%	4	9.8%	**5**	**10.2%**	2	12	13	20.4%
45-54	0	-	3	7.3%	**3**	**6.1%**	1	8	10	15.2%
55-64	1	12.5%	6	14.6%	**7**	**14.3%**	2	6	8	12.7%
65+	1	12.5%	1	2.4%	**2**	**4.1%**	1	1	2	3.4%
Not Stated	0	-	2	4.9%	**2**	**4.1%**	<1	3	4	6.2%
Total	8	100%	41	100%	**49**	**100%**	13	52	65	100%

The majority of ORV collision victims are under the age of 45 (71% of all victims). In 2019, 13 of 49 ORV collision victims (nearly 27%) are under the age of 25 while 35% are aged 25-34, and 10% are aged 35-44. Twelve of 49 victims (nearly 25%) are 45 years old and older (6% aged 45 to 54; 14% aged 55 to 64; 4% aged 65 and older).

ORV collision victims in 2019 are, for the most part, consistent in terms of overall age demographic when compared with the previous five year (2014 to 2018) annual average. In the previous five years:

- Persons under the age of 15 account for 3% of all victims in ORV collisions, compared to 4% in 2019;
- Persons aged 15 to 44 account for 59% of all victims in ORV collisions, compared to 67% in 2019;
- Persons aged 45 and above account for 31% of all victims in ORV collisions, compared to nearly 25% in 2019.

NOTE: The classification of victims is different from that of drivers (see Table 11-14) as victims may be of any age. Therefore, they are classified by a 5-year age cohort up to age 24. While drivers of off-road vehicles may not be required to be licensed, driver statistics are recorded consistent with other sections, and identified as under 16, 16 to 19, and then using the same classifications for victims.

NOTE: For a detailed count of ORV collision victims by age group in each year from 2014 to 2019, please refer to "*Table 11-18 Historical Summary of ORV Collision Victims by Age Group*" at the end of this section.

Table 11-11 ORV Collision Victims by Gender and Casualty Type

Table 11-11
ORV Collision Victims by Gender and Casualty Type: 2019, 2014-2018 Average

Gender	2019 Casualty Type				**2019 Total Victims**	**% of 2019 Total Victims**	2014-2018 Average			
	Killed	% of Total Killed	Injured	% of Total Injured			Killed	Injured	Total Victims	% of Total Victims
Male	8	100.0%	29	72.5%	**37**	**77.1%**	11	37	48	79.5%
Female	0	-	11	27.5%	**11**	**22.9%**	1	11	12	20.5%
Total	8	100%	40	100%	**48**	**100%**	12	48	60	100%

Note: Some victims do not have gender recorded and are therefore missing from the table above.

All of people killed and the majority of people injured in ORV collisions in 2019 are male. Males account for 37 ORV collision victims (77%). This is similar to the previous five year (2014 to 2018) annual average (nearly 80%).

Table 11-12 ORV Collision Victims by Safety Equipment Use and Casualty Type

Table 11-12
ORV Collision Victims by Safety Equipment Use and Casualty Type: 2019, 2014-2018 Average

Safety Equipment	2019 Casualty Type				**2019 Total Victims**	**% of 2019 Total Victims**	2014-2018 Average			
	Killed	% of Total Killed	Injured	% of Total Injured			Killed	Injured	Total Victims	% of Total Victims
Safety Helmet Worn	2	25.0%	18	43.9%	**20**	**40.8%**	3	32	35	53.9%
Safety Helmet Not Worn	4	50.0%	3	7.3%	**7**	**14.3%**	3	4	7	11.5%
Seat Belt Assembly Used	0	-	7	17.1%	**7**	**14.3%**	<1	6	7	10.5%
Seat Belt Assembly Not Used	0	-	2	4.9%	**2**	**4.1%**	<1	1	2	2.8%
Not Stated	2	25.0%	1	2.4%	**3**	**6.1%**	4	2	5	8.4%
Not Applicable*	0	-	10	24.4%	**10**	**20.4%**	1	7	8	13.0%
Total	8	100%	41	100%	**49**	**100%**	13	52	65	100%

* Victims who were not operators/passengers of off-road vehicles; therefore do not require a helmet.

In 2019, 20 victims (41%) in ORV collisions were wearing a safety helmet; 7 were not. This includes 2 people killed while wearing a helmet and 4 people killed while not wearing a helmet. The proportion of victims who were wearing a helmet in 2019 (41%) has decreased compared to the previous five year annual average (2014 to 2018; 54%).

Table 11-13 ORV Victims Killed vs. Injured for Helmeted and Non-helmeted ORV Occupants

Table 11-13

ORV Victims Killed vs. Injured for Helmeted and Non-helmeted ORV Occupants
(2014-2019)

	Helmet worn		Helmet not worn		Hemet Effectiveness
	Number	Percent	Number	Percent	(Ratio of % helmet not worn to % helmet worn)
Killed	17	8.8%	21	47.7%	5.45
Injured	177	91.2%	23	52.3%	0.57
Total	194	100%	44	100%	-

Note: Data have been presented in aggregate for the years 2014-2019.

As the number of victims wearing helmets exceeds those not wearing helmets, one could conclude that helmets contribute to fatalities and injuries in ORV collisions. However, it is likely that with a large majority of drivers and passengers wearing helmets, they have a high representation among collision victims.

Table 11-13 compares the proportion of people killed and injured for those wearing and not wearing helmets. Among people wearing helmets when they sustain an injury from an ORV collision, 9% are killed. Among people not wearing helmets when they sustain an injury from an ORV collision, 48% are killed. This indicates that an ORV collision victim is five-and-a-half times more likely to be killed if they are not wearing a helmet at the time of a collision.

Table 11-14 Drivers Involved in ORV Collisions by Age Group and Collision Severity

Table 11-14

Drivers Involved in ORV Collisions by Age Group and Collision Severity: 2019, 2014-2018 Average

Age Group	2019 Collision Severity						**2019 Total**	**% of 2019 Total**	2014-2018 Average	% Change 2019 to 2014-2018 Average
	Fatal	% of Total Fatal*	Injury	% of Total Injury*	PDO	% of Total PDO*				
<16	1	12.5%	2	5.4%	2	1.9%	**5**	**3.4%**	7	-26.5%
16-19	0	-	5	13.5%	4	3.8%	**9**	**6.0%**	16	-42.3%
20-24	2	25.0%	1	2.7%	15	14.4%	**18**	**12.1%**	33	-45.1%
25-34	2	25.0%	12	32.4%	32	30.8%	**46**	**30.9%**	61	-25.1%
35-44	1	12.5%	6	16.2%	23	22.1%	**30**	**20.1%**	49	-38.3%
45-54	0	-	4	10.8%	16	15.4%	**20**	**13.4%**	47	-57.6%
55-64	1	12.5%	6	16.2%	9	8.7%	**16**	**10.7%**	24	-32.8%
65+	1	12.5%	1	2.7%	3	2.9%	**5**	**3.4%**	6	-16.7%
Not Stated	0	-	0	-	0	-	**0**	**-**	11	-
Total	8	100%	37	100%	104	100%	**149**	**100%**	253	-41.2%

*Percentage of the total does not include the "not stated" category.

In 2019, drivers under the age of 45 account for nearly 73% of drivers involved in ORV collisions (<16 – 3%; 16 to 19 – 6%; 20 to 24 – 12%; 25 to 34 – 31%; 35 to 44 – 20%), while drivers aged 45 and older account for nearly 28% (45 to 54 – 13%; 55 to 64 – 11%; 65 and older – 3%).

Table 11-15 ORV Collisions by Contributing Factors and Collision Severity

Table 11-15

Drivers Involved in ORV Collisions by Contributing Factors and Collision Severity: 2019

Contributing Factor	2019 Collision Severity						**2019 Total Drivers**	**% of 2019 Total Drivers**
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Driver Action - Driving Properly and Human Condition - Apparently Normal	0	-	3	8.1%	9	8.7%	**12**	**8.1%**
Driver Action - Driving properly	0	-	0	-	0	-	**0**	**-**
Any At-fault Driver Action	5	62.5%	27	73.0%	61	58.7%	**93**	**62.4%**
Following too closely	0	-	0	-	4	3.8%	**4**	**2.7%**
Turning improperly	0	-	1	2.7%	2	1.9%	**3**	**2.0%**
Passing improperly	0	-	0	-	0	-	**0**	**-**
Changing lanes improperly	0	-	0	-	0	-	**0**	**-**
Fail to yield right-of-way	0	-	0	-	0	-	**0**	**-**
Disobey traffic control device/officer	0	-	0	-	0	-	**0**	**-**
Drive wrong way on roadway	0	-	0	-	0	-	**0**	**-**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	**0**	**-**
Back unsafely	0	-	0	-	2	1.9%	**2**	**1.3%**
Parking improperly	0	-	0	-	0	-	**0**	**-**
Lost control/Drive off road	2	25.0%	3	8.1%	1	1.0%	**6**	**4.0%**
Driverless vehicle ran out of control	0	-	0	-	0	-	**0**	**-**
Leave stop sign before safe to do so	0	-	0	-	0	-	**0**	**-**
Failed to signal	0	-	0	-	0	-	**0**	**-**
Take avoiding action	0	-	1	2.7%	1	1.0%	**2**	**1.3%**
Driver inexperience	0	-	0	-	1	1.0%	**1**	**0.7%**
Pedestrian error/confusion	0	-	0	-	0	-	**0**	**-**
NET Speed	3	37.5%	19	51.4%	51	49.0%	**73**	**49.0%**
Exceeding speed limit	0	-	1	2.7%	0	-	**1**	**0.7%**
Driving too fast for conditions	1	12.5%	18	48.6%	51	49.0%	**70**	**47.0%**
Unsafe operating speed (Too fast or too slow)	2	25.0%	0	-	0	-	**2**	**1.3%**
NET Distracted driving	0	-	4	10.8%	6	5.8%	**10**	**6.7%**
Careless Driving	0	-	4	10.8%	6	5.8%	**10**	**6.7%**
Distraction/Inattention	0	-	1	2.7%	0	-	**1**	**0.7%**

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Contributing Factor	2019 Collision Severity						2019 Total Drivers	% of 2019 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Human Condition - Apparently Normal	1	12.5%	27	73.0%	87	83.7%	**115**	**77.2%**
Any At-fault Human Condition	6	75.0%	0	-	0	-	**6**	**4.0%**
Loss of consciousness/Blackout prior to collision	1	12.5%	0	-	0	-	**1**	**0.7%**
Extreme fatigue/Fell asleep	0	-	0	-	0	-	**0**	**-**
Defective eyesight	0	-	0	-	0	-	**0**	**-**
Defective hearing	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	0	-	0	-	**0**	**-**
Physical disability	0	-	0	-	0	-	**0**	**-**
Mental disability	0	-	0	-	0	-	**0**	**-**
Mental confusion/Inability to remember	0	-	0	-	0	-	**0**	**-**
Sudden illness	0	-	0	-	0	-	**0**	**-**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	**0**	**-**
NET Impaired	5	62.5%	0	-	0	-	**5**	**3.4%**
Ability impaired alcohol	4	50.0%	0	-	0	-	**4**	**2.7%**
Ability impaired drugs	0	-	0	-	0	-	**0**	**-**
Had been drinking/Suspected alcohol use	1	12.5%	0	-	0	-	**1**	**0.7%**
No Apparent (Vehicle) Defect	2	25.0%	31	83.8%	92	88.5%	**125**	**83.9%**
Any At-fault Vehicle Defect	1	12.5%	1	2.7%	0	-	**2**	**1.3%**
Defective brakes	0	-	0	-	0	-	**0**	**-**
Defective steering	0	-	0	-	0	-	**0**	**-**
Defective headlights	1	12.5%	0	-	0	-	**1**	**0.7%**
Defective brake lights	0	-	0	-	0	-	**0**	**-**
Defective lighting (unspecified)	0	-	0	-	0	-	**0**	**-**
Defective engine controls/drive train	0	-	0	-	0	-	**0**	**-**
Defective suspension/wheels	0	-	0	-	0	-	**0**	**-**
Defective tires	0	-	0	-	0	-	**0**	**-**
Tow hitch/yoke defective	0	-	0	-	0	-	**0**	**-**
Defective exhaust system	0	-	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	0	-	**0**	**-**
Defective glazing (obscured windows)	0	-	0	-	0	-	**0**	**-**
Vehicle modifications	0	-	0	-	0	-	**0**	**-**
Fire	0	-	0	-	0	-	**0**	**-**
Overloaded/oversized	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	0	-	1	2.7%	0	-	**1**	**0.7%**
Jack-knife/trailer swing	0	-	0	-	0	-	**0**	**-**
Hydroplaning tires	0	-	0	-	0	-	**0**	**-**

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Contributing Factor	2019 Collision Severity						2019 Total Drivers	% of 2019 Total Drivers
	Fatal	% of Total Fatal	Injury	% of Total Injury	PDO	% of Total PDO		
Any At-fault Environmental Condition	1	12.5%	5	13.5%	38	36.5%	**44**	**29.5%**
Animal action - Wild	0	-	0	-	1	1.0%	**1**	**0.7%**
Animal action - Domestic	0	-	0	-	1	1.0%	**1**	**0.7%**
Slippery road surface	1	12.5%	0	-	1	1.0%	**2**	**1.3%**
Snow drift	0	-	1	2.7%	0	-	**1**	**0.7%**
Obstruction/debris on roadway	0	-	4	10.8%	35	33.7%	**39**	**26.2%**
View obstructed/limited	0	-	0	-	0	-	**0**	**-**
Glare/reflection	0	-	0	-	0	-	**0**	**-**
Construction zone	0	-	0	-	0	-	**0**	**-**
Defective driving surface	0	-	1	2.7%	0	-	**1**	**0.7%**
Shoulders defective	0	-	0	-	0	-	**0**	**-**
Lane markings inadequate	0	-	0	-	0	-	**0**	**-**
Defective/inoperative traffic control device	0	-	0	-	0	-	**0**	**-**
Weather	0	-	0	-	0	-	**0**	**-**
Pedestrian corridor in use	0	-	0	-	0	-	**0**	**-**
Uninvolved vehicle	0	-	0	-	0	-	**0**	**-**
Uninvolved pedestrian	0	-	0	-	0	-	**0**	**-**
Presence of prior accident	0	-	0	-	0	-	**0**	**-**
No Contributing Factor(s) Identified	1	12.5%	0	-	0	-	**1**	**0.7%**
Not Stated	0	-	2	5.4%	2	1.9%	**4**	**2.7%**
Total	8	100%	37	100%	104	100%	**149**	**100%**

*Note: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

In 2019, at least one at-fault driver action is recorded for 93 of the 149 drivers involved in ORV collisions (62%), including:

- 5 of 8 drivers involved in fatal collisions;
- 27 of 37 drivers involved in injury collisions; and,
- 61 of 104 drivers involved in PDO collisions.

The most prevalent at-fault driver actions include:

- Speed (including “exceeding speed limit”, “driving too fast for conditions” and “unsafe operating speed”) – 49% of the drivers involved;
- Distracted driving (including “careless driving” and “distraction/inattention”) – 7% of the drivers involved;
- “Loss of control/drive off road” – 4% of the drivers involved;
- “Following too closely” – 3% of the drivers involved; and,
- “Turning improperly” – 2% of the drivers involved.

At-fault human conditions are recorded as contributing for 4% of the drivers involved in ORV collisions, with the most prevalent being impaired driving (including “ability impaired by alcohol”, “ability impaired by drugs” and “had been drinking/suspected alcohol use”) (3% of the drivers involved).

Environmental conditions are recorded as contributing for nearly 30% of the drivers involved in ORV collisions, with the most prevalent being “obstruction/debris on roadway” (26% of the drivers involved).

Only two drivers involved in ORV collisions had a vehicle defect recorded as a contributing factor.

In the previous five year (2014 to 2018) annual average of the drivers involved in ORV collisions:

- 59% had an at-fault driver action recorded, with 32% being distracted (“careless driving” and “distraction/inattention”), 20% speed, and 8% “lost control/drive off road”;
- 2% had an at-fault ‘human condition’ recorded, with the most common being impaired (2%);
- 15% had an environmental condition recorded, with the most common being “obstruction/debris on roadway” (9%) and “defective driving surface” (2%); and,
- On average, only 2 drivers had a vehicle defect recorded as a contributing factor per year.

In 2019, 5 of 8 drivers involved in fatal collisions had an at-fault driver action and 6 of 8 had an at-fault human condition. The most common at-fault contributing factors recorded for drivers involved in fatal ORV collisions in 2019 include:

- Impaired (including “ability impaired by alcohol”, “ability impaired by drugs” and “had been drinking/suspected alcohol use”) – 5 of 8 drivers; and,
- Speed (including “exceeding speed limit”, “driving too fast for conditions” and “unsafe operating speed”) – 3 of 8 drivers.

NOTE: For a detailed count of drivers involved in ORV collisions by the contributing factors recorded in each year from 2014 to 2019, please refer to “*Table 11-19 Historical Summary of Drivers Involved in ORV Collisions by Contributing Factors*” at the end of this section.

Table 11-16 Historical Summary of ORV Collisions by Month of Occurrence

Table 11-16
Summary of ORV Collisions by Month of Occurrence: 2014 to 2019

Month	2014 Total	% of 2014 Total	2015 Total	% of 2015 Total	2016 Total	% of 2016 Total	2017 Total	% of 2017 Total	2018 Total	% of 2018 Total	**2019 Total**	**% of 2019 Total**
January	40	13.6%	35	13.0%	40	14.9%	34	20.2%	22	13.5%	**12**	**8.3%**
February	44	14.9%	36	13.4%	41	15.3%	26	15.5%	29	17.8%	**23**	**15.9%**
March	41	13.9%	39	14.5%	32	11.9%	11	6.5%	26	16.0%	**26**	**17.9%**
April	30	10.2%	24	8.9%	9	3.4%	16	9.5%	14	8.6%	**11**	**7.6%**
May	27	9.2%	15	5.6%	20	7.5%	12	7.1%	12	7.4%	**11**	**7.6%**
June	13	4.4%	19	7.1%	10	3.7%	13	7.7%	10	6.1%	**9**	**6.2%**
July	20	6.8%	20	7.4%	23	8.6%	12	7.1%	8	4.9%	**17**	**11.7%**
August	20	6.8%	16	5.9%	16	6.0%	6	3.6%	8	4.9%	**12**	**8.3%**
September	16	5.4%	22	8.2%	24	9.0%	8	4.8%	7	4.3%	**9**	**6.2%**
October	16	5.4%	16	5.9%	8	3.0%	12	7.1%	5	3.1%	**2**	**1.4%**
November	14	4.7%	7	2.6%	8	3.0%	6	3.6%	2	1.2%	**6**	**4.1%**
December	14	4.7%	20	7.4%	37	13.8%	12	7.1%	20	12.3%	**7**	**4.8%**
Total	295	100%	269	100%	268	100%	168	100%	163	100%	**145**	**100%**

Table 11-17 Historical Summary of ORV Collisions by Location

Table 11-17
Summary of ORV Collisions by Location: 2014 to 2019

Location	2014 Total	% of 2014 Total	2015 Total	% of 2015 Total	2016 Total	% of 2016 Total	2017 Total	% of 2017 Total	2018 Total	% of 2018 Total	**2019 Total**	**% of 2019 Total**
Public Roadway	45	15.3%	54	20.1%	48	17.9%	14	8.3%	20	12.3%	**19**	**13.1%**
Ditches	16	5.4%	27	10.0%	25	9.3%	14	8.3%	13	8.0%	**9**	**6.2%**
River/Lake	20	6.8%	22	8.2%	18	6.7%	19	11.3%	15	9.2%	**11**	**7.6%**
Field	9	3.1%	17	6.3%	20	7.5%	16	9.5%	9	5.5%	**5**	**3.4%**
Farm Yard/Private Property	46	15.6%	43	16.0%	25	9.3%	19	11.3%	19	11.7%	**24**	**16.6%**
Parking Lot	2	0.7%	2	0.7%	1	0.4%	1	0.6%	0	-	**0**	**-**
Embankment	2	0.7%	1	0.4%	5	1.9%	3	1.8%	4	2.5%	**0**	**-**
Gravel Road	5	1.7%	5	1.9%	5	1.9%	3	1.8%	3	1.8%	**3**	**2.1%**
Trail*	77	26.1%	48	17.8%	76	28.4%	46	27.4%	43	26.4%	**38**	**26.2%**
Other**	66	22.4%	47	17.5%	41	15.3%	33	19.6%	37	22.7%	**34**	**23.4%**
Not Stated	7	2.4%	3	1.1%	4	1.5%	0	-	0	-	**2**	**1.4%**
Total	295	100%	269	100%	268	100%	168	100%	163	100%	**145**	**100%**

*Includes marked groomed trail, bush trail/winter road, and snowmobile trail.

**Includes park, forest, bush, camp site, mountain, valley, hill, railroad and floodway/diversion.

Table 11-18 Historical Summary of ORV Collision Victims by Age Group

Table 11-18

Historical Summary of ORV Collision Victims by Age Group: 2014 to 2019

Age Group	2014 Total	% of 2014 Total	2015 Total	% of 2015 Total	2016 Total	% of 2016 Total	2017 Total	% of 2017 Total	2018 Total	% of 2018 Total	**2019 Total**	**% of 2019 Total**
0-4	0	-	1	1.5%	0	-	1	2.3%	0	-	**0**	**-**
5-9	0	-	1	1.5%	1	1.1%	1	2.3%	0	-	**0**	**-**
10-14	1	1.4%	1	1.5%	2	2.1%	0	-	2	4.0%	**2**	**4.1%**
15-19	8	11.6%	5	7.5%	6	6.4%	1	2.3%	1	2.0%	**7**	**14.3%**
20-24	7	10.1%	9	13.4%	4	4.3%	4	9.3%	7	14.0%	**4**	**8.2%**
25-34	17	24.6%	11	16.4%	20	21.3%	11	25.6%	14	28.0%	**17**	**34.7%**
35-44	12	17.4%	16	23.9%	22	23.4%	6	14.0%	10	20.0%	**5**	**10.2%**
45-54	8	11.6%	10	14.9%	19	20.2%	6	14.0%	6	12.0%	**3**	**6.1%**
55-64	8	11.6%	7	10.4%	10	10.6%	9	20.9%	7	14.0%	**7**	**14.3%**
65+	0	-	2	3.0%	5	5.3%	1	2.3%	3	6.0%	**2**	**4.1%**
Not Stated	8	11.6%	4	6.0%	5	5.3%	3	7.0%	0	-	**2**	**4.1%**
Total	69	100%	67	100%	94	100%	43	100%	50	100%	**49**	**100%**

Table 11-19 Historical Summary of ORV Collisions by Contributing Factors

Table 11-19

Historical Summary of ORV Collisions by Contributing Factors: 2014 to 2019

Contributing Factor	2014 Total Drivers	% of 2014 Total Drivers	2015 Total Drivers	% of 2015 Total Drivers	2016 Total Drivers	% of 2016 Total Drivers	2017 Total Drivers	% of 2017 Total Drivers	2018 Total Drivers	% of 2018 Total Drivers	**2019 Total Drivers**	**% of 2019 Total Drivers**
Driver Action - Driving Properly and Human Condition - Apparently Normal	18	5.5%	34	11.3%	36	12.2%	11	6.2%	10	5.9%	**12**	**8.1%**
Driver Action - Driving properly	0	-	3	1.0%	2	0.7%	0	-	1	0.6%	**0**	**-**
Any At-fault Driver Action	157	48.3%	139	46.3%	170	57.6%	148	83.6%	128	75.3%	**93**	**62.4%**
Following too closely	8	2.5%	7	2.3%	3	1.0%	5	2.8%	2	1.2%	**4**	**2.7%**
Turning improperly	6	1.8%	4	1.3%	4	1.4%	3	1.7%	1	0.6%	**3**	**2.0%**
Passing improperly	0	-	0	-	1	0.3%	0	-	0	-	**0**	**-**
Changing lanes improperly	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Fail to yield right-of-way	1	0.3%	2	0.7%	0	-	2	1.1%	1	0.6%	**0**	**-**
Disobey traffic control device/officer	0	-	1	0.3%	0	-	0	-	0	-	**0**	**-**
Drive wrong way on roadway	0	-	0	-	0	-	0	-	1	0.6%	**0**	**-**
Passing a vehicle at pedestrian X-walk	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Back unsafely	1	0.3%	5	1.7%	1	0.3%	3	1.7%	1	0.6%	**2**	**1.3%**
Parking improperly	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Lost control/Drive off road	13	4.0%	22	7.3%	24	8.1%	30	16.9%	7	4.1%	**6**	**4.0%**
Driverless vehicle ran out of control	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Leave stop sign before safe to do so	0	-	0	-	1	0.3%	0	-	0	-	**0**	**-**
Failed to signal	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Take avoiding action	3	0.9%	2	0.7%	5	1.7%	3	1.7%	1	0.6%	**2**	**1.3%**
Driver inexperience	1	0.3%	3	1.0%	8	2.7%	13	7.3%	6	3.5%	**1**	**0.7%**
Pedestrian error/confusion	0	-	0	-	0	-	0	-	0	-	**0**	**-**
NET Speed	35	10.8%	19	6.3%	42	14.2%	64	36.2%	98	57.6%	**73**	**49.0%**
Exceeding speed limit	0	-	0	-	2	0.7%	0	-	0	-	**1**	**0.7%**
Driving too fast for conditions	31	9.5%	18	6.0%	34	11.5%	63	35.6%	97	57.1%	**70**	**47.0%**
Unsafe operating speed (Too fast or too slow)	4	1.2%	1	0.3%	6	2.0%	1	0.6%	1	0.6%	**2**	**1.3%**
NET Distracted driving	109	33.5%	97	32.3%	120	40.7%	57	32.2%	21	12.4%	**10**	**6.7%**
Careless Driving	109	33.5%	93	31.0%	114	38.6%	51	28.8%	14	8.2%	**10**	**6.7%**
Distraction/Inattention	2	0.6%	6	2.0%	11	3.7%	14	7.9%	7	4.1%	**1**	**0.7%**

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Contributing Factor	2014 Total Drivers	% of 2014 Total Drivers	2015 Total Drivers	% of 2015 Total Drivers	2016 Total Drivers	% of 2016 Total Drivers	2017 Total Drivers	% of 2017 Total Drivers	2018 Total Drivers	% of 2018 Total Drivers	**2019 Total Drivers**	**% of 2019 Total Drivers**
Human Condition - Apparently Normal	29	8.9%	38	12.7%	77	26.1%	95	53.7%	131	77.1%	**115**	**77.2%**
Any At-fault Human Condition	5	1.5%	5	1.7%	11	3.7%	3	1.7%	4	2.4%	**6**	**4.0%**
Loss of consciousness/Blackout prior to collision	0	-	0	-	0	-	0	-	0	-	**1**	**0.7%**
Extreme fatigue/Fell asleep	0	-	1	0.3%	0	-	0	-	0	-	**0**	**-**
Defective eyesight	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective hearing	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Medical disability	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Physical disability	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Mental disability	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Mental confusion/Inability to remember	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Sudden illness	0	-	0	-	0	-	0	-	1	0.6%	**0**	**-**
Exceed hours of service (commercial drivers only)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
NET Impaired	5	1.5%	4	1.3%	11	3.7%	3	1.7%	3	1.8%	**5**	**3.4%**
Ability impaired alcohol	2	0.6%	3	1.0%	6	2.0%	3	1.7%	2	1.2%	**4**	**2.7%**
Ability impaired drugs	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Had been drinking/Suspected alcohol use	3	0.9%	1	0.3%	5	1.7%	0	-	1	0.6%	**1**	**0.7%**
No Apparent (Vehicle) Defect	39	12.0%	64	21.3%	132	44.7%	119	67.2%	132	77.6%	**125**	**83.9%**
Any At-fault Vehicle Defect	3	0.9%	1	0.3%	4	1.4%	0	-	1	0.6%	**2**	**1.3%**
Defective brakes	1	0.3%	0	-	0	-	0	-	0	-	**0**	**-**
Defective steering	0	-	1	0.3%	1	0.3%	0	-	0	-	**0**	**-**
Defective headlights	0	-	0	-	0	-	0	-	0	-	**1**	**0.7%**
Defective brake lights	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective lighting (unspecified)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective engine controls/drive train	0	-	0	-	2	0.7%	0	-	0	-	**0**	**-**
Defective suspension/wheels	2	0.6%	0	-	1	0.3%	0	-	1	0.6%	**0**	**-**
Defective tires	0	-	0	-	1	0.3%	0	-	0	-	**0**	**-**
Tow hitch/yoke defective	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective exhaust system	0	-	0	-	1	0.3%	0	-	0	-	**0**	**-**
Hood/tailgate/door/covering opened	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective glazing (obscured windows)	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Vehicle modifications	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Fire	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Overloaded/oversized	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Load shifted/spilled	0	-	0	-	0	-	0	-	0	-	**1**	**0.7%**
Jack-knife/trailer swing	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Hydroplaning tires	0	-	0	-	0	-	0	-	0	-	**0**	**-**

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Contributing Factor	2014 Total Drivers	% of 2014 Total Drivers	2015 Total Drivers	% of 2015 Total Drivers	2016 Total Drivers	% of 2016 Total Drivers	2017 Total Drivers	% of 2017 Total Drivers	2018 Total Drivers	% of 2018 Total Drivers	**2019 Total Drivers**	**% of 2019 Total Drivers**
Any At-fault Environmental Condition	29	8.9%	25	8.3%	63	21.4%	33	18.6%	41	24.1%	**44**	**29.5%**
Animal action - Wild	5	1.5%	1	0.3%	0	-	3	1.7%	1	0.6%	**1**	**0.7%**
Animal action - Domestic	3	0.9%	1	0.3%	0	-	1	0.6%	0	-	**1**	**0.7%**
Slippery road surface	3	0.9%	2	0.7%	6	2.0%	4	2.3%	4	2.4%	**2**	**1.3%**
Snow drift	2	0.6%	1	0.3%	8	2.7%	5	2.8%	1	0.6%	**1**	**0.7%**
Obstruction/debris on roadway	13	4.0%	15	5.0%	33	11.2%	16	9.0%	32	18.8%	**39**	**26.2%**
View obstructed/limited	2	0.6%	2	0.7%	8	2.7%	1	0.6%	3	1.8%	**0**	**-**
Glare/reflection	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Construction zone	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective driving surface	2	0.6%	2	0.7%	13	4.4%	4	2.3%	0	-	**1**	**0.7%**
Shoulders defective	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Lane markings inadequate	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Defective/inoperative traffic control device	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Weather	1	0.3%	2	0.7%	3	1.0%	0	-	0	-	**0**	**-**
Pedestrian corridor in use	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Uninvolved vehicle	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Uninvolved pedestrian	0	-	0	-	0	-	0	-	0	-	**0**	**-**
Presence of prior accident	0	-	0	-	0	-	0	-	0	-	**0**	**-**
No Contributing Factor(s) Identified	1	0.3%	0	-	0	-	0	-	0	-	**1**	**0.7%**
Not Stated	107	32.9%	105	35.0%	60	20.3%	5	2.8%	4	2.4%	**4**	**2.7%**
Total	325	100%	300	100%	295	100%	177	100%	170	100%	**149**	**100%**

*Note: For each vehicle and/or driver involved in a collision, up to three contributing factors can be recorded. Because multiple factors can be noted, the counts and percentages under each collision severity will add to more than the total collisions of that severity.

SECTION 12 - Alcohol-Related Criminal Code Convictions

Introduction

This section counts the number of drivers convicted of alcohol-related Criminal Code offences for the year 2018 by age at the time of the offence and includes historical statistics for the period 1999 to 2017. There is a one-year lag in the statistics reported to allow for court processing time. Therefore, 2018 is the most current year for which these statistics are available. Details are provided for "first", "second" and "third and subsequent" (i.e., third, fourth, fifth, etc. combined) offences and whether or not a youth was present in the vehicle at the time of the offence.

Key Highlights
In 2018, there are a total of 1,453 alcohol-related Criminal Code offence convictions, including:

- 852 convictions for driving with a blood alcohol concentration (BAC) over .08[4];
- 539 convictions for impaired driving[5]; and,
- 62 convictions for refusing to provide a breath or blood sample[6].

In 2018, the count of drivers convicted of alcohol-related Criminal Code offences (1,453) decreased by 14% compared to 2017 (1,695), the count decreased by nearly 23% compared to the previous five year (2013 to 2017) annual average (1,874). Comparing 2018 to the previous five year (2013 to 2017) annual average:

- Convictions for "alcohol content over .08" decreased by 21%;
- Convictions for "impaired driving" decreased by 22%; and,
- Convictions for "refuse sample" decreased by 39%.

Licensed drivers up to the age of 44 are overrepresented in alcohol-related Criminal Code convictions.

- Drivers under age 25 represented 13% of the licensed drivers in 2018, but accounted for 22% of convictions.
- Drivers aged 25 to 44 represented 35% of the licensed drivers in 2018, but accounted for 56% of convictions.

Over the past 10 years, from 2008 to 2018, there was a 40% decrease in the rate of first offences. Rates of recidivism, indicated by second, and third and subsequent offences, decreased at a rate of 42% in second alcohol-related Criminal Code offences in 2018, and at a rate of 49% in third and subsequent offences in 2018 compared to 2008.

Major Elements Examined
This section reports the number of drivers convicted of alcohol-related Criminal Code offences.

Convictions have been broken down by whether or not a passenger under the age of 16 was in the vehicle at the time the offence occurred (under columns designated by a trailing "C" in the statute number). In 2005, Manitoba added increased consequences to Criminal Code offences 253A, 253B and 254-5 when these offences are committed while a youth was in the vehicle; 2007 represents the first year where these conviction categories are available for reporting.

Beginning in 2007, convictions of Manitoba drivers for impaired driving offences originating in other provinces and the United States have been added to the counts reported here. Prior to that time, these "out-of-province" offences were not included in the annual counts.

"Relative involvement rates" in this section of the report are calculated as a rate per 1,000 licensed drivers to ensure consistency with other jurisdictions.

In years past, the severity of the sanctions imposed by the courts in Manitoba took into account whether or not the offence involved a traffic collision. Until 2004, Driver Records noted whether the conviction was associated with a crash; that procedure has been discontinued and this report no longer includes a separate count for convictions occurring with or without a collision.

[4] Includes s.253B and s.253BC
[5] Includes s.253A, s.253AC, s.255-2 and s.255-3
[6] Includes s.254-5 and s.254-5C

Terms and Definitions

"Blood alcohol concentration (BAC)"

- A measure of the concentration of alcohol in a person's blood. A measure of ".08 BAC" is equivalent of 80 milligrams of alcohol per 1,000 milligrams of blood, or 0.08%.

"Criminal Code 253A" and "Criminal Code 253B"[7]: Impaired driving

- Everyone commits an offence who operates a motor vehicle or vessel or operates or assists in the operation of an aircraft or of railway equipment or has the care or control of a motor vehicle, vessel, aircraft or railway equipment, whether it is in motion or not,
  - (*a*) while the person's ability to operate the vehicle, vessel, aircraft or railway equipment is impaired by alcohol or a drug; or
  - (*b*) having consumed alcohol in such a quantity that the concentration in the person's blood exceeds eighty milligrams of alcohol in one hundred millilitres of blood.
- For greater certainty, the reference to impairment by alcohol or a drug in paragraph (*a*) includes impairment by a combination of alcohol and a drug.
- "253AC" and "253BC" indicate a conviction when there was a youth in the vehicle.

"Criminal Code Statute 254-5": Refusing to comply with a request for sample

- If a peace officer has reasonable grounds to suspect that a person has alcohol or a drug in their body and that the person has, within the preceding three hours, operated a motor vehicle or vessel, operated or assisted in the operation of an aircraft or railway equipment or had the care or control of a motor vehicle, a vessel, an aircraft or railway equipment, whether it was in motion or not, the peace officer may, by demand, require the person to comply with paragraph (*a*), in the case of a drug, or with either or both of paragraphs (*a*) and (*b*), in the case of alcohol:
  - (*a*) to perform forthwith physical coordination tests … and, if necessary, to accompany the peace officer for that purpose; and
  - (*b*) to provide forthwith a sample of breath that, in the peace officer's opinion, will enable a proper analysis to be made by means of an approved screening device and, if necessary, to accompany the peace officer for that purpose.
- Everyone commits an offence who, without reasonable excuse, fails or refuses to comply with a demand made under this section.
- "254-5C" indicates a conviction while a youth was in the vehicle.

"Criminal Code Statute 255-2": Impaired driving/refusing to provide sample causing injury

- Everyone who commits an offence under paragraph 253(*a*) and causes bodily harm to another person as a result is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who, while committing an offence under paragraph 253(*b*), causes an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.

[7] Definitions for Criminal Code Statute 253, 254 and 255 are taken directly from the **Criminal Code (R.S., 1985, c. C-46)** of Canada, as posted on the Department of Justice website. (http://lois-laws.justice.gc.ca/eng/)

“Criminal Code Statute 255-3”: Impaired driving/refusing to provide sample causing death

- Everyone who commits an offence under paragraph 253(*a*) and causes the death of another person as a result is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who, while committing an offence under paragraph 253(*b*), causes an accident resulting in the death of another person is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in the death of another person, or in bodily harm to another person whose death ensues, is guilty of an indictable offence and liable to imprisonment for life.

Table 12-1: Total Alcohol-Related Criminal Code Convictions

Table 12-1
Total Alcohol-Related Criminal Code Convictions: 1999 to 2018*

Year	Alcohol Content Over .08		Impaired Driving		Impaired Driving Causing Injury/Death		Refuse Sample		Total
	253B	253BC	253A	253AC	255-2	255-3	254-5	254-5C	
1999	2,460	N/A	441	N/A	29	3	320	N/A	3,253
2000	1,959	N/A	493	N/A	34	4	245	N/A	2,735
2001	1,783	N/A	574	N/A	35	2	186	N/A	2,580
2002	1,655	N/A	611	N/A	20	4	143	N/A	2,433
2003	1,464	N/A	567	N/A	19	3	144	N/A	2,197
2004	1,316	N/A	486	N/A	19	4	97	N/A	1,922
2005	1,089	N/A	474	N/A	16	4	98	N/A	1,681
2006	1,270	N/A	478	N/A	12	4	67	N/A	1,831
2007	1,301	3	618	1	14	2	80	0	2,019
2008	1,324	5	593	5	15	3	89	0	2,034
2009	1,344	4	657	3	23	0	84	1	2,116
2010	1,424	3	663	6	23	2	90	0	2,211
2011	1,252	8	577	0	19	5	94	1	1,956
2012	1,177	3	661	6	19	7	106	0	1,979
2013	1,127	5	661	8	16	4	100	1	1,922
2014	1,164	15	700	1	23	3	121	1	2,028
2015	1,049	11	686	7	19	5	84	3	1,864
2016	1,045	15	670	5	14	9	103	1	1,862
2017	951	19	615	6	8	1	93	2	1,695
2018	**840**	**12**	**522**	**5**	**7**	**5**	**61**	**1**	**1,453**
2013-17 Average	1,067	13	666	5	16	4	100	2	1,874
% Change 2017 to 2018	-11.7%	-36.8%	-15.1%	-16.7%	-12.5%	400.0%	-34.4%	-50.0%	-14.3%
% Change 2013-17 Average to 2018	-21.3%	-7.7%	-21.7%	-7.4%	-56.3%	13.6%	-39.1%	-37.5%	-22.5%
% Change 1999 to 2018	-65.9%	N/A	18.4%	N/A	-75.9%	66.7%	-80.9%	N/A	-55.3%

*There is a one-year lag in the statistics reported to allow for court processing time. Therefore, 2018 is the most current year for which these statistics are available.

Note: In 2005, Manitoba added increased consequences for Criminal Code offences 253A, 253B and 254-5 committed with a youth under the age of 16 in the vehicle. These convictions are denoted by a trailing "C" in the statute number.

NOTE: Counts and percentage change statistics that cannot be calculated due to the fact that the specific conviction code or type did not exist in historical data are noted in the table as “N/A”. Changes to the previous year and to the previous five-year trend for convictions committed with a youth in the vehicle should be interpreted with caution due to small counts.

CAUTION: Beginning in 2007, convictions for impaired driving offences originating in other provinces and the United States have been added to the counts reported here. Prior to that time, these “out-of-province” offences were not included in the annual counts. The difference in convictions noted in 2008 compared to years prior to 2007 is affected by this change.

In 2018, the count of drivers convicted of alcohol-related Criminal Code offences (1,453) decreased by 14% compared to 2017 (1,695); the count decreased by nearly 23% compared to the previous five year (2013 to 2017) annual average (1,874).

Comparing 2018 to the previous five year (2013 to 2017) annual average:

- Convictions for “alcohol content over .08” decreased by 21%;
- Convictions for “impaired driving” decreased by 22%; and,
- Convictions for “refuse sample” decreased by 39%.

In 2018, there were 12 convictions for driving with a blood alcohol concentration (BAC) over .08 while a youth (under age 16) was in the vehicle, 5 for impaired driving while a youth was in the vehicle, and 1 for refusing to provide a breath or blood sample while a youth was in the vehicle. Counts of these convictions over the ten year period have fluctuated dramatically due to their overall low frequency in any given year.

In the 20-year period from 1999 to 2018, total alcohol-related Criminal Code convictions decreased by 55%, from 3,253 in 1999 to 1,453 in 2018.

- Convictions for “alcohol content over .08” decreased by 65% (2,460 in 1999 to 852 in 2018).
- Convictions for “impaired driving” increased by 14% (473 in 1999 to 539 in 2018).
- Convictions for “refuse sample” decreased by 81% (320 in 1999 to 62 in 2018).

Table 12-2: Total Alcohol-Related Criminal Code Convictions by Age Group

Table 12-2
Total Alcohol-Related Criminal Code Convictions by Age Group: 1999 to 2018

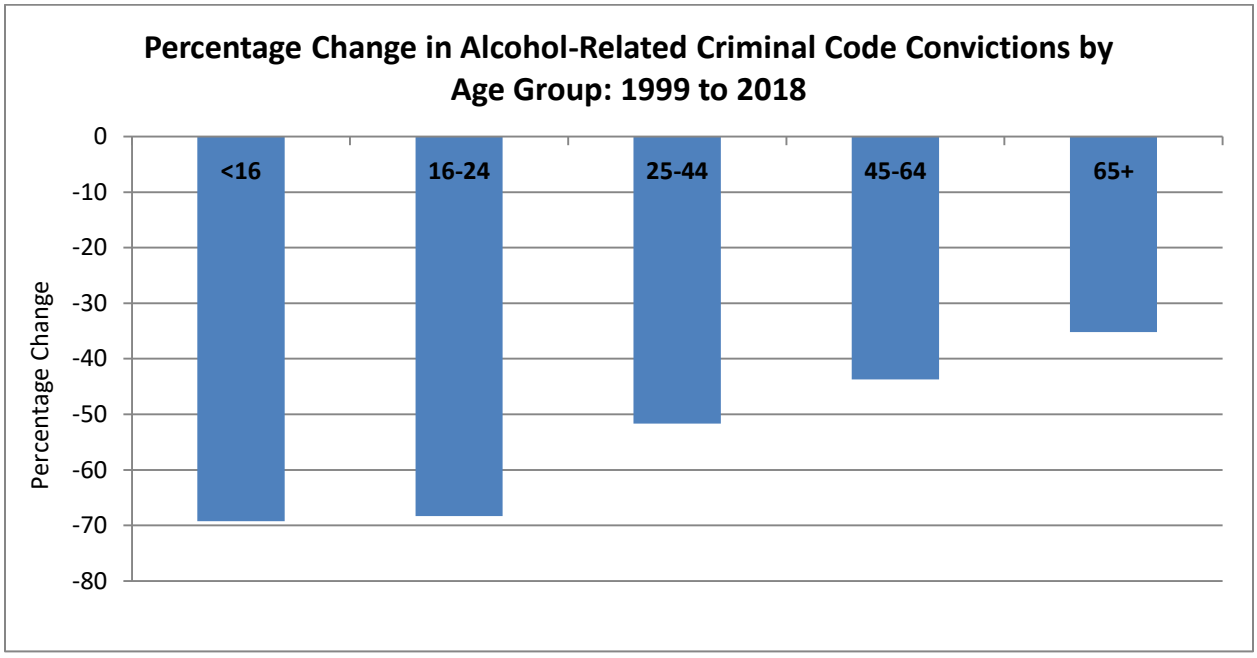
	<16	16-17	18-20	21-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	Total
1999	13	81	412	504	484	445	429	330	248	151	56	46	28	15	11	3,253
2000	12	75	345	430	396	368	354	298	198	102	66	42	23	14	12	2,735
2001	11	91	357	379	384	334	322	259	177	128	54	44	22	15	3	2,580
2002	11	85	333	338	359	309	277	282	175	102	78	39	24	10	11	2,433
2003	7	65	300	308	317	269	237	233	178	109	81	44	26	14	9	2,197
2004	5	55	282	273	251	235	209	232	150	83	63	46	21	13	4	1,922
2005	6	46	210	272	243	204	178	158	139	91	51	45	24	5	9	1,681
2006	8	58	259	298	264	222	173	178	168	82	60	35	16	5	5	1,831
2007	7	50	274	289	306	248	244	200	151	110	67	35	19	9	10	2,019
2008	4	59	234	320	312	245	196	201	197	117	74	43	21	8	3	2,034
2009	2	37	255	341	358	268	222	213	176	120	57	37	19	8	3	2,116
2010	8	43	286	356	353	241	250	198	169	133	76	55	33	7	3	2,211
2011	5	36	235	333	334	220	200	166	157	122	88	36	15	7	2	1,956
2012	7	33	211	318	334	251	239	179	148	128	67	37	18	7	2	1,979
2013	4	29	179	292	302	278	237	179	148	118	72	45	26	12	1	1,922
2014	8	16	186	303	338	290	226	192	150	141	80	47	37	9	5	2,028
2015	6	16	169	277	351	275	197	150	167	109	78	38	23	4	4	1,864
2016	3	17	159	288	345	250	223	171	148	107	72	37	25	7	10	1,862
2017	3	22	132	234	324	236	177	170	152	100	72	41	19	6	7	1,695
2018	**4**	**14**	**109**	**193**	**267**	**226**	**176**	**147**	**95**	**86**	**68**	**33**	**27**	**6**	**2**	**1,453**
2013-17 Average	5	20	165	279	332	266	212	172	153	115	75	42	26	8	5	1,874
% Change 2017 to 2018	33.3%	-36.4%	-17.4%	-17.5%	-17.6%	-4.2%	-0.6%	-13.5%	-37.5%	-14.0%	-5.6%	-19.5%	42.1%	No change	-71.4%	-14.3%
% Change 2013-17 Average to 2018	-16.7%	-30.0%	-33.9%	-30.8%	-19.6%	-15.0%	-17.0%	-14.7%	-37.9%	-25.2%	-9.1%	-20.7%	3.8%	-21.1%	-63.0%	-22.5%
% Change 1999 to 2018	-69.2%	-82.7%	-73.5%	-61.7%	-44.8%	-49.2%	-59.0%	-55.5%	-61.7%	-43.0%	21.4%	-28.3%	-3.6%	-60.0%	-81.8%	-55.3%

Caution: The count of convictions shown does not take into account the number of licensed drivers by age group.

Comparing 2018 to the previous five year (2013 to 2017) annual average:

- There are nearly 23% less convictions in total (a difference of 421);
- Convictions among the youngest age group (under age 16) decreased by a count of 1;
- Convictions among 16 to 24 year olds decreased by 32% (a count of 148);
- Convictions among 25 to 44 year olds decreased by 17% (a count of 166);
- Convictions among 45 to 64 year olds decreased by 27% (a count of 102); and,
- Convictions among those aged 65 and older decreased by 10% (a count of 4).

Figure 12-1: Percentage Change in Alcohol-Related Criminal Code Convictions by Age Group



During the 20-year period 1999 to 2018, alcohol-related Criminal Code convictions have decreased by 55% in Manitoba. Convictions among drivers aged:

- Under 16 decreased by a count of 9;
- 16 to 24 decreased by 68%;
- 25 to 44 decreased by 52%;
- 45 to 64 decreased by 44%; and,
- 65 and older decreased by 35%.

Table 12-3: Total Alcohol-Related Criminal Code Offences by Age Group and Conviction Type

Table 12-3
Total Alcohol-Related Criminal Code Offences by Age Group and Conviction Type: 2018

Age Group	Alcohol Content Over .08		Impaired Driving		Impaired Driving Causing Injury/Death		Refuse Sample		Total
	253B	253BC	253A	253AC	255-2	255-3	254-5	254-5C	
<16	1	0	2	1	0	0	0	0	4
16-17	7	1	5	0	1	0	0	0	14
18-20	62	0	43	0	1	0	3	0	109
21-24	121	0	60	1	1	0	10	0	193
25-29	162	2	95	2	0	3	3	0	267
30-34	124	2	87	0	2	0	11	0	226
35-39	96	5	64	0	2	1	8	0	176
40-44	86	1	50	0	0	0	10	0	147
45-49	51	1	37	1	0	0	4	1	95
50-54	45	0	37	0	0	0	4	0	86
55-59	38	0	24	0	0	1	5	0	68
60-64	24	0	8	0	0	0	1	0	33
65-69	19	0	6	0	0	0	2	0	27
70-74	4	0	2	0	0	0	0	0	6
75+	0	0	2	0	0	0	0	0	2
Total	**840**	**12**	**522**	**5**	**7**	**5**	**61**	**1**	**1,453**

Caution: The count of convictions shown does not take into account population demographics by age group or the number of licensed drivers by age group.

Table 12-4: Alcohol-Related Criminal Code Convictions by Active Licensed Drivers and Age Group

Table 12-4
Alcohol-Related Criminal Code Convictions by Active Licensed Drivers and Age Group: 2008, 2013 and 2018

Age Group	2008			2013			2018		
	# Alcohol Convictions	% Total Alcohol Convictions	% Licensed Drivers	# Alcohol Convictions	% Total Alcohol Convictions	% Licensed Drivers	# Alcohol Convictions	% Total Alcohol Convictions	% Licensed Drivers
<16-24*	617	30.3%	14.2%	504	26.2%	14.3%	320	22.0%	13.4%
25-44	954	46.9%	34.2%	996	51.8%	33.7%	816	56.2%	34.7%
45-64	431	21.2%	36.2%	383	19.9%	35.1%	282	19.4%	33.2%
65+	32	1.6%	15.4%	39	2.0%	17.0%	35	2.4%	18.7%
Total	**2,034**	**100%**	**100%**	**1,922**	**100%**	**100%**	**1,453**	**100%**	**100%**

* Includes statistics for individuals under the age of 16 convicted of an alcohol-related Criminal Code offence, but who may not have been licensed at the time of offence.

Alcohol-related convictions decreased by 29% from 2008 (count of 2,034) to 2018 (count of 1,453).

<16 to 24 Age Group
Drivers up to the age of 24 continue to be overrepresented in alcohol-related Criminal Code convictions. Drivers up to the age of 24 accounted for 14% of all licensed drivers in 2008 and 2013, but for 30% of alcohol offence convictions in 2008 and 26% in 2013. In 2018, these drivers represent 13% of the licensed drivers, but accounted for 22% of convictions.

25 to 44 Age Group
Drivers aged 25 to 44 continue to be overrepresented in alcohol-related Criminal Code convictions. In the years 2008, 2013, and 2018, drivers in this group made up 34%, 34%, and 35% of licensed drivers, respectively. However, these drivers accounted for 47% in 2008, 52% in 2013, and 56% in 2018 of all alcohol-related Criminal Code convictions.

45 to 64 Age Group
Drivers aged 45 to 64 are underrepresented in alcohol-related Criminal Code convictions. In the years 2008, 2013, and 2018, drivers in this group made up 36%, 35%, and 33%, respectively, of licensed drivers. At the same time, these drivers accounted for 21% in 2008, 20% in 2013, and 19% in 2018 of all alcohol-related Criminal Code convictions.

65 and Older Age Group
Older drivers are underrepresented in alcohol-related Criminal Code convictions. In the years 2008, 2013, and 2018, drivers 65 years of age and older made up 15%, 17%, and 19% of licensed drivers, respectively, but accounted for only 2% in 2008, 2013, and 2018 of alcohol-related Criminal Code convictions each of those years.

Table 12-5: Driver Involvement in "First", "Second", and "Third and Subsequent" Alcohol-Related Criminal Code Convictions by Age Group

Table 12-5
Driver Involvement in 'First', 'Second', and 'Third and Subsequent' Alcohol-Related Criminal Code Convictions by Age Group: 2008, 2013 and 2018

Age Group	2008			2013			2018		
	Alcohol* Convictions	Licensed Drivers	Rate /1,000	Alcohol Convictions	Licensed Drivers	Rate /1,000	Alcohol Convictions	Licensed Drivers	Rate /1,000
Total Alcohol-Related Criminal Code Convictions									
<16-24	617	108,712	5.7	504	122,137	4.1	320	123,330	2.6
25-44	954	261,358	3.7	996	288,001	3.5	816	319,780	2.6
45-64	431	277,173	1.6	383	300,441	1.3	282	305,624	0.9
65+	32	117,771	0.3	39	145,211	0.3	35	171,680	0.2
Total	**2,034**	**765,014**	**2.7**	**1,922**	**855,791**	**2.2**	**1,453**	**920,414**	**1.6**
First Occurrence									
<16-24	568	108,712	5.2	468	122,137	3.8	283	123,330	2.3
25-44	835	261,358	3.2	857	288,001	3.0	727	319,780	2.3
45-64	380	277,173	1.4	345	300,441	1.1	260	305,624	0.9
65+	30	117,771	0.3	39	145,211	0.3	33	171,680	0.2
Total	**1,813**	**765,014**	**2.4**	**1,709**	**855,791**	**2.0**	**1,303**	**920,414**	**1.4**
Second Occurrence									
<16-24	43	108,712	0.4	34	122,137	0.3	36	123,330	0.3
25-44	94	261,358	0.4	117	288,001	0.4	69	319,780	0.2
45-64	38	277,173	0.1	30	300,441	0.1	16	305,624	0.1
65+	2	117,771	<0.1	0	145,211	<0.1	2	171,680	<0.1
Total	**177**	**765,014**	**0.2**	**181**	**855,791**	**0.2**	**123**	**920,414**	**0.1**
Third and Subsequent Occurrence									
<16-24	6	108,712	0.1	2	122,137	<0.1	1	123,330	<0.1
25-44	25	261,358	0.1	22	288,001	0.1	20	319,780	0.1
45-64	13	277,173	<0.1	8	300,441	<0.1	6	305,624	<0.1
65+	0	117,771	<0.1	0	145,211	<0.1	0	171,680	<0.1
Total	**44**	**765,014**	**0.1**	**32**	**855,791**	**<0.1**	**27**	**920,414**	**<0.1**

* For comparative purposes, the report assumes each alcohol-related Criminal Code conviction is for a single licensed driver although a single driver may obtain more than one alcohol-related Criminal Code conviction in any given year or specific incident.

Compared to ten years ago, the involvement rate of drivers in alcohol-related Criminal Code convictions has decreased by 41% (2.7 per 1,000 licensed drivers in 2008; 1.6 per 1,000 licensed drivers in 2018).[8]

[8] Please note that due to the inclusion of only one decimal place in the figures displayed in Table 12-5 that some of the percentage changes in involvement rate noted will be different than those calculated using the figures from the table. The reported percentage change uses multiple decimal points in its calculation while the displayed figures have been rounded to one decimal.

<16 to 24 Age Group
For every 1,000 licensed drivers in this age group, there were 5.7, 4.1 and 2.6 alcohol-related Criminal Code convictions in 2008, 2013 and 2018, respectively. The 2018 rate for this age group is 54% lower than the 2008 rate.

25 to 44 Age Group
The relative involvement rate of drivers aged 25 to 44 in alcohol-related Criminal Code convictions (per 1,000 licensed drivers) was 3.7 in 2008, 3.5 in 2013, and 2.6 in 2018. The 2018 rate for this age group is 30% lower than the 2008 rate.

45 to 64 Age Group
The relative involvement rate of drivers aged 45 to 64 in alcohol-related Criminal Code convictions (per 1,000 licensed drivers) was 1.6 in 2008, 1.3 in 2013, and 0.9 in 2018. The 2018 rate for this age group is 41% lower than the 2008 rate.

65 and Older Age Group
The relative involvement rate of drivers aged 65 and older in alcohol-related Criminal Code convictions (per 1,000 licensed drivers) was 0.3 in 2008, 0.3 in 2013, and 0.2 in 2018. The 2018 rate for this age group is 25% lower than the 2008 rate.

First Occurrence
In 2018, the number of drivers convicted of an alcohol-related Criminal Code offence for the **first** time has decreased by 28% compared to ten years ago (1,813 in 2008; 1,303 in 2018).

Comparing the involvement rates (per 1,000 licensed drivers) for 2008 and 2018, first occurrence Criminal Code convictions decreased by 40% overall.

- Age 24 and under – a 56% decrease in 2018 compared to 2008
- Age 25 to 44 – a 29% decrease in 2018 compared to 2008
- Age 45 to 64 – a 38% decrease in 2018 compared to 2008
- Age 65 and older – a nearly 25% decrease in 2018 compared to 2008

Second Occurrence
In 2018, the number of drivers convicted of an alcohol-related Criminal Code offence for the **second** time has decreased by nearly 31% compared to ten years ago (177 in 2008; 123 in 2018).

Comparing the involvement rates (per 1,000 licensed drivers) for 2008 and 2018, second occurrence Criminal Code convictions decreased by 42% overall.

- Age 24 and under – a 26% decrease in 2018 compared to 2008
- Age 25 to 44 – a 40% decrease in 2018 compared to 2008
- Age 45 to 64 – a 62% decrease in 2018 compared to 2008
- Age 65 and older – a 31% decrease in 2018 compared to 2008

Third and Subsequent Occurrence
In 2018, the number of drivers convicted of an alcohol-related Criminal Code offence for the **third and subsequent** time has decreased by 39% compared to ten years ago (44 in 2008; 27 in 2018).

Comparing the involvement rates (per 1,000 licensed drivers) for 2008 and 2018, third and subsequent occurrence Criminal Code convictions decreased by 49% overall.

- Age 24 and under – a count of 1 in 2018 compared to 6 in 2008; an 85% decrease in the rate
- Age 25 to 44 – a count of 20 in 2018 compared to 25 in 2008; a 35% decrease in the rate
- Age 45 to 64 – a count of 6 in 2018 compared to 13 in 2008; a 58% decrease in the rate
- Age 65 and older – none in 2018 and in 2008

CAUTION: Please interpret numbers of convictions for “second” and “third and subsequent” offences with caution. Due to the small numbers of these convictions overall, small shifts in the counts can produce relatively large percentage change differences.

GLOSSARY – Terms & Definitions

Terms and Definitions

"Accident Configuration"

- Briefly describes the action taken by a vehicle immediately prior to or at the start of the collision, including such events as rear-ending another vehicle, side-swiping another vehicle, turning into (the path of) another vehicle, parking, meeting another vehicle at an intersection and/or leaving the roadway.
- "Other" in terms of accident configuration includes, primarily, collisions involving more than one configuration or sequence of events.

"Active Drivers"

- Drivers holding an active Manitoba Driver's Licence of any specific Licence Class

"At-fault Contributing Factor"

- A contributing factor where some action or condition other than "driving properly" and "apparently normal" has been noted.

"ATV"

- All Terrain Vehicle; includes vehicles with 3, 4 and 6 wheels.

"Blood alcohol concentration (BAC)"

- A measure of the concentration of alcohol in a person's blood. A measure of ".08 BAC" is equivalent of 80 milligrams of alcohol per 1,000 milligrams of blood, or 0.08%.

"Casualty Type"

- A classification of the severity of the injury sustained by a victim in a traffic collision, i.e., whether someone was killed or injured. This classification also includes a designation for the severity of each non-fatal injury sustained (i.e., victims sustaining a serious/major, minor or minimal injury).

"Collision Severity"

- A classification of a collision based on the most severe result of the collision, i.e., whether someone was killed (fatal), injured (injury) or property damage only (PDO) occurred.

"Collision Type"

- Refers to the object struck by a motor vehicle during a collision (including: a pedestrian, another motor vehicle, a train, a motorcycle, a bicycle, an animal, and fixed objects) or to what happened to the vehicle in a single-vehicle collision (including: overturned on roadway and ran off roadway).

"Contributing Factor"

- Those circumstances or factors recorded as having contributed to the collision or its severity. Factors can be selected from four categories: driver action, human condition, vehicle condition, or environmental condition. The TAR allows for up to three contributing factors to be recorded for each driver or vehicle involved in the collision.

"Criminal Code 253A" and "Criminal Code 253B"[9]: Impaired driving

- Every one commits an offence who operates a motor vehicle or vessel or operates or assists in the operation of an aircraft or of railway equipment or has the care or control of a motor vehicle, vessel, aircraft or railway equipment, whether it is in motion or not,
  - (*a*) while the person's ability to operate the vehicle, vessel, aircraft or railway equipment is impaired by alcohol or a drug; or
  - (*b*) having consumed alcohol in such a quantity that the concentration in the person's blood exceeds eighty milligrams of alcohol in one hundred millilitres of blood.
- For greater certainty, the reference to impairment by alcohol or a drug in paragraph (*a*) includes impairment by a combination of alcohol and a drug.
- "253AC" and "253BC" indicate a conviction while a youth was in the vehicle.

[9] Definitions for Criminal Code Statute 253, 254 and 255 are taken directly from the **Criminal Code (R.S., 1985, c. C-46)** of Canada, as posted on the Department of Justice website. (https://laws-lois.justice.gc.ca/eng/)

"Criminal Code Statute 254-5": Refusing to comply with a request for sample

- If a peace officer has reasonable grounds to suspect that a person has alcohol or a drug in their body and that the person has, within the preceding three hours, operated a motor vehicle or vessel, operated or assisted in the operation of an aircraft or railway equipment or had the care or control of a motor vehicle, a vessel, an aircraft or railway equipment, whether it was in motion or not, the peace officer may, by demand, require the person to comply with paragraph (*a*), in the case of a drug, or with either or both of paragraphs (*a*) and (*b*), in the case of alcohol:
    - (*a*) to perform forthwith physical coordination tests … and, if necessary, to accompany the peace officer for that purpose; and
    - (*b*) to provide forthwith a sample of breath that, in the peace officer's opinion, will enable a proper analysis to be made by means of an approved screening device and, if necessary, to accompany the peace officer for that purpose.
- Everyone commits an offence who, without reasonable excuse, fails or refuses to comply with a demand made under this section.
- "254-5C" indicates a conviction while a youth was in the vehicle.

"Criminal Code Statute 255-2": Impaired driving/refusing to provide sample causing injury

- Everyone who commits an offence under paragraph 253(*a*) and causes bodily harm to another person as a result is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who, while committing an offence under paragraph 253(*b*), causes an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term of not more than 10 years.

"Criminal Code Statute 255-3": Impaired driving/refusing to provide sample causing death

- Everyone who commits an offence under paragraph 253(*a*) and causes the death of another person as a result is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who, while committing an offence under paragraph 253(*b*), causes an accident resulting in the death of another person is guilty of an indictable offence and liable to imprisonment for life.
- Everyone who commits an offence under subsection 254(5) and, at the time of committing the offence, knows or ought to know that their operation of the motor vehicle, vessel, aircraft or railway equipment, their assistance in the operation of the aircraft or railway equipment or their care or control of the motor vehicle, vessel, aircraft or railway equipment caused an accident resulting in the death of another person, or in bodily harm to another person whose death ensues, is guilty of an indictable offence and liable to imprisonment for life.

"Driver Action"

- A category of contributing factors attributed to actions taken or performed by a driver immediately prior to a collision.

"Driver Involvement Rate"

- A calculation of the number of drivers involved in traffic collisions for every 10,000 drivers licensed in Manitoba. The total number of drivers licensed to drive includes both active and suspended drivers. This involvement rate does not take into account the number of vehicle kilometres driven by each driver group.

"Environmental Condition"

- A category of contributing factors attributed to environmental conditions (i.e., weather, road surface and animal actions) immediately prior to a collision.

"Fatal Collision"

- A motor vehicle collision in which at least one person is killed as a result of the collision. The death must have occurred within thirty days of the collision occurrence.

"Graduated Driver Licensing (GDL)"

- A three-stage program designed to help new drivers, regardless of age, acquire the knowledge and skill needed to safely operate a motor vehicle. Each licence stage has specific rules and restrictions governing when and under what circumstances the holder is allowed to operate a motor vehicle, enabling novice drivers to gain more experience under a greater variety of driving conditions. Both Class 5 and Class 6 licences have a GDL stage associated with them.
- Three stages of GDL: Learner (5/L or 6/L); Intermediate (5/I or 6/I); and, Full (5/F or 6/F).
- To view a full discussion of the GDL program in Manitoba, please visit:
  - https://www.mpi.mb.ca/pages/graduated-driver-licensing.aspx; ou en Français,
  - https://www.mpi.mb.ca/pages/graduated-driver-licensing-fr.aspx

"Human Condition"

- A category of contributing factors attributed to the physical or mental condition of a driver immediately prior to a collision, most often that limit the driver's ability to drive safely or properly.

"Injured"

- The casualty type "injured" indicates the victim sustained some level of personal injury, but in which they were not killed. Levels of injury include: 'serious' or 'major' (admitted to hospital); 'minor' (treated and released from hospital); and, 'minimal' (no hospital treatment required). 'Other' injury is noted when the severity of the victim's injuries is not known or recorded in the TAR.

"Injury Collision"

- A motor vehicle collision in which at least one person has been recorded as sustaining some level of personal injury, but in which no one is fatally injured or killed.

"Involvement"

- A calculation of the number of collisions per specific unit of licensed drivers or registered vehicles. For the purposes of this report, involvement is calculated per 10,000 licensed drivers or registered vehicles.

"Killed"

- The casualty type "killed" indicates the victim involved in the traffic collision died as a result of their injuries within thirty (30) days of the collision occurrence.

"Licence Class"

- A Manitoba Driver's Licence of a specific level which permits the holder to operate vehicles within a specific Vehicle Class

"Licensed Drivers"

- A count of all Manitobans aged 16 and older who hold a valid licence within the licensing year including active and suspended drivers. (See *Section 2 Licensed Drivers* for more information)

"Light Condition"

- Describes the light conditions at the scene of the accident, including:
  - Day – the light conditions which normally occur between one half hour after sunrise and one half hour before sunset;
  - Dawn – the light conditions which normally occur between one half hour before sunrise and one half hour after sunrise;
  - Dusk – the light conditions which normally occur between one half hour before sunset and one half hour after sunset;
  - Dark – the light conditions which normally occur between one half hour after sunset and one half hour before sunrise; and,
  - Artificial lighting – artificial illumination devices were functioning at the accident site under light conditions which normally occur between one half hour after sunset and one half hour before sunrise.

"Light Duty Vehicles"

- A classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: passenger vehicles (automobile), mini/multi-purpose van, van under 4,500 kg and pick-up under 4,500 kg.

"NSC Commercial Vehicles"

- The National Safety Code (NSC) classification of vehicles is a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Truck greater than 4,500 kilograms (unit chassis)", "Power Unit for Semi-Trailer", "Truck (Other)" (where the type and size of truck is unknown), "School Bus", "Transit Bus (Urban)", "Inter-City Bus", and "Bus (Other)". These vehicles bear a National Safety Code Number and are entered onto the National Safety Code Collision Monitoring Report.

"Off-road Vehicle (ORV)"

- One of several vehicle types designed for off-road use. It includes snowmobiles, off-road motorcycles, all-terrain vehicles (ATVs), amphibious vehicles, dune/sport buggies, and 4-wheel drive vehicles operated off-road.

"Pedestrian Action"

- Refers to the actions taken by a pedestrian immediately prior to a collision (including: crossing at an intersection with or without the right-of-way, crossing between intersections, running into the roadway, walking on the roadway, lying on the roadway, playing on the roadway, etc.).

"Pedestrian Involvement Rate"

- A calculation of the number of pedestrians involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address: http://www.gov.mb.ca/health/annstats/index.html

"Pre-collision activity"

- The action of a vehicle immediately prior to involvement in a collision. This is an indication of what the vehicle was doing prior to the accident or to the driver realizing that a collision may occur and does not include vehicle manoeuver to avoid the collision.

"Property Damage Only (PDO) Collision"

- A motor vehicle collision in which no injury or fatality is sustained and only property damage is the result.

"PSV Vehicles"

- Also known as 'public service vehicles', a classification of vehicle types including those defined in the Traffic Accident Report (TAR) as: "Other school vehicle", and "Emergency vehicles", including ambulance, fire and police vehicles.

"Public Roadway"

- A public roadway in Manitoba is considered to be any provincial road (PR), provincial trunk highway (PTH) or municipal road, including the entrances to and exits from these roadways. This excludes all off-road areas, parking lots, private property and First Nation Reserve roads (unless the road is a PR or PTH running through, across or on Reserve lands).

"Region"

- Manitoba Infrastructure and Transportation is served by 5 regional office locations, each responsible for a geographic region (for boundaries, see Map 11-1). "Regions" are used to indicate the region in which a collision occurred.

"Reportable Collision"

- Prior to a change in the Highway Traffic Account (which took effect in October of 2011), motor vehicle collisions resulting in a fatality, injury or property damage in excess of $1,000 were required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completed a Traffic Accident Report for the collision.
- Amendments to the Highway Traffic Act (which received Royal Ascent in June 2011 and took effect in October of 2011) changed the definition of a reportable collision to require a police report be made if the driver is aware, has reason to believe, or is later made aware, that a collision involves: a fatality; an injury requiring admittance to hospital for observation or treatment; another driver not having a valid driver's licence; another vehicle not validly registered; the driver of another vehicle not providing the required particulars; the driver of another vehicle not stopping at the scene of the accident; or, alcohol or another intoxicating substance as a factor in the accident.

- As of October 2011, all accidents occurring on a public roadway where the above conditions are not met are reported through the claim registration process with Manitoba Public Insurance.
- As of 2012 and consistent with other jurisdictions in Canada, it is a requirement that a minimum of $2,000 damage (all vehicles combined) is necessary for property damage only (PDO) collisions to be included in this report.
- This report deals with these reportable collisions and the TARs arising from them, regardless of whether the TAR is generated by law enforcement agencies or by Manitoba Public Insurance.

“Reportable ORV Collision”

- ORV collisions resulting in a fatality, injury or property damage in excess of $1,000 are required by law to be reported to a law enforcement agency. Subsequently, the law enforcement agency completes a Traffic Accident Report (TAR) for the collision. This report deals with these reportable ORV collisions and the TARs arising from them.

“Road User Class”

- A classification based on how a person involved in a collision was using the road at the time of the collision. It includes: Drivers (of motor vehicles), Passengers (in motor vehicles), those Riding/Hanging On (to a motor vehicle), Motorcyclist (drivers and passengers), Moped (drivers and passengers), Bicyclist (drivers and passengers), and Pedestrians.

“Rural Location”

- Collisions occurring on primary highways, secondary highways and local roadways, including the Trans Canada Highway and excluding those that occur within the municipal boundaries of an urban area.

“Suspended drivers”

- Drivers holding a Manitoba Driver’s Licence of any specific Licence Class who have been disqualified from driving for some reason. Although the list is extensive, some possible suspensions could be for driving violations, medical conditions, administrative suspensions and criminal code convictions.

“Urban Location”

- Collisions occurring within the municipal boundaries of urban areas, including Winnipeg, Brandon, Portage la Prairie, Flin Flon, Dauphin, Thompson, The Pas, Selkirk and others.

“Vehicle Class”

- Category of vehicles meeting specific designations and specifications
- Non-commercial vehicle classes are vehicles registered for private use and include:
    - Passenger - A motor vehicle classified by the manufacturer as a passenger car or which is designed, constructed or adapted for the principle purpose of transporting passengers and includes a delivery car, but does not include a motorcycle, moped or motor vehicle which is designed, constructed or adapted for the purpose of carrying goods or commodities.
    - Antique - A car, truck or motorcycle that is more than thirty years old at the time of application for registration. A motor vehicle registered as an antique car, truck or motorcycle can be driven only when: taking it to be repaired or serviced; displaying it to the public in a parade or procession and driving it to or from such a parade or procession; driving it to an antique car, truck or motorcycle rally as authorized by the Registrar of Motor Vehicles.
    - Motorcycle - A vehicle that has a steering handlebar completely constrained from rotating in relation to the axle of one wheel in contact with the ground, is designed to travel on not more than three wheels in contact with the ground, has a minimum unladen seat height of 650 millimetres, has a minimum wheel rim diameter of 250 millimetres, has a minimum wheelbase of 1,016 millimetres, and, has a maximum speed capability of more than 50 km/h but does not include a moped, power-assisted bicycle or tractor.
    - Moped - A motor vehicle which has 2 tandem wheels or 3 wheels, each of which is more than 250 millimetres in diameter, has a seat or saddle having a minimum unladen height of 650 millimetres, when measured from the ground level to the top of the forward most part of the saddle, is capable of being driven at all times by pedals only if so equipped, by motor only or by both pedals and motor, and, the motor has a piston displacement of not more than 50 cubic centimetres, or is an electric motor neither of which is capable of enabling the moped to attain a speed greater than 50 km/h.

  - Truck – see “Passenger”.
  - Farm Truck - A motor vehicle classified as a “truck” at time of registration and is owned by a person engaged in farming.
  - Trailer - A vehicle designed for carrying persons or chattels, and for being towed by a motor vehicle, and includes a farm trailer but does not include an implement of husbandry that is temporarily towed, propelled, or moved upon a highway.

- Commercial vehicle classes are those involving vehicles registered to or for the use of a business and include:
  - Truck - A truck (or trailer) used to transport the registered owner’s (or lessee’s) own business goods: beyond a radius of 20 kilometres of the City of Winnipeg, where the registered owner’s business address is in the City of Winnipeg, beyond a radius of 30 kilometres of a city, town or village other than the City of Winnipeg, where the registered owner’s address is not in the City of Winnipeg.
  - Public Service Vehicles (PSV) - A motor vehicle or trailer operated by or on behalf of any person, for transportation for gain or compensation of persons or property upon a highway, and includes a semi-trailer truck; but does not include the passenger-carrying-motor vehicles of an electric, or steam railway or motor bus company operating on the streets of a city, or school buses, ambulances or hearses or motor vehicle operated for gain or compensation under *The Taxicab Act* or a municipal by-law in cities, towns, and villages.
  - Dealer - A person who carries on the business as principal or agent, or who holds himself or herself out as carrying on the business as principal or agent, (a) of buying motor vehicles or trailers; (b) of selling motor vehicles or trailers, whether or not in combination with leasing them; or (c) of buying and selling motor vehicles or trailers, whether or not in combination with leasing them.
  - Repairer - A person who maintains a garage for the purpose of rendering services therein upon motor vehicles and/or trailers, at a charge, price or consideration; or who owns and operates a fleet of five or more motor vehicles or trailers; or both, and maintains a facility for their repair, is permitted under The Highway Traffic Act to obtain “Repairer” licence plates to be used to transport motor vehicles for repair from place of origin to the repair facility and return, and the testing of the motor vehicle after the repair work has been completed.
  - Trailers – see previous definition.
  - Regulated Passenger - A bus or van with manufacturer's seating capacity of 11 people or more, including the driver; used by an organization to transport people without receiving payment for the transport.

“Vehicle Condition”

- A category of contributing factors attributed to the physical condition of a vehicle immediately prior to a collision.

“Vehicle Occupant”

- All those in the “Road User Class” of “Drivers” and “Passengers”. It excludes “Motorcyclist”, “Bicyclist”, “Moped”, those “Riding/Hanging On” to a vehicle and “Pedestrians”.

“Vehicle Involvement Rate”

- A calculation of the number of vehicles involved in traffic collisions for every 10,000 vehicles registered in Manitoba. The total number of vehicles registered is based on a point-in-time observation of the number of vehicles registered in specific vehicle classes. More detail regarding the methodology used to count registered vehicles can be found in “*Section 3 Vehicle Registrations*” of this report.

“Victim Involvement Rate”

- A calculation of the number of victims or casualties involved in traffic collisions for every 100,000 people in the general population in Manitoba. Population statistics are taken from the Provincial government and can be found at the following web address: http://www.gov.mb.ca/health/annstats/index.html

“Weather Condition”

- Describes the weather conditions prevalent at the time of the accident, including:
    - Clear – bright conditions, without precipitation or airborne matter, are recorded as clear;
    - Cloudy – dull, overcast conditions, without precipitation or airborne matter, are recorded as cloudy;
    - Raining – raining (self explanatory);
    - Snowing – snowing (self explanatory);
    - Fog or Mist – airborne matter, of natural origin, which obscures visibility;
    - Smoke or Dust – airborne matter, of a natural or artificial origin, which obscures visibility;
    - Freezing Rain / Sleet / Hail – freezing rain, sleet or hail (self explanatory);
    - Drifting Snow – snow drifting on or above roadway, which obscures visibility of the roadway, road markings, traffic devices or roadway fixtures; and,
    - Strong Winds – used if wind was a contributing factor in the accident.