

Traffic Collision Statistics Report **2014**



*Manitoba
Public Insurance*

2014 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. 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.

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. When comparing 2014 to the five year average from 2009 to 2013, there will be an increase in collision counts that is primarily a result of this change to two reporting sources. 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 2014.

Licensed Drivers and Vehicle Registrations

There are 869,239 licensed drivers in Manitoba in 2014, an increase of nearly 2% compared to 2013.

Overall, there are 1,033,058 vehicles registered in Manitoba (commercial and non-commercial, combined) in 2014, a 2% increase from 2013.

Traffic Collisions

In 2014, there are a total of 40,672 traffic collisions that conform to the reportable collision requirement for Traffic Accident Reports. Of these:

- 64 involve a fatality (0.2% of all collisions);
- 9,023 involve an injury, but not a fatality (22% of all collisions); and,
- 31,585 involve property damage only (78% of all collisions).

Overall traffic collisions in Manitoba in 2014 decreased compared to 2013 but increased compared to the previous five year (2009 to 2013) annual average. There are 40,672 collisions in 2014, down from 41,819 collisions in 2013 but up from 33,769 on average in the five year period 2009 to 2013. This increase is mostly due to increases in injury and PDO collisions reported (up 32% and 18% compared to the previous five years, respectively). Conversely, the number of fatal collisions decreased by 7% compared to 2013 and by nearly 23% to the previous five years. The count of fatal collisions in 2014 is the lowest it has been in two decades.

People Killed and Injured in Collisions

In 2014, there are 11,529 victims (or casualties) of traffic collisions. Of these:

- 68 are killed (fewer than the average in the previous five years, 93);
- 284 are seriously injured (fewer than the average in the previous five years, 336);
- 1,972 sustain minor injuries (fewer than the average in the previous five years, 2,451);
- 9,112 sustain minimal injuries (more than the average in the previous five years, 5,423); and,
- 93 sustain injuries that are undefined in terms of severity (fewer than the average in the previous five years, 622).

The victim involvement rate (per 100,000 people in the general population) in traffic collisions in 2014 (882.6) has increased by 1% compared to 2013 (871.3) and by 24% compared to the previous five years (2009 to 2013) annual average (710.9). Victim involvement rates in traffic collisions in 2014 where the person:

- Is killed (5.2 in 2014) is 21% lower than in 2013 and 30% lower than in the previous five years; and,
- Is injured, including all levels of severity but excluding killed (877.4 in 2014), is nearly 2% higher than in 2013 and 25% higher than in the previous five years.

Traffic collisions in urban locations account for the majority of casualties overall while rural locations account for the majority of people killed and seriously injured. In 2014, 86% of all casualties resulted from collisions in urban areas, primarily in Winnipeg (74% of all casualties). Collisions in rural locations, however, account for 72% of people killed and nearly 41% of people seriously injured. In the previous five year (2009 to 2013) annual average, 81% of all victims are from collisions in urban locations (68% in Winnipeg) while 68% of people killed and 52% of people seriously injured are from collisions in rural locations.

In 2014 (and very 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 September) and is highest in late fall, winter and early spring (ranging from 8% to 14% from October to March). Conversely, people are most often killed and seriously injured in traffic collisions in July, August and September (18%, 12% and 12% of people killed, respectively – 10%, 11% and 13% of people seriously injured, respectively). This is relatively consistent with the previous five years.

Considering people killed and seriously injured in Manitoba traffic collisions in 2014:

- Drivers account for the largest proportion of people killed (50%) and seriously injured (63%);
- Passengers account for 19% of people killed and 22% of people seriously injured;
- Pedestrians account for 16% of people killed and 6% of people seriously injured;
- Bicyclists account for 7% of people killed and 1% of people seriously injured; and,
- Motorcyclists (including mopeds riders) account for 6% of people killed and nearly 8% of people seriously injured.

In 2014, most vehicle occupant victims (including drivers, passengers and motorcyclists/moped riders) were using safety equipment at the time of the collision (98% of all victims where use is known). However, 35% of the people killed and 8% 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.

In 2014, 97% of driver and passenger victims were using the available safety equipment (seatbelts and child safety seats) and were not ejected from the vehicle. However, 78% of people ejected and killed and 57% of the people ejected and seriously injured were not using the available safety equipment at the time of the collision.

Drivers and Vehicles Involved in Collisions

In 2014, there are 61,294 drivers involved in traffic collisions. Of these:

- 90 are involved in fatal collisions;
- 16,120 are involved in injury collisions; and,
- 45,084 are involved in PDO collisions.

The rate of involvement for drivers in traffic collisions in 2014 is 705.1 per 10,000 licensed drivers, a decrease of 5% compared to the rate in 2013 (742.0), but an increase of 12% from the previous five year (2009 to 2013) annual average (627.8). In 2014, the driver involvement in:

- Fatal collisions (1.0) decreased by 16% from 2013 and by 27% compared to the previous five years;
- Injury collisions (185.4) increased by 2% from 2013 and by nearly 30% compared to the previous five years; and,
- PDO collisions (518.7) decreased by 7% from 2013, but increased by 7% compared to the previous five years.

Young drivers have a much higher rate of involvement in traffic collisions than older drivers. In 2014, drivers aged 16 to 24 years old have an involvement rate (per 10,000 licensed drivers) in traffic collisions of 1,029.1. This is:

- 1.2 times that of drivers aged 25 to 34 (rate of 871.5);
- 1.3 times that of drivers aged 35 to 44 (rate of 777.2);
- 1.5 times that of drivers aged 45 to 54 (rate of 668.6);
- Nearly twice that of drivers aged 55 to 64 (rate of 540.4); and,
- More than two-and-a-half times that of drivers aged 65 and older (rate of 396.8).

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.

In 2014, there are 62,277 vehicles involved in traffic collisions. Of these:

- 95 are involved in fatal collisions;
- 16,233 are involved in injury collisions; and,
- 45,949 are involved in PDO collisions.

Vehicle involvement in traffic collisions per 10,000 registered vehicles (vehicle involvement rate) overall has decreased in 2014 compared to 2013, but has increased relative to the previous five year (2009 to 2013) annual average. The vehicle involvement rate in collisions in 2014 for:

- Total collisions is 718.0 – decreased by 5% from 2013, but increased by 11% from the previous five years;
- Fatal collisions is 1.1 – decreased by 16% from 2013, and by 27% from the previous five years;
- Injury collisions is 187.2 – increased by 2% from 2013, and by 28% from the previous five years; and,
- PDO collisions is 529.8 – decreased by 7% from 2013, but increased by 6% from the previous five years.

Contributing Factors to Collisions

In 2014, 79% of all collisions have some at-fault contributing factor recorded (81% of fatal collisions; 78% of injury collisions). In 2014:

- A driver action is a contributing factor in 66% of all **collisions** (69% of fatal collisions; 73% of injury collisions; 64% of PDO collisions);
- A human condition is a contributing factor in 1% of all **collisions** (36% of fatal collisions; 1% of injury collisions; less than 1% of PDO collisions); and,
- Environmental conditions are contributing factors in 17% of all **collisions** (8% of fatal collisions; 8% of injury collisions; 19% of PDO collisions).

The most prevalent **contributing factors recorded for collisions** in 2014 include:

- Distracted driving – 21% of all collisions (27% fatal; 20% injury; 21% PDO);
- “Following too closely” – 16% of all collisions (none fatal; nearly 27% injury; 13% PDO);
- The actions of a wild animal – 10% of all collisions (none fatal; 2% injury; 12% PDO);
- Speed – 8% of all collisions (17% fatal; 8% injury; nearly 8% PDO);
- “Backing unsafely” – 7% of all collisions (none fatal; 2% injury; 9% PDO);
- “Turning improperly” – nearly 6% of all collisions (5% fatal; 7% injury; 5% PDO);
- “Fail to yield right-of-way” – 5% of all collisions (8% fatal; 8% injury; nearly 5% PDO);
- “Slippery road surface” – 5% of all collisions (none fatal; 4% injury; 5% PDO);
- “Changing lanes improperly” – 4% of all collisions (none fatal; 3% injury; 5% PDO); and,
- “Lost control/Drive off the road” – nearly 4% of all collisions (17% fatal; 4% injury; 3% PDO).

The most prevalent contributing factors recorded for collisions where **people are killed or seriously injured** in 2014 include:

- Distracted driving – nearly 27% of people killed and 29% of people seriously injured;
- “Lost control/Drive off the road” – 16% of people killed and 15% of people seriously injured;
- Speed –18% of people killed and 12% of people seriously injured;
- Impaired – 28% of people killed and 8% of people seriously injured;
- “Fail to yield right-of-way” – 10% of people killed and nearly 10% of people seriously injured;
- “Following too closely” – none of the people killed and 7% of people seriously injured;
- “Leave stop sign before safe to do so” – 3% of people killed and 6% of people seriously injured;
- “Turning improperly” – 4% of people killed and 5% of people seriously injured; and,
- “Slippery road surface” – none of the people killed and 5% of people seriously injured.

Off-Road Vehicle (ORV) Collisions

In 2014, there are 35 off-road vehicle collisions, involving 43 victims, 49 vehicles and 47 drivers. Of the total off-road vehicle collisions:

- 11 are fatal collisions;
- 21 are injury collisions; and,
- 3 are PDO collisions.

Alcohol-related Criminal Code Convictions

In 2013¹, there are a total of 1,922 alcohol-related Criminal Code offence convictions, including:

- 1,132 convictions for driving with a blood alcohol concentration (BAC) over .08;
- 689 convictions for impaired driving; and,
- 101 convictions for refusing to provide a breath or blood sample.

In the 20-year period from 1994 to 2013, total alcohol-related Criminal Code convictions declined by 42%, from 3,319 in 1994 to 1,922 in 2013. Total convictions in 2013 (1,922 convictions) decreased slightly (a count of 57; 3%) compared to 2012 (1,979 convictions) and was down as well by 7% compared to the previous five year (2008 to 2012) annual average (2,059 convictions).

Over the past twenty years, alcohol-related Criminal Code convictions have declined by 42% in all age groups in Manitoba. Comparing the total number of convictions in 2013 to 1994 among drivers:

- Under 16 years of age, convictions declined by 20%;
- 16 to 24 years of age, convictions declined by nearly 44%
- 25 to 44 years of age, convictions declined by 46%;
- 45 to 64 years of age, convictions declined by 26%; and,
- 65 years of age and older, convictions declined by 44%.

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

- Licensed drivers under age 25 represented 14% of the licensed drivers in 2013, but accounted for 26% of convictions.
- Drivers aged 25 to 44 represented 34% of the licensed drivers in 2013, but accounted for 52% of convictions.

Rates of recidivism, indicated by second and third and subsequent offences, decreased substantially from 2003 to 2013. There was a 29% reduction in rate at which drivers are convicted of a second alcohol-related Criminal Code offence, and a 51% reduction in the rate for third and subsequent offences in 2013 compared to 2003.

¹ There is a one-year lag in the statistics reported to allow for court processing time. Therefore, 2013 is the most current year for which these statistics are available.

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

Table 5-14
Collision Victims by Safety Equipment Use and Casualty Type: 2014

Safety Equipment	2014 Casualty Type												2014 Total Victims	% of 2014 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	0	-	5	1.9%	22	1.2%	68	0.8%	2	2.4%	97	0.9%	97	0.9%
Lap belt only installed - Not in use	5	9.8%	4	1.5%	15	0.8%	31	0.3%	0	-	50	0.4%	55	0.5%
Shoulder belt only installed - In use	1	2.0%	2	0.8%	12	0.6%	32	0.4%	0	-	46	0.4%	47	0.4%
Shoulder belt only installed - Not in use	1	2.0%	1	0.4%	13	0.7%	21	0.2%	0	-	35	0.3%	36	0.3%
Lap and shoulder belt assembly - In use	20	39.2%	145	55.8%	1,243	67.2%	8,033	89.3%	61	74.4%	9,482	84.8%	9,502	84.6%
Combined belt installed - Not in use	6	11.8%	8	3.1%	15	0.8%	19	0.2%	1	1.2%	43	0.4%	49	0.4%
Only lap part of full assembly in use	0	-	0	-	2	0.1%	16	0.2%	0	-	18	0.2%	18	0.2%
Air bag deployed - Safety belt in use	4	7.8%	43	16.5%	409	22.1%	511	5.7%	9	11.0%	972	8.7%	976	8.7%
Air bag deployed - Safety belt not use	2	3.9%	4	1.5%	12	0.6%	11	0.1%	0	-	27	0.2%	29	0.3%
Safety seat properly installed - In use	0	-	1	0.4%	23	1.2%	124	1.4%	0	-	148	1.3%	148	1.3%
Safety seat improperly installed - In use	0	-	2	0.8%	7	0.4%	4	<0.1%	0	-	13	0.1%	13	0.1%
Safety seat installed - Not in use	0	-	0	-	2	0.1%	0	-	0	-	2	<0.1%	2	<0.1%
Safety helmet worn	1	2.0%	20	7.7%	37	2.0%	59	0.7%	1	1.2%	117	1.0%	118	1.1%
Safety helmet not worn	0	-	1	0.4%	2	0.1%	0	-	0	-	3	<0.1%	3	<0.1%
No safety device available	0	-	0	-	1	<0.1%	4	<0.1%	0	-	5	<0.1%	5	<0.1%
Other	1	2.0%	1	0.4%	10	0.5%	22	0.2%	6	7.3%	39	0.3%	40	0.4%
Not Applicable	4	7.8%	3	1.2%	8	0.4%	20	0.2%	0	-	31	0.3%	35	0.3%
Unknown	6	11.8%	20	7.7%	16	0.9%	17	0.2%	2	2.4%	55	0.5%	61	0.5%
Total	51	100%	260	100%	1,849	100%	8,992	100%	82	100%	11,183	100%	11,234	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: 2009-2013 Average

Safety Equipment	2009-2013 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	2	7	86	109	6	208	210	2.5%
Lap belt only installed - Not in use	<1	2	9	8	<1	19	19	0.2%
Shoulder belt only installed - In use	1	3	33	33	3	72	73	0.9%
Shoulder belt only installed - Not in use	3	2	7	10	<1	20	23	0.3%
Lap and shoulder belt assembly - In use	21	162	1,638	4,530	137	6,467	6,488	76.8%
Combined belt installed - Not in use	19	20	48	20	1	89	108	1.3%
Only lap part of full assembly in use	-	1	5	10	-	16	16	0.2%
Air bag deployed - Safety belt in use	6	43	249	210	7	510	516	6.1%
Air bag deployed - Safety belt not in use	3	4	9	7	<1	20	23	0.3%
Safety seat properly installed - In use	1	2	48	86	2	138	139	1.6%
Safety seat improperly installed - In use	<1	<1	3	4	-	8	8	<0.1%
Safety seat installed - Not in use	<1	<1	2	2	-	4	4	<0.1%
Safety helmet worn	3	17	43	29	2	91	94	1.1%
Safety helmet not worn	1	3	2	1	-	6	7	<0.1%
No safety device available	<1	1	4	4	-	9	9	0.1%
Other	<1	2	4	14	<1	21	21	0.3%
Not Applicable	<1	2	6	8	3	19	19	0.2%
Unknown	15	27	83	203	343	656	671	7.9%
Total	78	298	2,278	5,289	506	8,372	8,450	100%

Note: Counts of victims in the 2009-2013 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 2014, most victims in traffic collisions were using safety equipment at the time of the collision (98% of all victims where safety equipment use is known, i.e., excluding "other", "not applicable" and "unknown").

In 2014, 35% of the people killed in traffic collisions and 8% 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.

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': 2014

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 <u>not</u> in use	179	14	7.8%	18	10.1%	146	81.6%	1	0.6%
Equipment in use	10,919	26	0.2%	218	2.0%	10,602	97.1%	73	0.7%
Safety Equipment Effectiveness*			32.85		5.04		0.84		0.84

*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 2014, victims not using safety equipment are thirty-three times more likely to be killed and five times more likely to be seriously injured in a traffic collision than those who used the equipment. Over the previous five years (2009 to 2013), people not using the available safety equipment are thirty-two times more likely to be killed and 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"

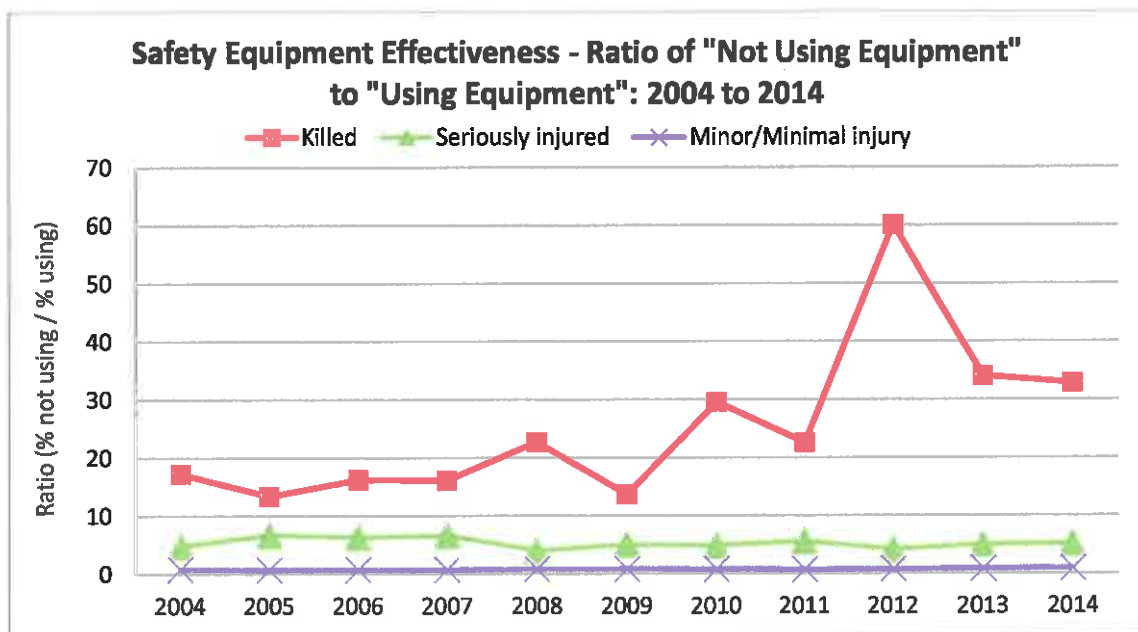


Table 5-16 Vehicle Occupant Victim Ejections in Traffic Collision

Table 5-16
 Vehicle Occupant Victims by Ejection From Vehicle and Casualty Type: 2014

Ejection	2014 Casualty Type												2014 Total Victims	% of 2014 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	38	80.9%	224	94.1%	1,796	99.2%	8,878	99.5%	81	100.0%	10,979	99.3%	11,017	99.2%
Fully Ejected	9	19.1%	13	5.5%	12	0.7%	33	0.4%	0	-	58	0.5%	67	0.6%
Partially Ejected	0	-	1	0.4%	3	0.2%	14	0.2%	0	-	18	0.2%	18	0.2%
Total	47	100%	238	100%	1,811	100%	8,925	100%	81	100%	11,055	100%	11,102	100%

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