

***Alberta***

***Traffic Collision Statistics***

***2014***



***Alberta***

***Traffic Collision Statistics***

***2014***

For further information contact:  
Alberta Transportation  
Office of Traffic Safety  
Main Floor, Twin Atria Building  
4999 – 98 Avenue  
Edmonton, Alberta T6B 2X3  
780-427-8901  
[www.transportation.alberta.ca](http://www.transportation.alberta.ca)



## 2014 Overview

- The number of **traffic fatalities increased 3.1%** over the past year from 358 fatalities in 2013 to 369 in 2014.
- The number of **traffic injuries increased 0.5%** over the past year from 18650 injuries in 2013 to 18745 in 2014.
- The number of **traffic collisions increased 2.2%** over the past year from 141638 collisions in 2013 to 144740 in 2014.
- **The highest number of fatal collisions** occurred in **July**. **The highest number of injury collisions** occurred in **October**.
- **Friday** was the most collision-prone day of the week.
- **The most collision-prone period of time was the afternoon rush hour.**
- **Casualty rates** were highest for persons between the **ages of 15 and 24**.
- **Male drivers** between the **ages of 18 and 19** had the highest involvement rate of all drivers involved in casualty collisions.
- **Following too closely, running off the road and left turn across path** were the most frequently identified **improper driver actions** contributing to casualty collisions.
- **Fatal collisions** occurred most frequently in **rural areas**, whereas **injury and property damage collisions** occurred more frequently in **urban areas**.
- **32.6% of pedestrians** involved in **fatal collisions had consumed alcohol** prior to the collision compared to **10.1% of pedestrians in injury collisions**.
- **15.9% of drivers** involved in **fatal collisions had consumed alcohol** prior to the crash compared to **3.3% of drivers in injury collisions**.
- **Collision-involved restraint users had a much lower injury rate (7.0%)** than those not using restraints (30.6%)



## **Preface**

The purpose of this report is to provide an overview of the “who”, “what”, “when”, “where”, “why”, and “how” of traffic collisions which occurred in Alberta during 2014. Although the report is general in nature, it pays particular attention to casualty collisions, that is, those collisions which result in death or injury. Legislation in Alberta requires that a traffic collision, which results in death, injury, or property damage to an apparent extent of \$2000.00 or more, be reported immediately to an authorized peace officer. The officer completes a standardized collision report form which provides information on various aspects of the traffic collision. This report is based on the data collected from these report forms.

The collision report form is issued with standard instructions to every police service within Alberta, to be completed by the officer attending the scene of a motor vehicle collision or at a police station. Police priorities at the scene of a collision are to care for the injured, protect the motoring public, complete an on-scene investigation and clear the roadway. Completion of the collision report form is a secondary, but necessary, task.

After completion, the information on the collision report form is coded for input to computer files. The Alberta Collision Information System, which has been operational since 1978, undergoes several manual and computerized inspections each year in order to ensure maximum accuracy of the final data output. This collision information is used to make Alberta’s roads safer for all road users. Due to continuing police investigation, some numbers presented in this report may be subject to revision. It should also be noted that not all percentage columns will total 100 due to rounding error.

This report was produced based on collisions reported to Alberta Transportation by police, at the time of printing. The numbers presented in this report will not be updated. However, the patterns and trends detailed in this report represent an accurate description of Alberta’s traffic collision picture.





**Table of Contents**

	<b>Page</b>
2014 Overview .....	i
Preface .....	iii
List of Tables .....	vii
List of Figures .....	ix
Glossary .....	xi
2014 Traffic Collision Summary .....	1
When the Collisions Occurred .....	7
Victims .....	13
Drivers .....	17
Vehicles .....	21
Environment .....	25
Special Types of Vehicles	
Motorcycles .....	29
Truck Tractors .....	39
Trains .....	45
Pedestrians .....	49
Bicyclists .....	59
Traffic Safety Issues	
Alcohol Involvement .....	67
Restraint Use .....	77



**List of Tables**

	Page
Table 1.1	Alberta Traffic Collisions 2010 - 2014 .....2
Table 1.2	Traffic Collision Rates 2010 - 2014 .....3
Table 1.3	Provincial Comparison of Casualty Rates Per Billion Vehicle Kilometres Travelled 2009 - 2013 .....5
Table 2.1	Collision Occurrence by Month 2014 .....8
Table 2.2	Collision Occurrence by Day of Week 2014 .....9
Table 2.3	Collision Occurrence by Time Period 2014 .....10
Table 2.4	Collisions During 2014 Holidays .....12
Table 3.1	Injuries and Fatalities by Road User Class 2014 .....14
Table 3.2	Age of Casualties 2014 .....15
Table 4.1	Age and Sex of Drivers Involved in Casualty Collisions: Per 1,000 Licenced Drivers 2014 .....18
Table 4.2	Improper Actions of Drivers Involved in Casualty Collisions 2014 .....20
Table 5.1	Types of Vehicles Involved in Casualty Collisions 2014 .....22
Table 5.2	Vehicle Factors Involved in Casualty Collisions 2014 .....23
Table 5.3	Point of Impact on Vehicles Involved in Casualty Collisions 2014 .....24
Table 6.1	Location of Collisions 2014 .....26
Table 6.2	Casualty Collision Occurrence by Surface Condition 2014 .....27
Table 7.1	Motorcycles Involved in Casualty Collisions 2010 - 2014 .....30
Table 7.2	Age and Sex of Motorcycle Drivers Involved in Casualty Collisions 2014 .....32
Table 7.3	Improper Actions of Motorcycle Drivers Involved in Casualty Collisions 2014 .....33
Table 7.4	Condition of Motorcycle Drivers Involved in Casualty Collisions 2014 .....34
Table 7.5	Motorcycle Vehicle Factors in Casualty Collisions 2014 .....35
Table 7.6	Casualty Collisions Involving Motorcycles: Month of Occurrence 2014 .....36
Table 7.7	Casualty Collisions Involving Motorcycles: Road Surface Condition 2014 .....37

---

Table 7.8	Truck Tractors Involved in Casualty Collisions 2010 - 2014.....	40
Table 7.9	Improper Actions of Truck Tractor Drivers Involved in Casualty Collisions 2014 .....	41
Table 7.10	Condition of Truck Tractor Drivers Involved in Casualty Collisions 2014 .....	42
Table 7.11	Vehicle Factors of Truck Tractors Involved in Casualty Collisions 2014 .....	43
Table 7.12	Casualty Collisions Involving Truck Tractors: Month of Occurrence 2014 .....	44
Table 7.13	Trains Involved in Casualty Collisions 2010 - 2014 .....	46
Table 7.14	Casualty Collisions Involving Trains: Month of Occurrence 2014 .....	47
Table 7.15	Actions of Drivers Involved in Casualty Collisions with Trains 2014 .....	48
Table 8.1	Casualty Collisions Involving Pedestrians: Month of Occurrence 2014 .....	50
Table 8.2	Casualty Collisions Involving Pedestrians: Day of Week 2014 .....	51
Table 8.3	Casualty Collisions Involving Pedestrians: Time Period 2014.....	52
Table 8.4	Casualty Collisions Involving Pedestrians: Location 2014 .....	53
Table 8.5	Actions of Drivers Involved in Casualty Collisions with Pedestrians 2014 .....	54
Table 8.6	Age of Pedestrian Casualties 2014.....	55
Table 8.7	Condition of Pedestrians Involved in Casualty Collisions 2014.....	57
Table 8.8	Age of Drinking Pedestrians Involved in Casualty Collisions 2014 .....	58
Table 9.1	Casualty Collisions Involving Bicycles: Month of Occurrence 2014 .....	60
Table 9.2	Casualty Collisions Involving Bicycles: Day of Week 2014 .....	61
Table 9.3	Casualty Collisions Involving Bicycles: Time Period 2014 .....	62
Table 9.4	Age of Bicyclist Casualties 2014.....	63
Table 9.5	Improper Actions of Bicyclists Involved in Casualty Collisions 2014.....	64
Table 9.6	Condition of Bicyclists Involved in Casualty Collisions 2014 .....	65
Table 10.1	Condition of Drivers in Casualty Collisions 2014 .....	68
Table 10.2	Age and Sex of Drinking Drivers in Casualty Collisions 2014 .....	71
Table 10.3	Alcohol-Involved Casualty Collisions: Month of Occurrence 2014 .....	73
Table 10.4	Alcohol-Involved Casualty Collisions: Day of Week 2014 .....	74
Table 10.5	Alcohol-Involved Casualty Collisions: Time Period 2014.....	75
Table 10.6	Restraint Use of Vehicle Occupants and Injury Severity 2014 (Use vs. Non-Use) ....	78

---

**List of Figures**

	Page
Figure 1	Alberta Traffic Collision Rates Per 10,000 Population 2010 - 2014 ..... 4
Figure 2	Traffic Fatality Rates per Billion Vehicle Kilometres Travelled 2009 - 2013..... 6
Figure 3	Collision Occurrence by Month/Day of Week/Time Period 2014..... 11
Figure 4	Age of Casualties 2014..... 16
Figure 5	Age and Sex of Drivers Involved in Casualty Collisions 2014 ..... 19
Figure 6	Number of Motorcycles Involved in Fatal Collisions 2010 - 2014 ..... 31
Figure 7	Pedestrian Casualties 2014 ..... 56
Figure 8	Involvement of Drinking Drivers in Casualty Collisions 2010 - 2014 ..... 69
Figure 9	Driver Condition in Casualty Collisions 2014..... 70
Figure 10	Drinking Drivers Involved in Casualty Collisions 2014..... 72
Figure 11	Alcohol-Involved Casualty Collisions by Month/Day of Week/Time Period 2014..... 76



## **Glossary**

**Alcohol Impaired** – In the judgment of the police officer, driving ability was impaired by alcohol consumption. Whether or not the subject was actually charged is not taken into consideration by the collision report form.

**Casualty Collision** – A vehicle collision which results in either a fatal or personal injury.

**Drinking Driver** – Refers to those drivers judged by the police officer as having been drinking prior to the collision or as being alcohol impaired at the time of the collision. Whether or not the driver was actually charged is not taken into consideration by the collision report form.

**Fatality** – A fatality is the death of a person that occurs as a result of a motor vehicle collision within 30 days of the collision.

**Had Been Drinking** – In the judgment of the police officer, the driver had recently consumed alcohol but his driving ability was not obviously impaired.

**Major Injury** – Persons with injuries or complaints of pain who went to the hospital and were subsequently admitted, even if for observation only.

**Minor Injury** – Persons with injuries or complaints of pain that went to the hospital, were treated in emergency (or refused treatment) and SENT HOME without ever being admitted to the hospital. (Also includes people who indicated that they intended to seek medical treatment.)

**Motorcyclist** – Refers to drivers and passengers of motorcycles.

**Occupant Casualties** – Refers to people who were injured or killed as a result of a vehicle collision and were identified as being either a vehicle driver or passenger.

**Property Damage** – A vehicle collision which resulted in property damage exceeding \$2000.00.

**Reportable Collision** – A vehicle collision which resulted in death, injury or property damage greater than \$2000.00.

**Rural** – Any area outside of what is defined as “**Urban**”.

**Urban** – Any area within the corporate boundaries of a city, town, village or hamlet.





## **2014 Traffic Collision Summary**

### ***Introduction***

During 2014, 144740 collisions were recorded on Alberta roadways. Property damage collisions (over \$2000) represented 89.9% (130168) of this total while 9.8% (14244) were non-fatal injury collisions. Fatal collisions accounted for 0.2% (328) of the total reported collisions.

### ***Five-Year Trends***

In terms of population and licenced drivers, the fatal collision rate is unchanged from 2013, but decreased for registered vehicles. The fatality rates are unchanged in terms of population, licenced drivers, and registered vehicles.

The non-fatal injury collision and injury rates decreased in 2014 in terms of population, licenced drivers and registered vehicles.

Property damage collision rates decreased from 2013 to 2014 in terms of population, licenced drivers and registered vehicles.

### ***Provincial Comparisons***

In order to get a picture of Alberta's traffic casualties in comparison to other provinces, rates rather than absolute numbers are utilized. In this instance, the most recent casualty rates per billion vehicle kilometres travelled were examined.

Based on this comparison of rates per billion vehicle kilometres travelled, six provinces and territories had a higher fatality rate than Alberta in 2013. With regard to injury rates, in 2013, 10 jurisdictions had a higher injury rate than Alberta.

**Table 1.1****Alberta Traffic Collisions****2010 – 2014**

<b>Severity of Collisions</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
Fatal Collisions	328	331	307	285	307
Non-Fatal Injury Collisions	14244	14073	13822	13909	13552
Property Damage Collisions	130168	127234	122466	124985	137430
<b>Total Reportable Collisions</b>	<b>144740</b>	<b>141638</b>	<b>136595</b>	<b>139179</b>	<b>151289</b>
Number Killed	369	358	345	313	344
Number Injured	18745	18650	18220	18584	18253
<b>Total Number of Casualties</b>	<b>19114</b>	<b>19008</b>	<b>18565</b>	<b>18897</b>	<b>18597</b>

**Observations**

In 2014, the overall number of collisions increased 2.2% when compared to 2013. In 2014, injury collisions increased by 1.2% and fatal crashes decreased by 0.9%. The number of fatalities increased by 3.1% from 2013 to 2014 and the number of injuries increased by 0.5%. In terms of the past five years, overall collisions were lowest in 2012 and highest in 2010.

Note: On January 1, 2011, the reporting threshold for property damage only collisions increased from \$1000 to \$2000.

**Table 1.2****Traffic Collision Rates****2010 – 2014**

Severity of Collision	Rate Per 10,000 Population					Rate Per 10,000 Licenced Drivers					Rate Per 10,000 Registered Vehicles				
	2014	2013	2012	2011	2010	2014	2013	2012	2011	2010	2014	2013	2012	2011	2010
Fatal Collisions	0.8	0.8	0.8	0.8	0.8	1.1	1.1	1.1	1.0	1.1	0.9	1.0	0.9	0.9	1.0
Number Killed	0.9	0.9	0.9	0.8	0.9	1.2	1.2	1.2	1.1	1.2	1.0	1.0	1.0	1.0	1.1
Non-Fatal Injury Collisions	34.6	35.0	35.7	36.8	36.4	46.6	47.4	47.9	49.2	48.7	39.5	40.5	41.3	43.2	43.3
Number Injured	45.5	46.3	47.0	49.2	49.1	61.3	62.8	63.1	65.8	65.6	52.0	53.6	54.4	57.7	58.3
Property Damage Collisions	315.8	316.1	316.1	330.7	369.3	425.7	428.7	424.1	442.3	493.8	360.8	366.0	365.8	388.0	438.9
<b>Total Reportable Collisions</b>	<b>351.2</b>	<b>351.9</b>	<b>352.6</b>	<b>368.3</b>	<b>406.6</b>	<b>473.4</b>	<b>477.2</b>	<b>473.0</b>	<b>492.6</b>	<b>543.6</b>	<b>401.2</b>	<b>407.4</b>	<b>408.0</b>	<b>432.1</b>	<b>483.2</b>

**Observations**

In terms of population and licenced drivers, the fatal collision rate is unchanged from 2013 to 2014, but decreased for registered vehicles. The fatality rates are unchanged in terms of population, licenced drivers, and registered vehicles.

The non-fatal injury collision and injury rates decreased in terms of population, licenced drivers and registered vehicles.

Property damage collision rates decreased from 2013 to 2014 in terms of population, licenced drivers and registered vehicles.

Note: On January 1, 2011, the reporting threshold for property damage only collisions increased from \$1000 to \$2000.

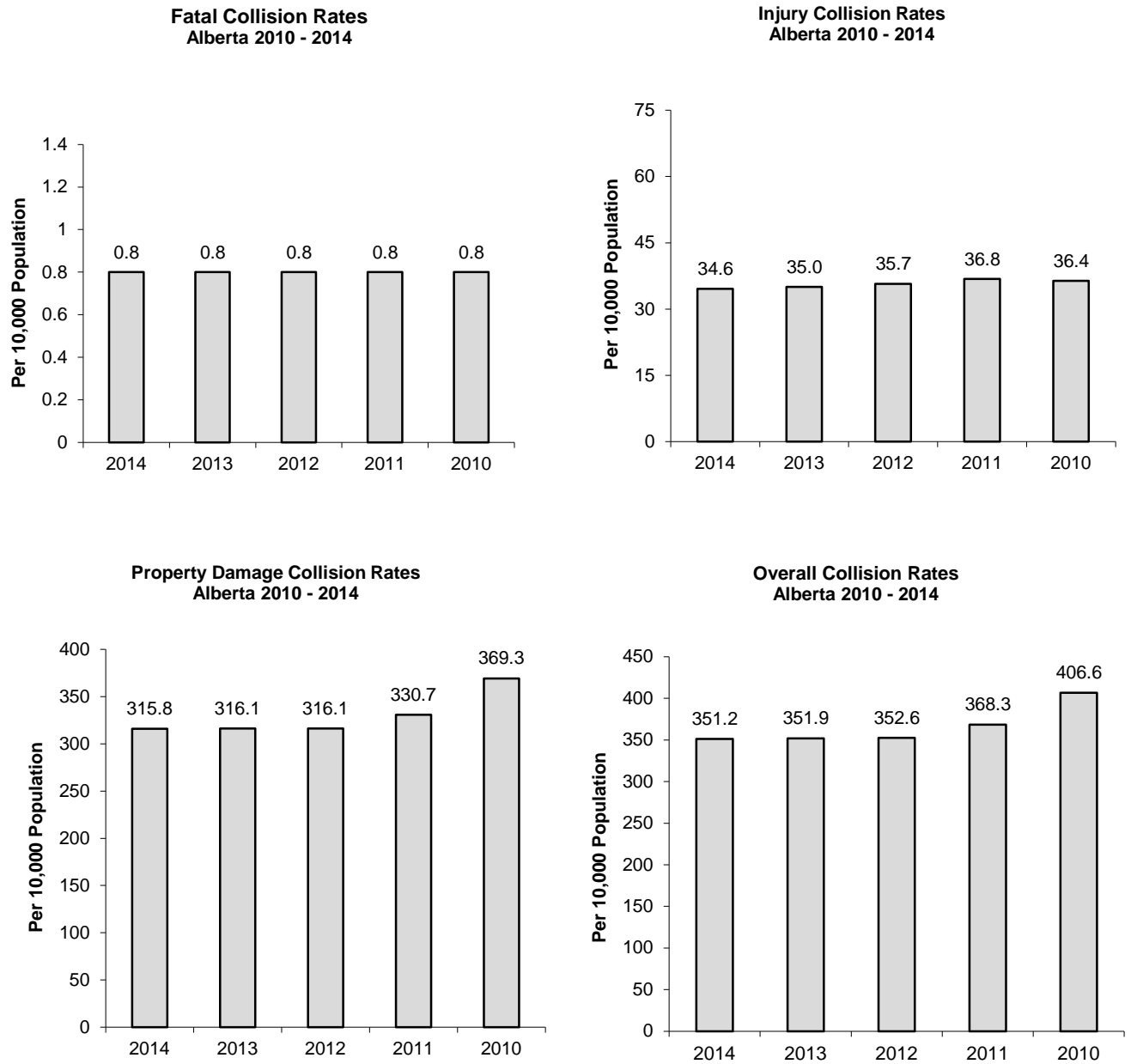
## Sources:

Population – Statistics Canada as of July 1, 2014

Licenced Drivers – Service Alberta – Registries Services, as of December 31, 2014

Registered Vehicles – Service Alberta – Registries Services, as of December 31, 2014

**Figure 1**



Note: On January 1, 2011, the reporting threshold for property damage only collisions increased from \$1000 to \$2000.

**Table 1.3****Provincial Comparison of Casualty Rates  
Per Billion Vehicle Kilometres Travelled****2009 – 2013**

	Fatalities					Injuries				
	2013	2012	2011	2010	2009	2013	2012	2011	2010	2009
Canada	5.6	6.0	5.8	6.6	6.6	481.9	480.5	485.0	504.1	518.7
Alberta	6.4	6.4	5.7	6.6	7.1	335.5	340.1	338.7	349.5	385.6
British Columbia	7.5	7.6	8.0	10.1	10.5	567.2	543.3	536.1	579.3	562.6
Saskatchewan	10.6	13.9	11.2	12.8	11.8	535.7	548.2	512.6	499.5	526.0
Manitoba	6.4	7.3	8.9	7.2	7.3	840.0	805.5	662.6	583.9	615.9
Ontario	3.7	4.3	3.7	4.5	4.2	465.6	459.9	479.8	498.3	490.7
Quebec	5.6	5.9	6.6	6.6	7.1	530.4	545.2	565.6	594.2	592.2
New Brunswick	6.3	8.0	7.6	11.5	8.3	355.7	351.8	344.3	425.9	480.7
Nova Scotia	7.6	7.7	6.2	6.9	7.2	401.4	434.1	480.1	476.9	751.5
Prince Edward Island	9.7	7.6	13.4	6.9	9.4	826.1	439.8	503.6	493.7	596.2
Newfoundland	5.8	5.9	5.5	5.8	6.9	426.2	433.7	407.5	426.2	508.9
Yukon	6.4	3.2	17.9	7.9	13.7	329.6	318.3	383.0	433.9	341.1
Northwest Territories	7.9	5.2	0.0	9.4	15.9	314.0	378.9	332.5	353.6	419.8
Nunavut	85.7	26.5	83.5	60.2	65.1	1142.9	1538.1	1197.0	1234.6	1368.1

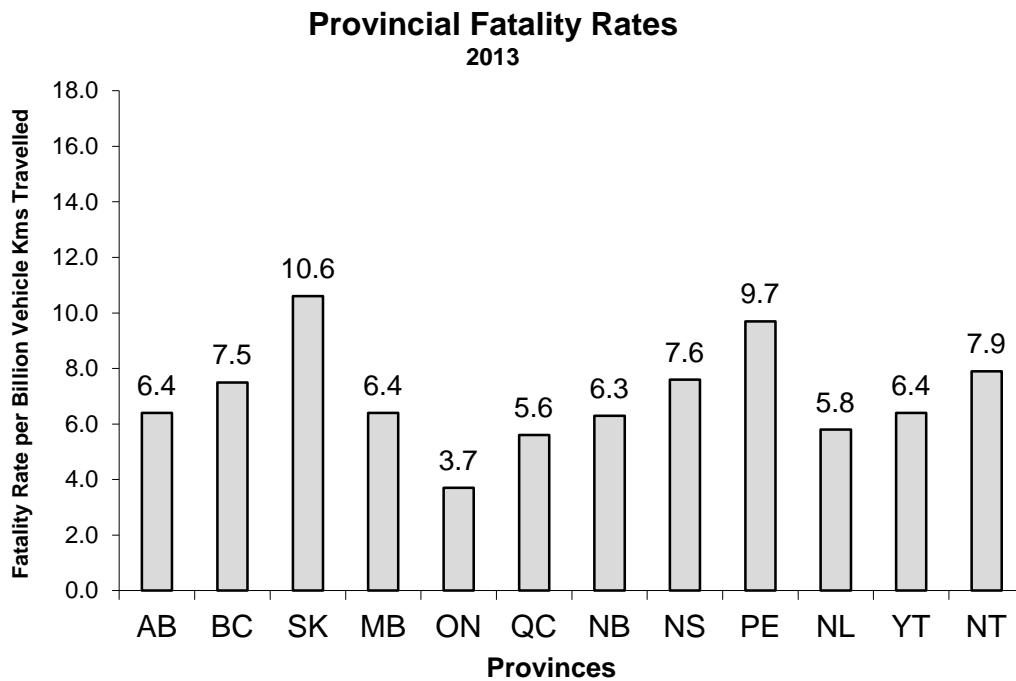
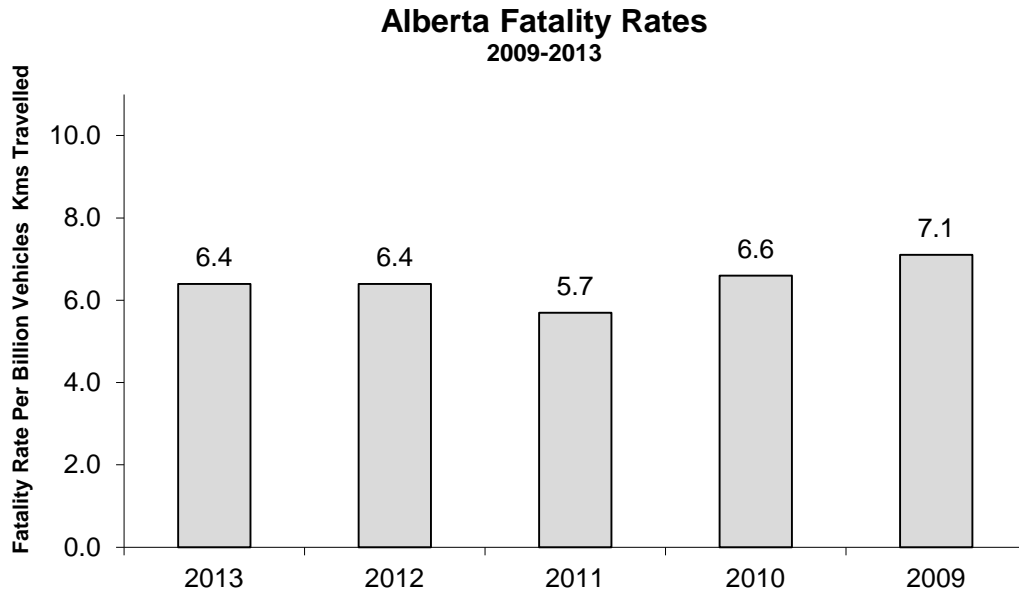
**Observations**

Based on the most recent information from Transport Canada, from 2012 to 2013, Alberta's fatality rate per billion vehicle kilometers travelled remained the same at 6.4. During the same period, the injury rate per billion vehicle kilometers travelled decreased from 340.1 to 335.5. Over the five years, since 2009, rates have declined by 0.7 fatalities and 50.1 injuries per billion vehicle kilometers travelled.

Sources: Transport Canada, "Canadian Motor Vehicle Traffic Collision Statistics," (TP3322) and Statistics Canada, "Canadian Vehicle Survey", catalogue No. 53-223-XIE. The Canadian Vehicle Survey (CVS) is a voluntary vehicle-based survey that provides annual estimates of road vehicle activity (Vehicle-kilometres and passenger-kilometres) of vehicles registered in Canada. The in-scope vehicles for the CVS include all motor vehicles except motorcycles, buses, off-road vehicles (e.g., snowmobiles, dune buggies, and amphibious vehicles) and special equipment (e.g. cranes, street cleaners, snowplows and backhoes) registered in Canada anytime during the survey reference period that have not been scrapped or salvaged. Vehicle Kilometres data for 2013 were estimated using average yearly change for the years 2010-2012. Data for Ontario are preliminary. Data for Newfoundland and New Brunswick were estimated.

The Canadian Motor Vehicle Traffic Collision Statistics can be accessed online at:  
<http://www.tc.gc.ca/eng/roadsafety/resources-researchstats-menu-847.htm>

**Figure 2**



Note: To maintain the scale of the graph and to facilitate the comparison across jurisdictions the fatality rate for Nunavut is not included in this graph. The rate for Nunavut is reported in Table 1.3.

## ***When the Collisions Occurred***

### **Month**

July experienced more fatal collisions than other months. The highest number of injury and property damage collisions were recorded during the months of October and November, respectively.

### **Day of Week**

The daily distribution of collisions indicated that Friday was the most collision-prone day of the week.

### **Time**

The afternoon rush hour period (3:00 p.m. – 6:59 p.m.) accounted for the highest proportion of collisions. The least collision-prone time period was the early morning (3:00 a.m. – 6:59 a.m.).

### **Holidays**

The Victoria Day Long Weekend recorded the highest number of fatalities while the Thanksgiving Long Weekend recorded the highest number of injuries. The Easter Long Weekend recorded the highest total number of collisions.

**Table 2.1**

<b>Collision Occurrence by Month</b>								
<b>2014</b>								
<b>Month</b>	<b>Fatal Collisions</b>		<b>Non-Fatal Injury Collisions</b>		<b>Property Damage Collisions</b>		<b>Total Collisions</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
January	21	6.4	1195	8.4	12901	9.9	14117	9.8
February	23	7.0	1020	7.2	11206	8.6	12249	8.5
March	23	7.0	1102	7.7	11522	8.9	12647	8.7
April	18	5.5	895	6.3	8696	6.7	9609	6.6
May	31	9.5	1116	7.8	8997	6.9	10144	7.0
June	29	8.8	1208	8.5	9453	7.3	10690	7.4
July	41	12.5	1291	9.1	9528	7.3	10860	7.5
August	24	7.3	1167	8.2	9064	7.0	10255	7.1
September	30	9.1	1339	9.4	10031	7.7	11400	7.9
October	37	11.3	1381	9.7	10466	8.0	11884	8.2
November	24	7.3	1346	9.4	15702	12.1	17072	11.8
December	27	8.2	1183	8.3	12597	9.7	13807	9.5
Unspecified	--	--	1	0.0	5	0.0	6	0.0
<b>Total Number of Collisions</b>	<b>328</b>	<b>100.0</b>	<b>14244</b>	<b>100.0</b>	<b>130168</b>	<b>100.0</b>	<b>144740</b>	<b>100.0</b>

**Observations**

The month of July experienced more fatal crashes than any other month. The highest number of reported injury collisions were in October. November reported more property damage collisions than any other month.



**Table 2.2****Collision Occurrence by Day of Week****2014**

Day of Week	Fatal Collisions		Non-Fatal Injury Collisions		Property Damage Collisions		Total Collisions	
	N	%	N	%	N	%	N	%
Monday	34	10.4	1971	13.8	18550	14.3	20555	14.2
Tuesday	45	13.7	2244	15.8	19106	14.7	21395	14.8
Wednesday	64	19.5	2162	15.2	19610	15.1	21836	15.1
Thursday	42	12.8	2229	15.6	19600	15.1	21871	15.1
Friday	39	11.9	2313	16.2	21887	16.8	24239	16.7
Saturday	59	18.0	1881	13.2	17438	13.4	19378	13.4
Sunday	45	13.7	1443	10.1	13972	10.7	15460	10.7
Unspecified	--	--	1	0.0	5	0.0	6	0.0
<b>Total Number of Collisions</b>	<b>328</b>	<b>100.0</b>	<b>14244</b>	<b>100.0</b>	<b>130168</b>	<b>100.0</b>	<b>144740</b>	<b>100.0</b>

**Observations**

The daily distribution of collisions indicated that, overall, Friday was the most collision-prone day of the week.

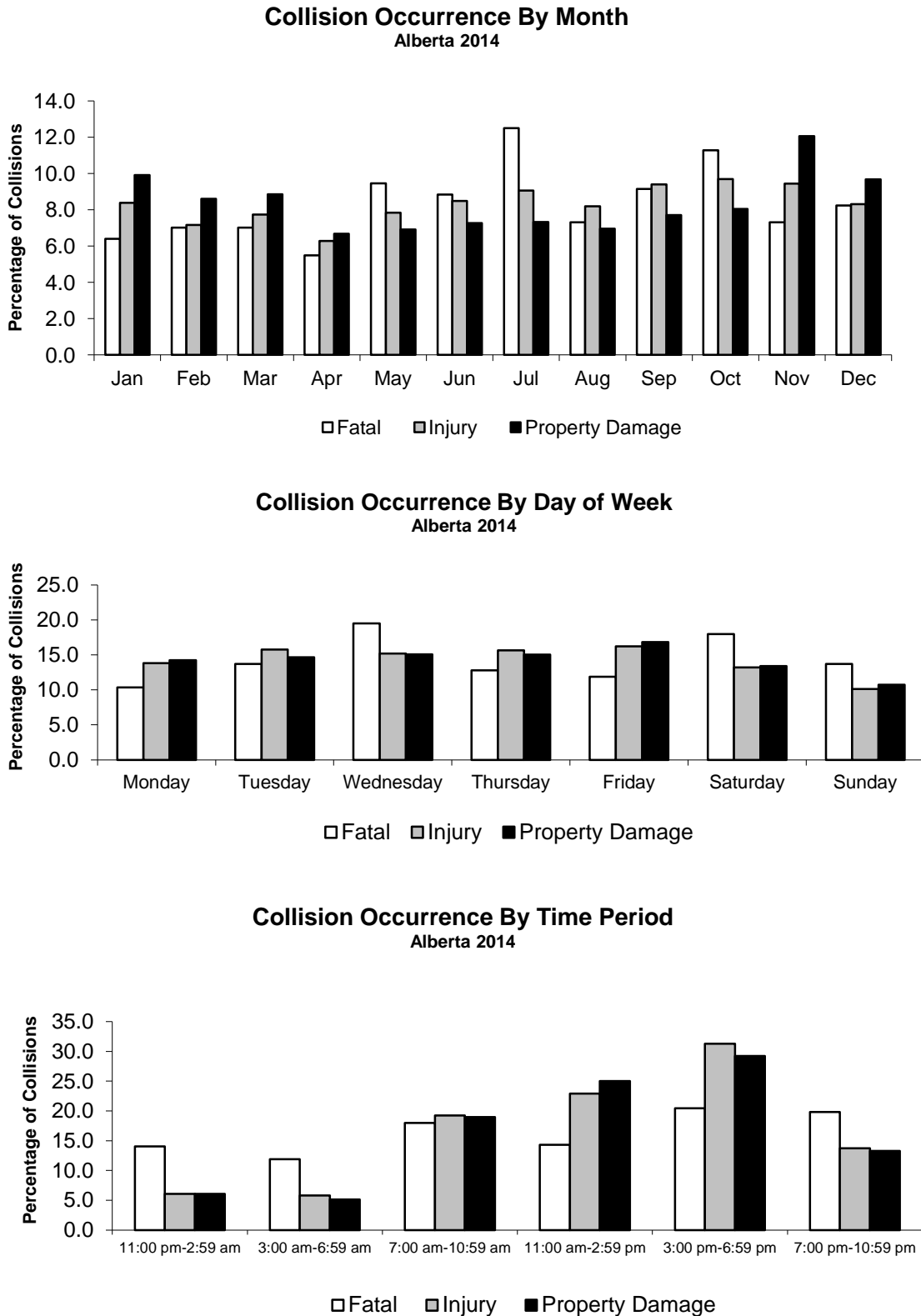
**Table 2.3****Collision Occurrence by Time Period****2014**

Time Period	Fatal Collisions		Non-Fatal Injury Collisions		Property Damage Collisions		Total Collisions	
	N	%	N	%	N	%	N	%
11:00 p.m. - 2:59 a.m.	46	14.0	863	6.1	7889	6.1	8798	6.1
3:00 a.m. - 6:59 a.m.	39	11.9	824	5.8	6702	5.1	7565	5.2
7:00 a.m. - 10:59 a.m.	59	18.0	2741	19.2	24702	19.0	27502	19.0
11:00 a.m. - 2:59 p.m.	47	14.3	3262	22.9	32556	25.0	35865	24.8
3:00 p.m. - 6:59 p.m.	67	20.4	4455	31.3	38034	29.2	42556	29.4
7:00 p.m. - 10:59 p.m.	65	19.8	1957	13.7	17299	13.3	19321	13.3
Unspecified	5	1.5	142	1.0	2986	2.3	3133	2.2
<b>Total Number of Collisions</b>	<b>328</b>	<b>100.0</b>	<b>14244</b>	<b>100.0</b>	<b>130168</b>	<b>100.0</b>	<b>144740</b>	<b>100.0</b>

**Observations**

The afternoon rush hour period (3:00 p.m. – 6:59 p.m.) accounted for the largest percentage (29.4%) of collisions occurring in a 24-hour period. The least collision-prone time period was the early morning (3:00 a.m. – 6:59 a.m.).

**Figure 3**



**Table 2.4****Collisions During 2014 Holidays**

<b>Holidays</b>	<b>Number Killed</b>	<b>Number Injured</b>	<b>Total Collisions*</b>
	<b>N</b>	<b>N</b>	<b>N</b>
New Year's Day (January 1)	4	36	391
Family Day Long Weekend (February 14-17)	1	145	1335
Easter Long Weekend (April 17-21)	3	187	1533
Victoria Day Long Weekend (May 16-19)	6	157	1034
Canada Day (July 1)	3	60	310
August Long Weekend (August 1-4)	2	170	1130
Labour Day Long Weekend (August 29-September 1)	3	174	1278
Thanksgiving Long Weekend (October 10-13)	3	220	1266
Remembrance Day (November 11)	3	31	445
Christmas Season (December 24-28)	3	149	1390
<b>Total</b>	<b>31</b>	<b>1329</b>	<b>10112</b>

**Observations**

The Victoria Day Long Weekend recorded the highest number of fatalities while the Thanksgiving Long Weekend recorded the highest number of injuries. The Easter Long Weekend recorded the highest total number of collisions.

\*Total collisions includes fatal, injury and property damage collisions.

Note: Comparisons should be done with caution. The number of days for each holiday period within the year may vary. From year to year, holiday periods may also vary in length.

## ***Victims***

### **Road User Class**

The majority of traffic victims were drivers and passengers of vehicles. Pedestrians and motorcyclists accounted for 6.7% and 3.4% of the total casualties, respectively.

### **Age of Casualties**

Casualty rates per 10,000 population were highest for persons between the ages of 15 and 24. The lowest casualty rates were recorded for children 14 years of age and under.

**Table 3.1****Injuries and Fatalities by Road User Class****2014**

Road User Class	Persons Killed		Persons Injured		Total Casualties	
	N	%	N	%	N	%
Drivers	202	54.7	11874	63.3	12076	63.2
Passengers	75	20.3	4122	22.0	4197	22.0
Pedestrians	45	12.2	1245	6.6	1290	6.7
Motorcyclists	33	8.9	612	3.3	645	3.4
Bicyclists	1	0.3	450	2.4	451	2.4
Other	9	2.4	271	1.4	280	1.5
Unspecified	4	1.1	171	0.9	175	0.9
<b>Total Casualties</b>	<b>369</b>	<b>100.0</b>	<b>18745</b>	<b>100.0</b>	<b>19114</b>	<b>100.0</b>

**Observations**

The majority of traffic victims were drivers (63.2%) and passengers (22.0%) of vehicles. Pedestrians and motorcyclists accounted for 6.7% and 3.4% of the total casualties, respectively.

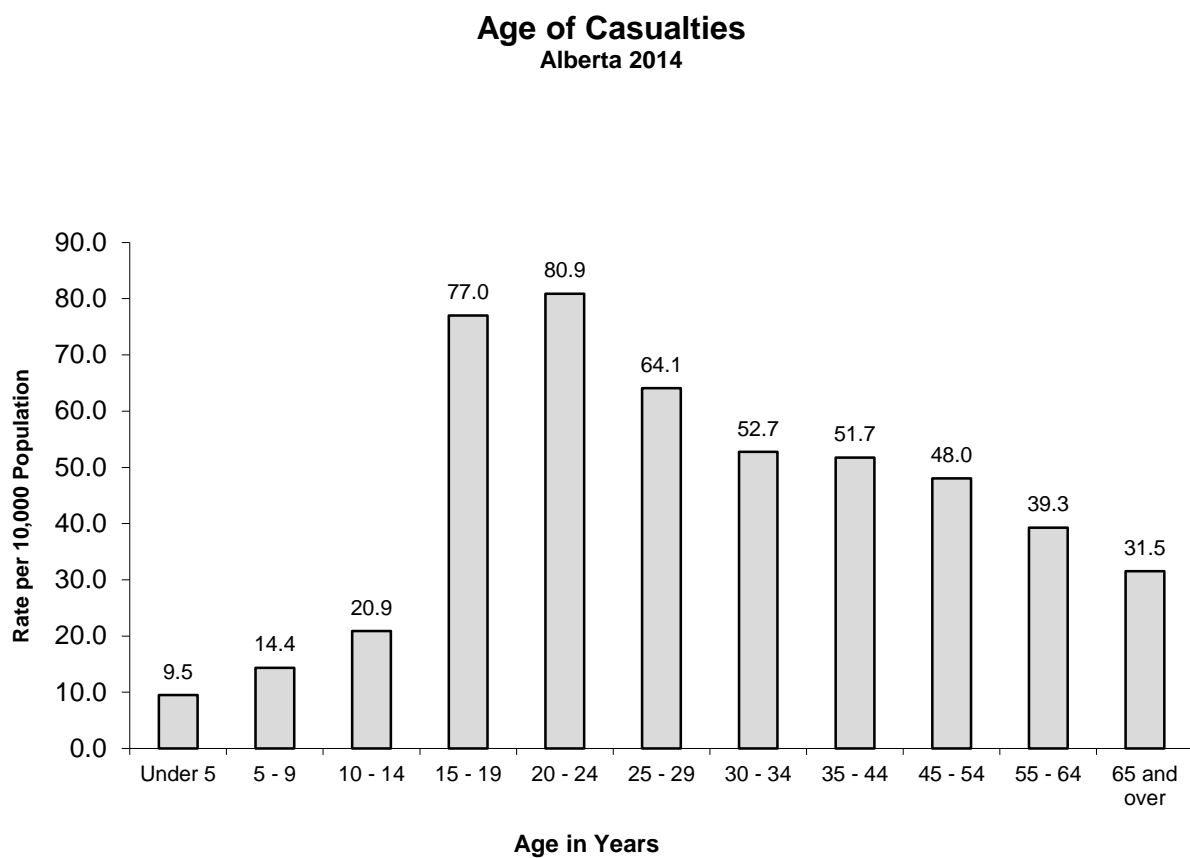
**Table 3.2****Age of Casualties****2014**

Age in Years	Persons Killed		Persons Injured		Total Casualties		Casualty Rate Per 10,000 Population*
	N	%	N	%	N	%	
Under 5	6	1.6	251	1.3	257	1.3	9.5
5 - 9	2	0.5	361	1.9	363	1.9	14.4
10 - 14	2	0.5	477	2.5	479	2.5	20.9
15 - 19	36	9.8	1859	9.9	1895	9.9	77.0
20 - 24	47	12.7	2333	12.4	2380	12.5	80.9
25 - 29	39	10.6	2161	11.5	2200	11.5	64.1
30 - 34	30	8.1	1849	9.9	1879	9.8	52.7
35 - 44	47	12.7	3062	16.3	3109	16.3	51.7
45 - 54	56	15.2	2717	14.5	2773	14.5	48.0
55 - 64	43	11.7	1854	9.9	1897	9.9	39.3
65 and over	59	16.0	1416	7.6	1475	7.7	31.5
Unspecified	2	0.5	405	2.2	407	2.1	
<b>Total Casualties</b>	<b>369</b>	<b>100.0</b>	<b>18745</b>	<b>100.0</b>	<b>19114</b>	<b>100.0</b>	

**Observations**

Casualty rates per 10,000 population were highest for persons between the ages of 15 and 24. The lowest casualty rates were recorded for children 14 years of age and younger.

\*Based on estimates of the Alberta population by age groups and sex, July 1, 2014, Statistics Canada

**Figure 4**



## ***Drivers***

### **Age and Sex of Drivers**

Collision rates per 1000 licenced drivers indicate that males 18 to 19 years old were more likely to be involved in a casualty collision than any other age group. The next age group most likely to be involved in casualty collisions was males 20 to 24 years old.

### **Driver Actions**

Following too closely (32.1%), running off the road (14.1%) and left turn across path (12.2%) were the most frequently identified improper driver actions contributing to casualty collisions.

**Table 4.1****Age and Sex of Drivers Involved in Casualty Collisions:**

Per 1,000 Licenced Drivers

2014

Age of Driver	Male			Female			Total*		
	N	%	Rate Per 1000** Licenced Drivers	N	%	Rate Per 1000** Licenced Drivers	N	%	Rate Per 1000** Licenced Drivers
Under 16	109	0.4	6.9	36	0.1	2.5	145	0.6	4.8
16 - 17	450	1.8	13.7	403	1.6	13.8	853	3.3	13.8
18 - 19	736	2.9	17.3	517	2.0	13.8	1253	4.9	15.7
20 - 24	1933	7.5	14.1	1309	5.1	10.9	3243	12.6	12.6
25 - 34	3609	14.1	10.4	2356	9.2	7.6	5966	23.2	9.1
35 - 44	2741	10.7	8.9	1973	7.7	7.2	4715	18.4	8.1
45 - 54	2498	9.7	8.7	1597	6.2	6.0	4096	16.0	7.4
55 - 64	1862	7.3	7.6	1031	4.0	4.7	2893	11.3	6.2
65 and over	1265	4.9	6.4	683	2.7	3.9	1948	7.6	5.2
Unspecified	137	0.5		35	0.1		566	2.2	
<b>Total Number of Drivers</b>	<b>15340</b>	<b>59.7</b>		<b>9940</b>	<b>38.7</b>		<b>25678</b>	<b>100.0</b>	

**Observations**

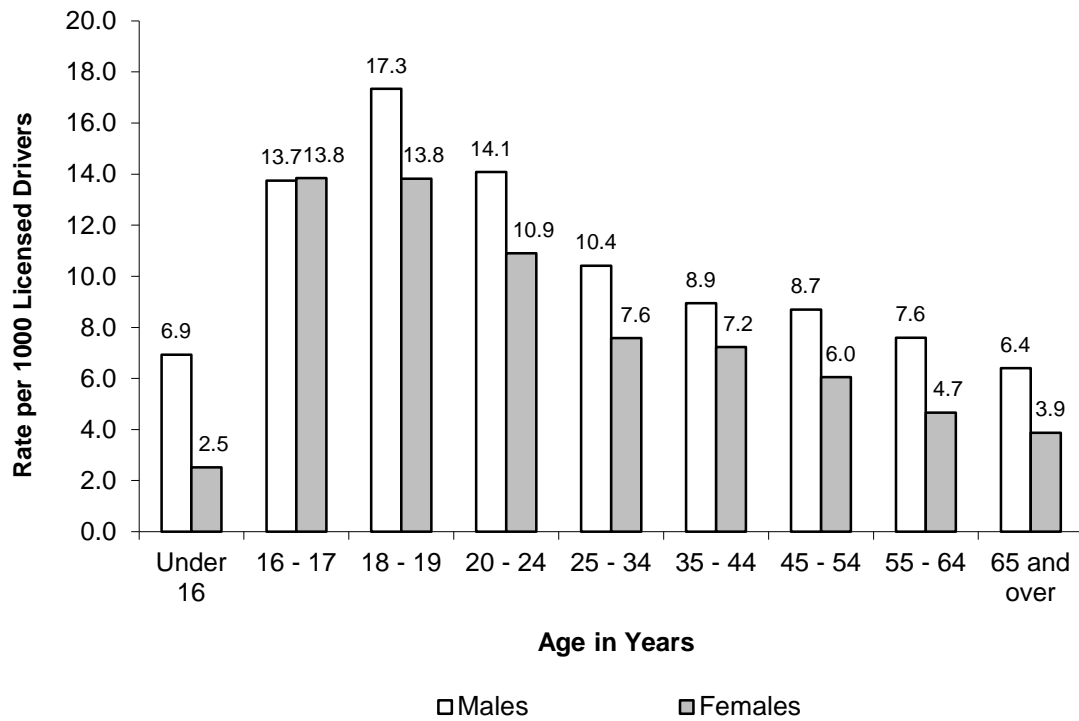
Collision rates per 1000 licenced drivers indicated that males 18 to 19 years old were more likely to be involved in a casualty collision than any other age group. The next age group most likely to be involved in casualty collisions was males 20 to 24 years old.

\*Total includes drivers whose sex was not specified on the collision report form. Includes bicyclists.

\*\*Source: Licenced Drivers – Service Alberta – Registries Services, as of December 31, 2014.

**Figure 5**

**Age and Sex of Drivers Involved in Casualty Collisions  
Alberta 2014**



**Table 4.2****Improper Actions of Drivers Involved in Casualty Collisions\*****2014**

Improper Actions	Drivers in Fatal Collisions		Drivers in Non-Fatal Injury Collisions		Total Drivers in Casualty Collisions	
	N	%	N	%	N	%
Followed Too Closely	10	4.1	3457	32.8	3467	32.1
Ran Off Road	89	36.6	1436	13.6	1525	14.1
Left Turn Across Path	19	7.8	1293	12.3	1312	12.2
Stop Sign Violation	22	9.1	872	8.3	894	8.3
Disobey Traffic Signal	5	2.1	740	7.0	745	6.9
Failed to Yield Right of Way to Pedestrian	12	4.9	523	5.0	535	5.0
Improper Lane Change	4	1.6	411	3.9	415	3.8
Improper Turn	5	2.1	394	3.7	399	3.7
Left of Centre	53	21.8	297	2.8	350	3.2
Backed Unsafely	4	1.6	317	3.0	321	3.0
Failed to Yield Right of Way - Uncontrolled Intersection	3	1.2	210	2.0	213	2.0
Yield Sign Violation	4	1.6	206	2.0	210	1.9
Improper Passing	9	3.7	133	1.3	142	1.3
Other	4	1.6	258	2.4	262	2.4
<b>Total Number of Drivers</b>	<b>243</b>	<b>100.0</b>	<b>10547</b>	<b>100.0</b>	<b>10790</b>	<b>100.0</b>

**Observations**

Following too closely (32.1%), running off the road (14.1%) and left turn across path (12.2%) were the most frequently identified improper driver actions contributing to casualty collisions.

\*Based on those cases where driver actions were specified on the collision report form. Includes bicyclists.

Note: There were a total of 22805 drivers involved in casualty collisions for which a driver action was specified on the collision report form. 12015 were indicated as driving properly at the time of the collision.

## **Vehicles**

### **Types of Vehicles**

Passenger cars (37.6%), minivans/MPVs (26.9%) and pick-up trucks/vans (23.7%) were the vehicles most frequently involved in total casualty collisions.

### **Vehicle Factors**

Overall 1.0% of vehicles involved in casualty collisions were identified as having a vehicle defect. The most common defect was defective brakes.

### **Point of Impact**

The most common point of impact in casualty collisions involved the front of the vehicle. Overall, 44.4% of the impacts involved the centre front.

**Table 5.1****Types of Vehicles Involved in Casualty Collisions\*****2014**

Type of Vehicle	Vehicles in Fatal Collisions		Vehicles in Non-Fatal Injury Collisions		Total Vehicles in Casualty Collisions	
	N	%	N	%	N	%
Passenger Car	119	22.3	9685	37.9	9804	37.6
Mini-Van/MPV	97	18.2	6924	27.1	7021	26.9
Pick-up Truck/Van	159	29.8	6011	23.5	6170	23.7
Truck 4500 kg+	47	8.8	876	3.4	923	3.5
Motorcycle	36	6.7	598	2.3	634	2.4
Tractor-Trailer	54	10.1	526	2.1	580	2.2
Bicycle	1	0.2	453	1.8	454	1.7
Off-Highway Vehicle	10	1.9	140	0.5	150	0.6
Transit Bus	--	--	106	0.4	106	0.4
School Bus	1	0.2	55	0.2	56	0.2
Emergency Vehicle	--	--	48	0.2	48	0.2
Construction Equipment	1	0.2	32	0.1	33	0.1
Other Bus	3	0.6	18	0.1	21	0.1
Farm Equipment	3	0.6	15	0.1	18	0.1
Motorized Snow Vehicle	--	--	14	0.1	14	0.1
Motorhome	2	0.4	11	0.0	13	0.0
Moped	--	--	8	0.0	8	0.0
Intercity Bus	1	0.2	4	0.0	5	0.0
Other	--	--	10	0.0	10	0.0
<b>Total Number of Vehicles</b>	<b>534</b>	<b>100.0</b>	<b>25534</b>	<b>100.0</b>	<b>26068</b>	<b>100.0</b>

**Observations**

Passenger cars, mini-vans/MPVs and pick-up trucks/vans were the vehicles most frequently involved in total casualty collisions. Overall, bicycles represented 1.7% and motorcycles 2.4% of the vehicles involved in casualty collisions. Tractor-Trailers were 2.2% of total vehicles in casualty crashes, but 10.1% of vehicles in fatal crashes.

\*Based on those cases where type of vehicle was specified on the collision report form.

**Table 5.2****Vehicle Factors Involved in Casualty Collisions\*****2014**

Vehicle Factors	Vehicles in Fatal Collisions		Vehicles in Non-Fatal Injury Collisions		Total Vehicles in Casualty Collisions	
	N	%	N	%	N	%
No Apparent Defect	448	98.2	22921	99.0	23369	99.0
Defective Brakes	1	0.2	60	0.3	61	0.3
Tires Failed	2	0.4	53	0.2	55	0.2
Lighting Defect	--	--	14	0.1	14	0.1
Improper Load/Shift	--	--	11	0.0	11	0.0
Other	5	1.1	87	0.4	92	0.4
<b>Total Number of Vehicles</b>	<b>456</b>	<b>100.0</b>	<b>23146</b>	<b>100.0</b>	<b>23602</b>	<b>100.0</b>

**Observations**

Overall 1.0% of vehicles involved in casualty collisions were identified as having a vehicle defect. The most common defect was defective brakes.

\*Based on those cases where a vehicle factor was specified on the collision report form. This information does not indicate whether or not a mechanical inspection of the collision-involved vehicle was conducted.

**Table 5.3****Point of Impact on Vehicles Involved in Casualty Collisions\*****2014**

Point of Impact	Vehicles in Fatal Collisions		Vehicles in Non-Fatal Injury Collisions		Total Vehicles in Casualty Collisions	
	N	%	N	%	N	%
Centre Front	266	50.9	10980	44.3	11246	44.4
Centre Rear	18	3.4	5475	22.1	5493	21.7
Left Front	31	5.9	1680	6.8	1711	6.8
Right Front	25	4.8	1647	6.6	1672	6.6
Rollover	85	16.3	1410	5.7	1495	5.9
Left Side	24	4.6	1036	4.2	1060	4.2
Right Side	31	5.9	1010	4.1	1041	4.1
Left Rear	11	2.1	624	2.5	635	2.5
Right Rear	6	1.1	552	2.2	558	2.2
Attachment	23	4.4	246	1.0	269	1.1
Undercarriage	--	--	73	0.3	73	0.3
Top	3	0.6	47	0.2	50	0.2
<b>Total Number of Vehicles</b>	<b>523</b>	<b>100.0</b>	<b>24780</b>	<b>100.0</b>	<b>25303</b>	<b>100.0</b>

**Observations**

The most common point of impact in casualty collisions involved the front of the vehicle. 44.4% of the impacts involved the centre front, while 21.7% of the impacts involved the centre rear.

\*Based on those cases where point of impact was specified on the collision report form.



## ***Environment***

### **Location**

The majority of fatal crashes (69.8%) occurred in rural areas, whereas the majority of injury (75.2%) and property damage (85.0%) crashes occurred in urban areas.

### **Surface Conditions**

The majority (62.8%) of all casualty collisions occurred when surface conditions were dry. Slush, snow or ice was involved in 18.0% of fatal collisions and 23.9% of non-fatal injury collisions.

**Table 6.1****Location of Collisions****2014**

Location	Fatal Collisions		Non-Fatal Injury Collisions		Property Damage Collisions		Total Collisions	
	N	%	N	%	N	%	N	%
Urban	99	30.2	10714	75.2	110707	85.0	121520	84.0
Rural	229	69.8	3530	24.8	19461	15.0	23220	16.0
<b>Total Number of Collisions</b>	<b>328</b>	<b>100.0</b>	<b>14244</b>	<b>100.0</b>	<b>130168</b>	<b>100.0</b>	<b>144740</b>	<b>100.0</b>

**Observations**

The majority of fatal collisions (69.8%) occurred in rural areas. Collisions occurring in urban areas resulted in the highest proportion of non-fatal injury collisions (75.2%) and property damage crashes (85.0%).

**Table 6.2****Casualty Collision Occurrence by Surface Condition****2014**

Surface Condition	Fatal Collisions		Non-Fatal Injury Collisions		Total Casualty Collisions	
	N	%	N	%	N	%
Dry	234	71.3	8914	62.6	9148	62.8
Slush/Snow/Ice	59	18.0	3402	23.9	3461	23.8
Wet	20	6.1	1285	9.0	1305	9.0
Loose Surface Material	6	1.8	208	1.5	214	1.5
Muddy	2	0.6	40	0.3	42	0.3
Other	2	0.6	63	0.4	65	0.4
Unspecified	5	1.5	332	2.3	337	2.3
<b>Total Number of Collisions</b>	<b>328</b>	<b>100.0</b>	<b>14244</b>	<b>100.0</b>	<b>14572</b>	<b>100.0</b>

**Observations**

The majority (62.8%) of casualty collisions occurred when surface conditions were dry. Slush, snow or ice was involved in 18.0% of fatal collisions and 23.9% of non-fatal injury collisions.



## ***Special Types of Vehicles***

### **Motorcycles**

- In 2014, based on motorcycle registrations, the involvement rate of motorcycles has decreased in fatal collisions and in injury collisions from 2013.
- The majority of motorcycle casualty collisions involved male drivers. Motorcycle drivers under the age of 25 had the highest involvement rate per 1000 licenced drivers.
- Compared to drivers involved in total casualty collisions, motorcycle drivers were more likely to run off the road, make an improper turn, or pass improperly. However, motorcycle drivers were less likely to make an unsafe left turn, commit a stop sign violation or disobey a traffic signal.
- Compared to drivers involved in all types of vehicle casualty collisions, motorcycle drivers were more likely to have consumed alcohol before the crash.
- Vehicle factors were identified for 2.9% of motorcycles involved in casualty collisions compared to 1.0% for all types of vehicles involved in casualty collisions.
- The occurrence of casualty collisions involving motorcycles was highest in the month of July.
- The majority of casualty collisions involving motorcycles occurred on dry roads.

**Table 7.1****Motorcycles Involved in Casualty Collisions****2010 – 2014**

<b>Number of Motorcycles</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
Fatal	36	42	22	26	31
Non-Fatal Injury	598	642	609	655	662
<b>Total Number of Motorcycles Involved in Casualty Collisions</b>	<b>634</b>	<b>684</b>	<b>631</b>	<b>681</b>	<b>693</b>
<b>Casualties*</b>					
Number Killed	35	42	21	24	31
Number Injured	649	697	660	719	715
<b>Total Casualties in Collisions Involving Motorcycles</b>	<b>684</b>	<b>739</b>	<b>681</b>	<b>743</b>	<b>746</b>
<b>Number of Motorcycles Involved in Casualty Collisions Per 10,000 Registered Motorcycles**</b>					
Fatal Collisions	2.9	3.6	2.0	2.4	2.9
Non-Fatal Injury Collisions	48.9	54.7	54.3	60.5	62.7

**Observations**

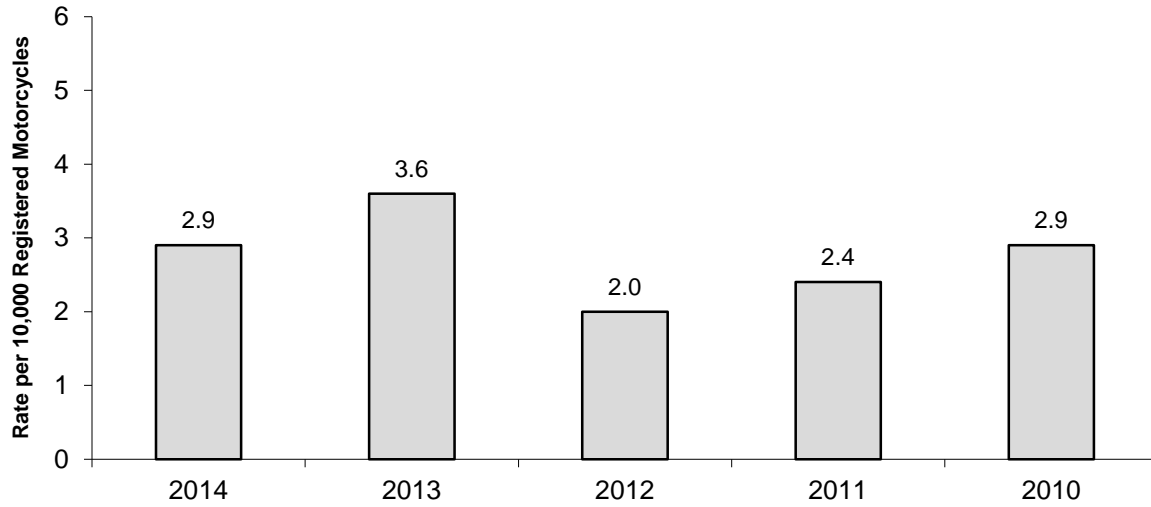
Based on motorcycle registrations in 2014, the involvement rate of motorcycles has decreased in fatal and injury collisions from 2013.

\*This refers to the total number of people killed and injured in collisions in which a motorcycle was involved. It does not refer to the number of motorcyclists killed and injured.

\*\* Source: Based on vehicle registration statistics, Service Alberta – Registries Services, December 31, 2014.

**Figure 6**

**Number of Motorcycles Involved in Fatal Collisions**  
Alberta 2010 - 2014



**Table 7.2****Age and Sex of Motorcycle Drivers Involved in Casualty Collisions****2014**

<b>Age of Motorcycle Driver</b>	<b>Male</b>		<b>Female</b>		<b>Total*</b>		<b>Rate Per 1,000 Licensed Motorcycle Drivers**</b>
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	
Under 16	2	0.3	--	--	2	0.3	--
16 - 17	5	0.8	--	--	5	0.8	35.5
18 - 19	18	2.8	1	0.2	19	3.0	30.6
20 - 24	70	11.0	7	1.1	77	12.1	11.1
25 - 34	139	21.9	9	1.4	148	23.3	3.5
35 - 44	100	15.8	21	3.3	121	19.1	2.2
45 - 54	104	16.4	17	2.7	121	19.1	1.6
55 - 64	106	16.7	6	0.9	112	17.7	1.5
65 and over	21	3.3	2	0.3	23	3.6	0.8
Unspecified	1	0.2	--	--	6	0.9	
<b>Total Number of Motorcycle Drivers</b>	<b>566</b>	<b>89.3</b>	<b>63</b>	<b>9.9</b>	<b>634</b>	<b>100.0</b>	

**Observations**

The majority of motorcycle casualty collisions involved male drivers. Based on involvement per 1,000 licenced operators, motorcycle drivers under the age of 25 were most likely to be involved in collisions. In particular, 16 - 17 year old motorcycle drivers had the highest involvement rate per 1,000 licenced motorcyclists. These age and sex comparisons are limited due to the lack of driving exposure data. In order to make valid age comparisons, it is important to take into account the number of kilometers driven annually by each age and sex group of motorcycle operators.

Note: In Alberta, Class 6 (motorcycle) licences are not issued to operators under 16 years of age.

\*Total includes drivers whose sex was not specified on the collision report form.

\*\*Source: Licenced Drivers – Service Alberta – Registries Services, as of December 31, 2014.



**Table 7.3****Improper Actions of Motorcycle Drivers Involved in Casualty Collisions\*****2014**

<b>Improper Actions of Motorcycle Driver</b>	<b>Driver Actions in Total Casualty Collisions (All Vehicle Types)</b>		
	<b>N</b>	<b>%</b>	<b>%</b>
Ran Off Road	98	40.2	14.1
Followed Too Closely	72	29.5	32.1
Improper Turn	17	7.0	3.7
Improper Lane Change	10	4.1	3.8
Left of Centre	9	3.7	3.2
Improper Passing	8	3.3	1.3
Left Turn Across Path	4	1.6	12.2
Disobey Traffic Signal	4	1.6	6.9
Yield Sign Violation	3	1.2	1.9
Stop Sign Violation	3	1.2	8.3
Failed to Yield Right of Way to Pedestrian	2	0.8	5.0
Backed Unsafely	1	0.4	3.0
Failed to Yield Right of Way - Uncontrolled Intersection	--	--	2.0
Other	13	5.3	2.4
<b>Total Number of Drivers</b>	<b>244</b>	<b>100.0</b>	

**Observations**

Compared to drivers involved in total casualty collisions, motorcycle drivers were more likely to run off the road, make an improper turn or pass improperly. However, motorcycle drivers were less likely to make an unsafe left turn, commit a stop sign violation or disobey a traffic signal.

\*Based on those cases where driver actions were specified on the collision report form.

Note: There were a total of 539 motorcycle drivers involved in casualty collisions for which a driver action was specified on the collision report form. 295 were indicated as driving properly at the time of the collision.

**Table 7.4****Condition of Motorcycle Drivers Involved in Casualty Collisions\*****2014**

<b>Condition of Motorcycle Driver</b>	<b>N</b>	<b>%</b>	<b>Driver Condition in Total</b>
			<b>Casualty Collisions (All Vehicle Types) %</b>
Normal	516	94.3	94.3
Had Been Drinking	11	2.0	1.4
Alcohol Impaired	15	2.7	2.2
<b>Total Alcohol Involvement</b>	<b>26</b>	<b>4.8</b>	<b>3.6</b>
Impaired by Drugs	--	--	0.3
Fatigued/Asleep	1	0.2	0.9
Other	4	0.7	1.0
<b>Total Number of Motorcycle Drivers</b>	<b>547</b>	<b>100.0</b>	

**Observations**

The motorcycle driver's condition was a contributory factor for 5.7% of the motorcycle drivers involved in casualty collisions. Compared to drivers involved in total casualty collisions, motorcycle drivers were more likely to have consumed alcohol prior to the crash.

\*Based on those cases where driver condition was specified on the collision report form.

**Table 7.5****Motorcycle Vehicle Factors in Casualty Collisions\*****2014**

<b>Vehicle Factors</b>	<b>N</b>	<b>%</b>	<b>Vehicle Factors in Total Casualty Collisions (All Vehicle Types) %</b>
No Apparent Defect	560	97.1	99.0
Defective Brakes	5	0.9	0.3
Tires Failed	4	0.7	0.2
Lighting Defect	3	0.5	0.1
Improper Load/Shift	--	--	0.0
Other	5	0.9	0.4
<b>Total Number of Motorcycles</b>	<b>577</b>	<b>100.0</b>	

**Observations**

Vehicle factors were identified for 2.9% of the motorcycles involved in casualty collisions compared to 1.0% for all types of vehicles involved in casualty collisions.

\*Based on those cases where a vehicle factor was specified on the collision report form. This does not indicate that a mechanical inspection of the collision-involved motorcycle was conducted.

**Table 7.6****Casualty Collisions Involving Motorcycles:****Month of Occurrence****2014**

<b>Month</b>	<b>N</b>	<b>%</b>
January	--	--
February	4	0.7
March	1	0.2
April	27	4.4
May	77	12.7
June	103	16.9
July	148	24.3
August	109	17.9
September	80	13.2
October	49	8.1
November	9	1.5
December	--	--
Unspecified	1	0.2
<b>Total Number of Collisions</b>	<b>608</b>	<b>100.0</b>

**Observations**

The month of July recorded the highest proportion of casualty crashes involving motorcycles.

**Table 7.7****Casualty Collisions Involving Motorcycles:****Road Surface Condition****2014**

<b>Road Surface Condition</b>	<b>N</b>	<b>%</b>
Dry	535	88.0
Loose Surface Material	28	4.6
Wet	28	4.6
Slush/Snow/Ice	2	0.3
Muddy	1	0.2
Other	3	0.5
Unspecified	11	1.8
<b>Total Number of Collisions</b>	<b>608</b>	<b>100.0</b>

**Observations**

The majority (88.0%) of casualty collisions involving motorcycles occurred on dry roads. Loose material on the road surface was involved in 4.6% of motorcycle casualty crashes. Wet roads were the scene for 4.6% of motorcycle casualty collisions.



## ***Special Types of Vehicles***

### **Truck Tractors**

- In 2014, there were 57 persons killed and 633 injured in collisions involving truck tractors. This represents an increase in fatalities and injuries from 2013.
- Compared to drivers of other vehicles, truck tractor drivers were more likely to run off the road, make an improper lane change, or pass improperly. However, operators of truck tractors were less likely than other vehicle operators to follow too closely, fail to yield right of way to a pedestrian or make a left turn across the path of oncoming vehicles.
- Truck tractor drivers were less likely to consume alcohol before the crash compared to drivers in total casualty collisions. In fact, in 2014 none of the truck tractor drivers consumed alcohol.
- Vehicle factors were more likely to be present in truck tractor casualty collisions than in total casualty collisions.
- The occurrence of casualty collisions involving truck tractors was highest in the month of September.

**Table 7.8****Truck Tractors Involved in Casualty Collisions****2010 – 2014**

<b>Number of Truck Tractors</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
Fatal	54	50	39	48	32
Non-Fatal Injury	526	477	476	481	411
<b>Total Number of Truck Tractors Involved in Casualty Collisions</b>	<b>580</b>	<b>527</b>	<b>515</b>	<b>529</b>	<b>443</b>
<b>Casualties*</b>					
Number Killed	57	53	37	50	33
Number Injured	633	584	599	670	535
<b>Total Casualties in Collisions Involving Truck Tractors</b>	<b>690</b>	<b>637</b>	<b>636</b>	<b>720</b>	<b>568</b>

**Observations**

In 2014, there were 57 persons killed and 633 injured in collisions involving truck tractors. This represents an increase in fatalities and injuries from 2013. The total number of truck tractors involved in casualty crashes was highest in 2014 at 580.

\*This refers to the total number of people killed and injured in collisions in which a truck tractor was involved. It does not refer to the number of truck tractor drivers killed and injured.



**Table 7.9****Improper Actions of Truck Tractor Drivers Involved in Casualty Collisions\*****2014**

<b>Improper Actions of Truck Tractor Driver</b>	<b>N</b>	<b>Driver Actions in Total Casualty Collisions (All Vehicle Types)</b>	
		<b>%</b>	<b>%</b>
Ran Off Road	72	34.8	14.1
Followed Too Closely	42	20.3	32.1
Left Turn Across Path	18	8.7	12.2
Improper Lane Change	14	6.8	3.8
Stop Sign Violation	14	6.8	8.3
Disobey Traffic Signal	9	4.3	6.9
Improper Turn	9	4.3	3.7
Left of Centre	8	3.9	3.2
Improper Passing	7	3.4	1.3
Backed Unsafely	5	2.4	3.0
Yield Sign Violation	3	1.4	1.9
Failed to Yield Right of Way - Uncontrolled Intersection	2	1.0	2.0
Failed to Yield Right of Way - Pedestrian	--	--	5.0
Other	4	1.9	2.4
<b>Total Number of Drivers</b>	<b>207</b>	<b>100.0</b>	

**Observations**

Compared to drivers of other vehicles, truck tractor drivers were more likely to run off the road, make an improper lane change, or pass improperly. However, operators of truck tractors were less likely than other vehicle operators to follow too closely, fail to yield right of way to a pedestrian or make a left turn across the path of oncoming vehicles.

\*Based on those cases where driver actions were specified on the collision report form.

Note: There was a total of 517 truck-tractor drivers involved in casualty collisions for which a driver action was specified on the collision report form. 310 were indicated as driving properly at the time of the collision.

**Table 7.10****Condition of Truck Tractor Drivers Involved in Casualty Collisions\*****2014**

<b>Driver Condition</b>	<b>N</b>	<b>%</b>	<b>Driver Condition in Total Casualty Collisions (All Vehicle Types) %</b>
Normal	507	95.8	94.3
Had Been Drinking	--	--	1.4
Alcohol Impaired	--	--	2.2
<b>Total Alcohol Involvement</b>	<b>--</b>	<b>--</b>	<b>3.6</b>
Fatigued/Asleep	15	2.8	0.9
Impaired by Drugs	1	0.2	0.3
Other	6	1.1	1.0
<b>Total Number of Drivers</b>	<b>529</b>	<b>100.0</b>	

**Observations**

The condition of the truck tractor driver was a contributory factor for 4.2% of the drivers involved. In 2014, no truck tractor drivers were reported by police as having consumed alcohol. Truck tractor drivers were more likely to have been fatigued or asleep at the time of the crash.

\*Based on those cases where driver condition was specified on the collision report form.

**Table 7.11****Vehicle Factors of Truck Tractors Involved in Casualty Collisions\*****2014**

<b>Vehicle Factors</b>	<b>N</b>	<b>%</b>	<b>Vehicle Factors in Total Casualty Collisions (All Vehicle Types) %</b>
No Apparent Defect	518	97.9	99.0
Tires Failed	3	0.6	0.2
Improper Load/Shift	3	0.6	0.0
Defective Brakes	2	0.4	0.3
Lighting Defect	--	--	0.1
Other	3	0.6	0.4
<b>Total Number of Truck Tractors</b>	<b>529</b>	<b>100.0</b>	

**Observations**

Vehicle factors were identified for 2.1% of truck tractors in casualty collisions. Vehicle factors were more likely to be present in truck tractor collisions than in total casualty collisions.

\*Based on those cases where a vehicle factor was specified on the collision report form. This does not indicate whether or not a mechanical inspection of the collision-involved truck tractor was conducted.

**Table 7.12****Casualty Collisions Involving Truck Tractors:****Month of Occurrence****2014**

<b>Month</b>	<b>N</b>	<b>%</b>
January	54	10.0
February	35	6.5
March	56	10.4
April	31	5.7
May	34	6.3
June	31	5.7
July	46	8.5
August	32	5.9
September	64	11.8
October	51	9.4
November	58	10.7
December	49	9.1
<b>Total Number of Collisions</b>	<b>541</b>	<b>100.0</b>

**Observations**

The occurrence of casualty collisions involving truck tractors was highest in the month of September and lowest during April and June.

## ***Special Types of Vehicles***

### **Trains**

- In 2014, two people were killed and 16 people were injured in crashes in which a train was involved. The number of casualties involving trains has decreased from 2013.
- The largest number of casualty collisions involving trains occurred in the months of February and September.
- All of the drivers involved in casualty collisions with a train made an improper driving action.

**Table 7.13****Trains Involved in Casualty Collisions****2010 – 2014**

<b>Number of Trains</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
Fatal	2	4	1	3	5
Non-Fatal Injury	14	16	16	19	10
<b>Total Number of Trains Involved in Casualty Collisions</b>	<b>16</b>	<b>20</b>	<b>17</b>	<b>22</b>	<b>15</b>
<b>Casualties*</b>					
Number Killed	2	4	1	3	6
Number Injured	16	20	20	27	13
<b>Total Casualties in Collisions Involving Trains</b>	<b>18</b>	<b>24</b>	<b>21</b>	<b>30</b>	<b>19</b>

**Observations**

The number of trains involved in casualty collisions decreased from 2013. The number of casualties resulting from these collisions also decreased.

\*This refers to the total number of people killed and injured in collisions involving a train.

**Table 7.14****Casualty Collisions Involving Trains:****Month of Occurrence****2014**

Month	Fatal Collisions		Non-Fatal Injury Collisions		Total Casualty Collisions	
	N	%	N	%	N	%
January	--	--	2	14.3	2	12.5
February	1	50.0	2	14.3	3	18.8
March	1	50.0	1	7.1	2	12.5
April	--	--	--	--	--	--
May	--	--	1	7.1	1	6.3
June	--	--	1	7.1	1	6.3
July	--	--	--	--	--	--
August	--	--	--	--	--	--
September	--	--	3	21.4	3	18.8
October	--	--	1	7.1	1	6.3
November	--	--	2	14.3	2	12.5
December	--	--	1	7.1	1	6.3
<b>Total Number of Collisions</b>	<b>2</b>	<b>100.0</b>	<b>14</b>	<b>100.0</b>	<b>16</b>	<b>100.0</b>

**Observations**

The largest number of casualty collisions involving trains occurred in the months of February and September.

**Table 7.15****Actions of Drivers Involved in Casualty Collisions with Trains\*****2014**

Driver Actions	Drivers in Fatal Collisions		Drivers in Non-Fatal Injury Collisions		Total Drivers in Casualty Collisions	
	N	%	N	%	N	%
Driving Properly	--	--	--	--	--	--
Disobey Traffic Signal	2	100.0	6	60.0	8	66.7
Failed to Yield Right of Way - Uncontrolled Intersection	--	--	2	20.0	2	16.7
Stop Sign Violation	--	--	1	10.0	1	8.3
Left Turn Across Path	--	--	1	10.0	1	8.3
Other	--	--	--	--	--	--
<b>Total Number of Drivers</b>	<b>2</b>	<b>100.0</b>	<b>10</b>	<b>100.0</b>	<b>12</b>	<b>100.0</b>

**Observations**

All of the drivers involved in casualty collisions with a train made an improper driving action.

\*Based on those cases where driver actions were specified on the collision report form.



## ***Pedestrians***

- Pedestrian casualty collisions were more likely to occur in October. April experienced the least number of pedestrian crashes.
- Pedestrian casualty collisions were most likely to occur on Thursday and least likely to occur on Sunday.
- Pedestrian casualty collisions were most likely to occur during the evening rush-hour period (3:00 p.m. - 6:59 p.m.).
- 47.9% of the drivers in casualty collisions involving a pedestrian were recorded as failing to yield the right of way to the pedestrian.
- The casualty rate per population was highest for pedestrians between the ages of 15 and 19.
- Of pedestrians involved in injury collisions, 10.1% had consumed alcohol before the collision, compared to 32.6% involved in fatal collisions.
- Of those pedestrians who had consumed alcohol prior to the collision, the highest rate of involvement per 10,000 population was for pedestrians 20 - 24 years of age.

**Table 8.1****Casualty Collisions Involving Pedestrians:****Month of Occurrence****2014**

<b>Month of Collision</b>	<b>N</b>	<b>%</b>
January	108	8.7
February	89	7.2
March	101	8.1
April	74	6.0
May	81	6.5
June	98	7.9
July	99	8.0
August	91	7.3
September	137	11.0
October	139	11.2
November	120	9.7
December	103	8.3
<b>Total Number of Collisions</b>	<b>1240</b>	<b>100.0</b>

**Observations**

Pedestrian casualty collisions were more likely to occur in October. April experienced the least number of pedestrian crashes.

**Table 8.2****Casualty Collisions Involving Pedestrians:****Day of Week****2014**

<b>Day of Week</b>	<b>N</b>	<b>%</b>
Monday	203	16.4
Tuesday	180	14.5
Wednesday	208	16.8
Thursday	213	17.2
Friday	172	13.9
Saturday	153	12.3
Sunday	111	9.0
<b>Total Number of Collisions</b>	<b>1240</b>	<b>100.0</b>

**Observations**

Pedestrian casualty collisions were most likely to occur on Thursday and least likely to occur on Sunday.

**Table 8.3****Casualty Collisions Involving Pedestrians:****Time Period****2014**

<b>Time Period</b>	<b>N</b>	<b>%</b>
11:00 p.m. - 2:59 a.m.	81	6.5
3:00 a.m. - 6:59 a.m.	70	5.6
7:00 a.m. - 10:59 a.m.	259	20.9
11:00 a.m. - 2:59 p.m.	229	18.5
3:00 p.m. - 6:59 p.m.	384	31.0
7:00 p.m. - 10:59 p.m.	208	16.8
Unspecified	9	0.7
<b>Total Number of Collisions</b>	<b>1240</b>	<b>100.0</b>

**Observations**

Pedestrian casualty collisions were most likely to occur during the evening rush-hour period from 3:00 p.m. to 6:59 p.m. These collisions were least likely to occur during the early morning hours (3:00 a.m. to 6:59 a.m.).

**Table 8.4****Casualty Collisions Involving Pedestrians:****Location****2014**

<b>Location</b>	<b>N</b>	<b>%</b>
Urban	1188	95.8
Rural	52	4.2
<b>Total Number of Collisions</b>	<b>1240</b>	<b>100.0</b>

**Observations**

The majority of pedestrian casualty collisions (95.8%) occurred in urban areas. Only 4.2% occurred in rural areas.

**Table 8.5****Actions of Drivers Involved in Casualty Collisions with Pedestrians\*****2014**

<b>Driver Actions</b>	<b>N</b>	<b>%</b>
Driving Properly	323	31.8
Failed to Yield Right of Way To Pedestrian	487	47.9
Backed Unsafely	83	8.2
Ran Off Road	27	2.7
Improper Turn	18	1.8
Left Turn Across Path	16	1.6
Stop Sign Violation	15	1.5
Failed to Yield Right of Way - Uncontrolled Intersection	12	1.2
Disobey Traffic Signal	10	1.0
Left of Centre	5	0.5
Yield Sign Violation	4	0.4
Improper Passing	3	0.3
Improper Lane Change	3	0.3
Followed Too Closely	2	0.2
Other	8	0.8
<b>Total Number of Drivers</b>	<b>1016</b>	<b>100.0</b>

**Observations**

31.8% of the drivers involved in pedestrian casualty crashes were recorded as driving properly. However, 47.9% of the drivers involved in pedestrian casualty collisions failed to yield the right of way to the pedestrian.

\*Based on those cases where driver actions were specified on the collision report form.

**Table 8.6****Age of Pedestrian Casualties****2014**

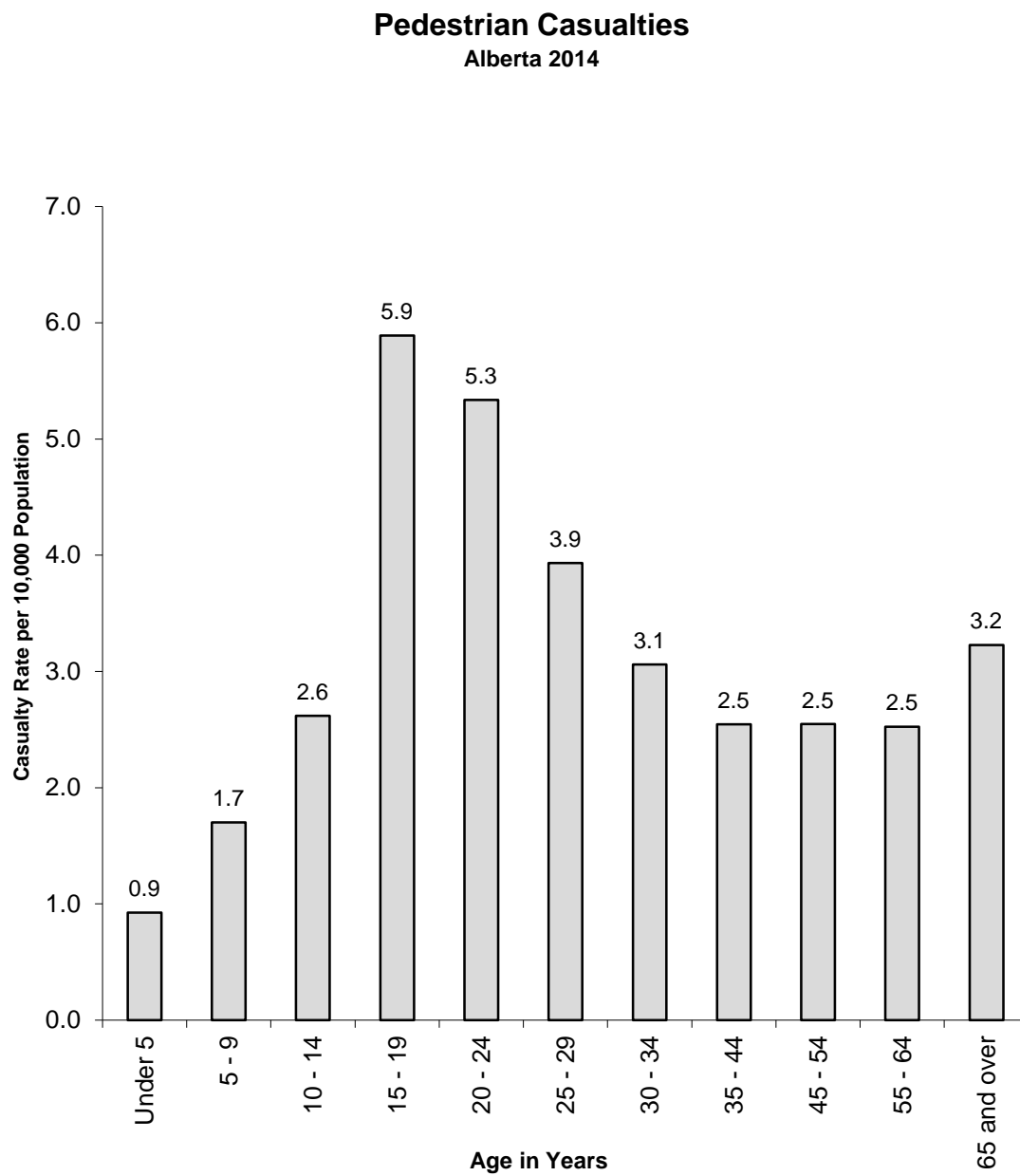
Age in Years	Pedestrians Killed	Pedestrians Injured	Total Pedestrian Casualties		Pedestrian Casualty Rate Per 10,000 Population*
	N	N	N	%	
Under 5	2	23	25	1.9	0.9
5 - 9	--	43	43	3.3	1.7
10 - 14	--	60	60	4.7	2.6
15 - 19	4	141	145	11.2	5.9
20 - 24	4	153	157	12.2	5.3
25 - 29	8	127	135	10.5	3.9
30 - 34	5	104	109	8.4	3.1
35 - 44	5	148	153	11.9	2.5
45 - 54	4	143	147	11.4	2.5
55 - 64	2	120	122	9.5	2.5
65 and over	11	140	151	11.7	3.2
Unspecified	--	43	43	3.3	
<b>Total Number of Pedestrian Casualties</b>	<b>45</b>	<b>1245</b>	<b>1290</b>	<b>100.0</b>	

**Observations**

The casualty rate per population was highest for pedestrians between the ages of 15 and 19. The lowest casualty rate was recorded for children under 5 years of age.

\*Source: Based on estimates of the Alberta population by age groups and sex, July 1, 2014, Statistics Canada

Figure 7





**Table 8.7****Condition of Pedestrians Involved in Casualty Collisions\*****2014**

Condition of Pedestrian	Pedestrians in Fatal Collisions		Pedestrians in Non-Fatal Injury Collisions		Total Pedestrians in Casualty Collisions	
	N	%	N	%	N	%
Normal	29	67.4	966	88.1	995	87.4
Had Been Drinking	8	18.6	58	5.3	66	5.8
Alcohol Impaired	6	14.0	53	4.8	59	5.2
<b>Total Alcohol Involvement</b>	<b>14</b>	<b>32.6</b>	<b>111</b>	<b>10.1</b>	<b>125</b>	<b>11.0</b>
Impaired by Drugs	--	--	8	0.7	8	0.7
Fatigued/Asleep	--	--	2	0.2	2	0.2
Other	--	--	9	0.8	9	0.8
<b>Total Number of Pedestrians</b>	<b>43</b>	<b>100.0</b>	<b>1096</b>	<b>100.0</b>	<b>1139</b>	<b>100.0</b>

**Observations**

Of pedestrians involved in injury collisions, 10.1% had consumed alcohol before the collision, compared to 32.6% involved in fatal collisions. As the severity of the collision increased, the involvement of alcohol increased.

\*Based only on those cases where pedestrian condition was specified on the collision report form.

**Table 8.8****Age of Drinking Pedestrians Involved in Casualty Collisions\*****2014**

<b>Age in Years</b>	<b>N</b>	<b>%</b>	<b>Rate per 10,000 Population**</b>
Under 10	--	--	--
10 - 14	--	--	--
15 - 19	9	7.2	0.4
20 - 24	26	20.8	0.9
25 - 29	19	15.2	0.6
30 - 34	20	16.0	0.6
35 - 44	18	14.4	0.3
45 - 54	22	17.6	0.4
55 - 64	7	5.6	0.1
65 and over	1	0.8	0.0
Unspecified	3	2.4	
<b>Total Number of Pedestrian Casualties</b>	<b>125</b>	<b>100.0</b>	

**Observations**

Of those pedestrians who had consumed alcohol prior to the collision, the highest rate of involvement per 10,000 population was for pedestrians 20 - 24 years of age.

\*Based on those cases where pedestrian condition was specified on the collision report form.

\*\*Source: Based on estimates of the Alberta population by age groups and sex, July 1, 2014, Statistics Canada.

## ***Bicyclists***

- Casualty collisions involving bicycles were more likely to occur in the month of July.
- Weekdays experienced the most casualty collisions involving bicycles. As well, the largest number of these crashes (39.2%) occurred during the evening rush-hour period.
- Young bicyclists aged 10 - 14 had the highest casualty rate per 10,000 population.
- Compared to operators of all vehicles in casualty collisions, bicyclists were more likely to disobey a traffic signal or fail to yield right-of-way at an uncontrolled intersection.
- 6.1% of bicyclists involved in casualty collisions had consumed alcohol before the crash.

**Table 9.1****Casualty Collisions Involving Bicycles:****Month of Occurrence****2014**

<b>Month of Collision</b>	<b>N</b>	<b>%</b>
January	3	0.7
February	2	0.4
March	7	1.6
April	23	5.1
May	56	12.4
June	71	15.7
July	80	17.7
August	59	13.1
September	69	15.3
October	63	14.0
November	11	2.4
December	7	1.6
<b>Total Number of Collisions</b>	<b>451</b>	<b>100.0</b>

**Observations**

The highest number of casualty crashes involving bicycles occurred during the month of July.

**Table 9.2****Casualty Collisions Involving Bicycles:****Day of Week****2014**

<b>Day of Week</b>	<b>N</b>	<b>%</b>
Monday	73	16.2
Tuesday	83	18.4
Wednesday	76	16.9
Thursday	77	17.1
Friday	71	15.7
Saturday	44	9.8
Sunday	27	6.0
<b>Total Number of Collisions</b>	<b>451</b>	<b>100.0</b>

**Observations**

Casualty collisions involving bicycles were most likely to occur on weekdays.

**Table 9.3****Casualty Collisions Involving Bicycles:****Time Period****2014**

<b>Time Period</b>	<b>N</b>	<b>%</b>
11:00 p.m. - 2:59 a.m.	11	2.4
3:00 a.m. - 6:59 a.m.	15	3.3
7:00 a.m. - 10:59 a.m.	92	20.4
11:00 a.m. - 2:59 p.m.	85	18.8
3:00 p.m. - 6:59 p.m.	177	39.2
7:00 p.m. - 10:59 p.m.	69	15.3
Unspecified	2	0.4
<b>Total Number of Collisions</b>	<b>451</b>	<b>100.0</b>

**Observations**

The largest proportion of casualty crashes (39.2%) involving bicycles occurred during the evening rush-hour period of 3:00 p.m. - 6:59 p.m.

**Table 9.4****Age of Bicyclist Casualties****2014**

Age in Years	Persons Killed		Persons Injured		Total Bicyclist Casualties		Casualty Rate Per 10,000 Population*
	N	%	N	%	N	%	
Under 5	--	--	4	0.9	4	0.9	0.1
5 - 9	--	--	21	4.7	21	4.7	0.8
10 - 14	--	--	59	13.1	59	13.1	2.6
15 - 19	--	--	59	13.1	59	13.1	2.4
20 - 24	--	--	54	12.0	54	12.0	1.8
25 - 29	--	--	50	11.1	50	11.1	1.5
30 - 34	--	--	32	7.1	32	7.1	0.9
35 - 44	--	--	58	12.9	58	12.9	1.0
45 - 54	1	100.0	60	13.3	61	13.5	1.1
55 - 64	--	--	25	5.6	25	5.5	0.5
65 and over	--	--	16	3.6	16	3.5	0.3
Unspecified	--	--	12	2.7	12	2.7	
<b>Total Casualties</b>	<b>1</b>	<b>100.0</b>	<b>450</b>	<b>100.0</b>	<b>451</b>	<b>100.0</b>	

**Observations**

Casualty rates per 10,000 population were highest for persons between the ages of 10 and 14. The lowest casualty rates were recorded for children under 5 years of age and adults aged 65 and older.

\*Based on estimates of the Alberta population by age groups and sex, July 1, 2014, Statistics Canada

**Table 9.5****Improper Actions of Bicyclists Involved in Casualty Collisions****2014**

<b>Improper Actions of Bicyclists</b>	<b>N</b>	<b>%</b>	<b>Driver Actions in</b>
			<b>Total Casualty Collisions (All Vehicle Types)</b>
			<b>%</b>
Disobey Traffic Signal	58	37.2	6.9
Failed to Yield Right of Way - Uncontrolled Intersection	22	14.1	2.0
Backed Unsafely	16	10.3	3.0
Failed to Yield Right of Way to Pedestrian	8	5.1	5.0
Stop Sign Violation	7	4.5	8.3
Improper Lane Change	7	4.5	3.8
Left Turn Across Path	6	3.8	12.2
Improper Turn	4	2.6	3.7
Left of Centre	4	2.6	3.2
Yield Sign Violation	4	2.6	1.9
Improper Passing	4	2.6	1.3
Followed Too Closely	1	0.6	32.1
Ran Off Road	--	--	14.1
Other	15	9.6	2.4
<b>Total Number of Bicyclists</b>	<b>156</b>	<b>100.0</b>	

**Observations**

Compared to operators of all vehicles in casualty collisions, bicyclists were more likely to disobey a traffic signal or to fail to yield right-of-way at an uncontrolled intersection.

\*Based on those cases where driver actions were specified on the collision report form.

Note: There were a total of 304 bicyclists involved in casualty collisions for which a driver action was specified on the collision report form. 148 were indicated as driving properly at the time of the collision.



**Table 9.6****Condition of Bicyclists Involved in Casualty Collisions\*****2014**

<b>Condition of Bicyclist</b>	<b>N</b>	<b>%</b>
Normal	378	92.9
Had Been Drinking	13	3.2
Alcohol Impaired	12	2.9
<b>Total Alcohol Involvement</b>	<b>25</b>	<b>6.1</b>
Impaired by Drugs	1	0.2
Fatigued/Asleep	1	0.2
Other	2	0.5
<b>Total Number of Bicyclists</b>	<b>407</b>	<b>100.0</b>

**Observations**

6.1% of bicyclists involved in casualty collisions had consumed alcohol before the crash.

\*Based only on those cases where bicyclist condition was specified on the collision report form.



## **Traffic Safety Issues**

### **Alcohol Involvement**

- A total of 3.3% of drivers involved in injury crashes were judged to have consumed alcohol prior to the crash, compared to 15.9% of drivers involved in fatal collisions. As the severity of the collision increased, the involvement of alcohol dramatically increased.
- In terms of involvement per 1,000 licenced drivers, males between 20 and 21 years of age were most likely to have been drinking before the crash. There were over four times as many male drivers as female drivers who had consumed alcohol prior to the collision.
- In 2014, alcohol related casualty crashes were most likely to have occurred in September, on Saturday, and between 11:00 p.m. and 2:59 a.m.
- Figure 8 provides a graphic representation of the involvement of drinking drivers in casualty collisions over the past five years, 2010 - 2014.

**Table 10.1****Condition of Drivers in Casualty Collisions\*****2014**

Condition of Driver	Drivers in Fatal Collisions		Drivers in Non-Fatal Injury Collisions		Total Drivers in Casualty Collisions	
	N	%	N	%	N	%
Normal	316	80.8	20964	94.5	21280	94.3
Had Been Drinking	21	5.4	297	1.3	318	1.4
Alcohol Impaired	41	10.5	445	2.0	486	2.2
<b>Total Alcohol Involvement</b>	<b>62</b>	<b>15.9</b>	<b>742</b>	<b>3.3</b>	<b>804</b>	<b>3.6</b>
Impaired by Drugs	4	1.0	54	0.2	58	0.3
Fatigued/Asleep	3	0.8	201	0.9	204	0.9
Other	6	1.5	223	1.0	229	1.0
<b>Total Number of Drivers</b>	<b>391</b>	<b>100.0</b>	<b>22184</b>	<b>100.0</b>	<b>22575</b>	<b>100.0</b>

**Observations**

Of drivers involved in injury collisions, 3.3% had consumed alcohol before the crash, compared to 15.9% in fatal collisions. As the severity of the collision increased, the involvement of alcohol dramatically increased. Overall, 3.6% of drivers involved in casualty collisions were judged to have consumed alcohol before the crash.

\*Based on those cases where driver condition was specified on the collision report form. These numbers do not include bicyclists (see Table 9.6, page 65).

**Figure 8**

**Involvement of Drinking Drivers in Casualty Collisions**  
 Alberta 2010 - 2014

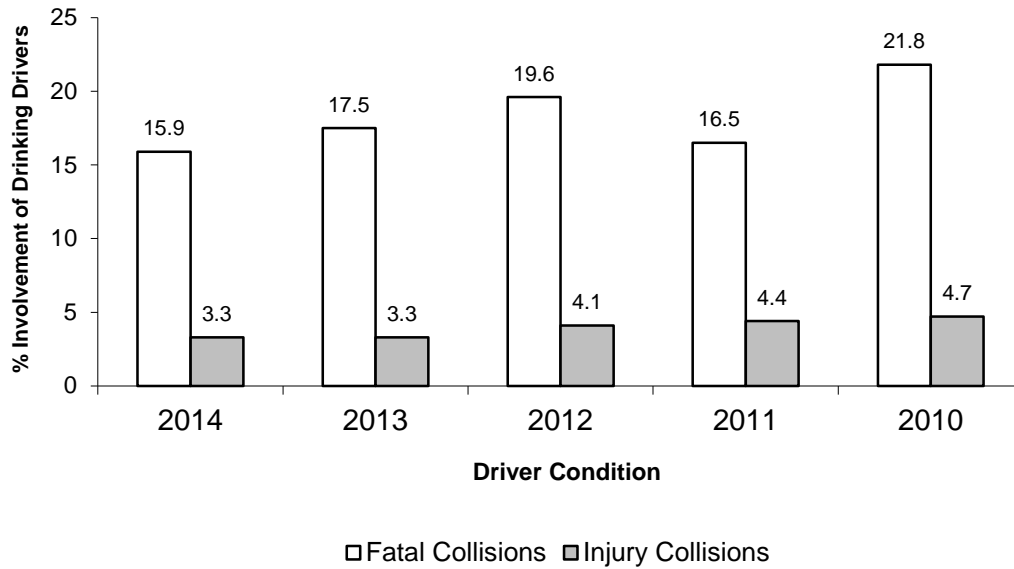
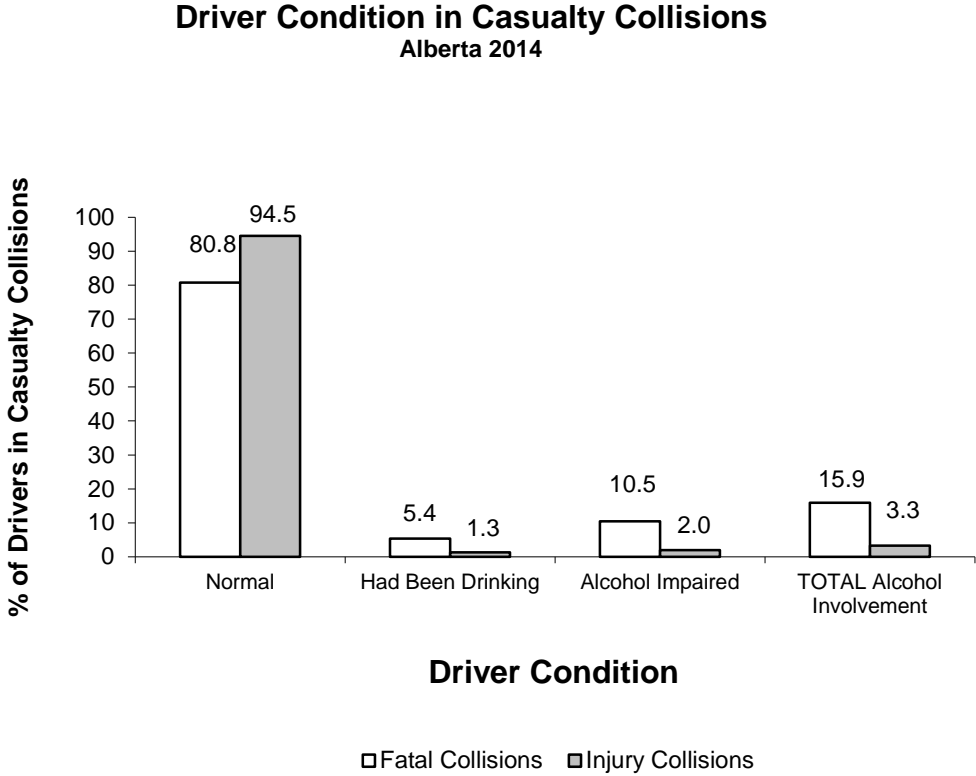


Figure 9



**Table 10.2****Age and Sex of Drinking Drivers in Casualty Collisions\*****2014**

Age in Years	Male		Rate Per 1,000** Licensed Drivers	Female		Rate Per 1,000** Licensed Drivers	Total*		Rate Per 1,000** Licensed Drivers
	N	%		N	%		N	%	
Under 16	2	0.2	0.1	--	--	--	2	0.2	0.1
16 - 17	7	0.9	0.2	5	0.6	0.2	12	1.5	0.2
18 - 19	33	4.1	0.8	8	1.0	0.2	41	5.1	0.5
20 - 21	60	7.5	1.2	18	2.2	0.4	78	9.7	0.9
22 - 24	90	11.2	1.0	17	2.1	0.2	107	13.3	0.6
25 - 29	115	14.3	0.7	32	4.0	0.2	147	18.3	0.5
30 - 34	101	12.6	0.6	17	2.1	0.1	118	14.7	0.4
35 - 44	105	13.1	0.3	27	3.4	0.1	132	16.4	0.2
45 - 54	73	9.1	0.3	21	2.6	0.1	94	11.7	0.2
55 - 64	38	4.7	0.2	6	0.7	0.0	44	5.5	0.1
65 and over	12	1.5	0.1	3	0.4	0.0	15	1.9	0.0
Unspecified	3	0.4		1	0.1		14	1.7	
<b>Total Drivers</b>	<b>639</b>	<b>79.5</b>		<b>155</b>	<b>19.3</b>		<b>804</b>	<b>100.0</b>	

**Observations**

Of those collision-involved drivers who had consumed alcohol, there were over four times as many male drivers as female drivers. In terms of involvement per 1,000 licenced drivers, males 20 - 21 years of age were more likely to have consumed alcohol prior to a casualty collision than any other age group.

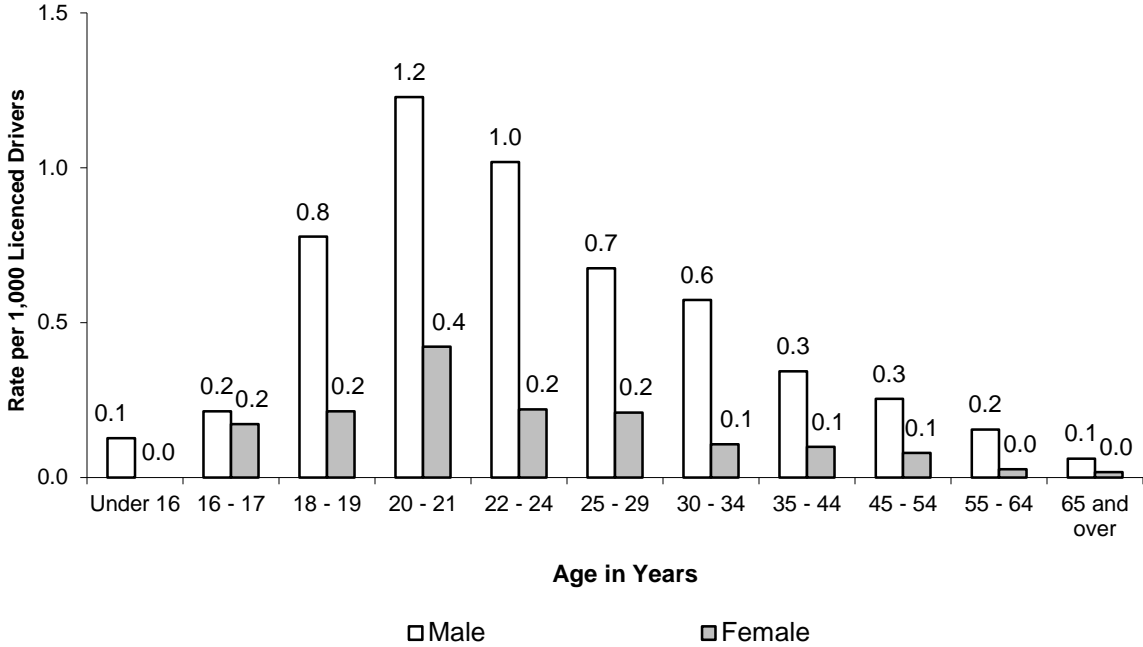
Drinking drivers include those indicated on the collision report form as having been drinking prior to the crash and those who were alcohol-impaired at the time of the crash. Whether or not the driver was actually charged is not taken into consideration by the collision report form.

\*Includes only drivers whose age and/or sex was specified on the collision report form. Total includes drinking drivers whose sex was not specified on the collision report form.

\*\*Source: Licenced Drivers – Service Alberta – Registries Services, as of December 31, 2014.

Figure 10

### Drinking Drivers Involved in Casualty Collisions Alberta 2014





**Table 10.3****Alcohol-Involved Casualty Collisions:****Month of Occurrence****2014**

<b>Month</b>	<b>Fatal Collisions</b>		<b>Non-Fatal Injury Collisions</b>		<b>Total Casualty Collisions</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
January	3	4.9	40	5.4	43	5.4
February	6	9.8	50	6.8	56	7.0
March	1	1.6	60	8.1	61	7.6
April	4	6.6	59	8.0	63	7.9
May	6	9.8	78	10.6	84	10.5
June	7	11.5	59	8.0	66	8.3
July	4	6.6	67	9.1	71	8.9
August	3	4.9	69	9.4	72	9.0
September	9	14.8	82	11.1	91	11.4
October	10	16.4	70	9.5	80	10.0
November	5	8.2	56	7.6	61	7.6
December	3	4.9	47	6.4	50	6.3
<b>Total Number of Collisions</b>	<b>61</b>	<b>100.0</b>	<b>737</b>	<b>100.0</b>	<b>798</b>	<b>100.0</b>

**Observations**

The month of September accounted for the largest proportion of alcohol-involved casualty collisions. The month of January accounted for the smallest proportion of alcohol-involved casualty collisions.

**Table 10.4****Alcohol-Involved Casualty Collisions:****Day of Week****2014**

<b>Day of Week</b>	<b>Fatal Collisions</b>		<b>Non-Fatal Injury Collisions</b>		<b>Total Casualty Collisions</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
Monday	5	8.2	74	10.0	79	9.9
Tuesday	6	9.8	68	9.2	74	9.3
Wednesday	12	19.7	86	11.7	98	12.3
Thursday	3	4.9	85	11.5	88	11.0
Friday	13	21.3	116	15.7	129	16.2
Saturday	12	19.7	174	23.6	186	23.3
Sunday	10	16.4	134	18.2	144	18.0
<b>Total Number of Collisions</b>	<b>61</b>	<b>100.0</b>	<b>737</b>	<b>100.0</b>	<b>798</b>	<b>100.0</b>

**Observations**

The highest number of alcohol-involved fatal collisions occurred on Friday (21.3%), while the highest number of non-fatal injury collisions occurred on Saturday (23.6%). The smallest number of alcohol-involved casualty collisions occurred on Tuesday (9.3%).

**Table 10.5****Alcohol-Involved Casualty Collisions:****Time Period****2014**

<b>Time Period</b>	<b>Fatal Collisions</b>		<b>Non-Fatal Injury Collisions</b>		<b>Total Casualty Collisions</b>	
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>
11:00 p.m. - 2:59 a.m.	21	34.4	245	33.2	266	33.3
3:00 a.m. - 6:59 a.m.	6	9.8	93	12.6	99	12.4
7:00 a.m. - 10:59 a.m.	4	6.6	45	6.1	49	6.1
11:00 a.m. - 2:59 p.m.	2	3.3	55	7.5	57	7.1
3:00 p.m. - 6:59 p.m.	8	13.1	107	14.5	115	14.4
7:00 p.m. - 10:59 p.m.	18	29.5	186	25.2	204	25.6
Unspecified	2	3.3	6	0.8	8	1.0
<b>Total Number of Collisions</b>	<b>61</b>	<b>100.0</b>	<b>737</b>	<b>100.0</b>	<b>798</b>	<b>100.0</b>

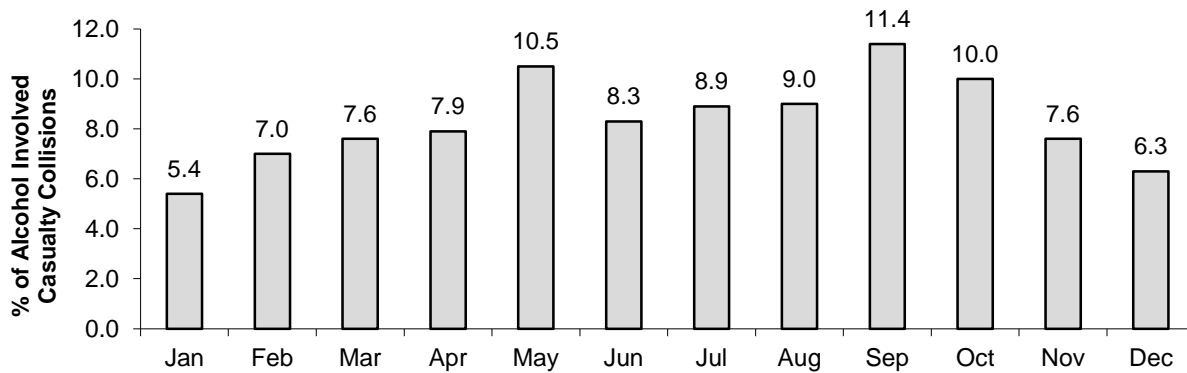
**Observations**

The late night/early morning time period (11:00 p.m. – 2:59 a.m.) was most likely to record alcohol-involved casualty collisions (33.3%). The morning hours (7:00 a.m. – 10:59 a.m.) were least likely to record alcohol-involved casualty crashes (6.1%).

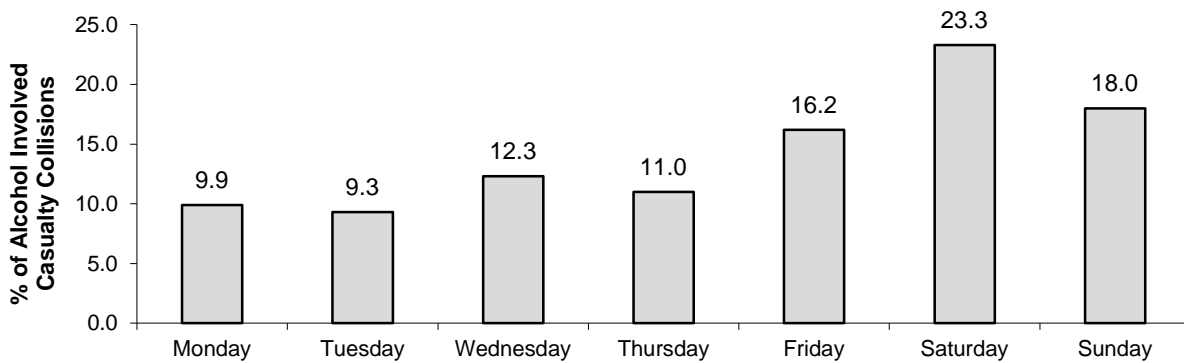
Figure 11

### Alcohol-Involved Casualty Collisions Alberta 2014

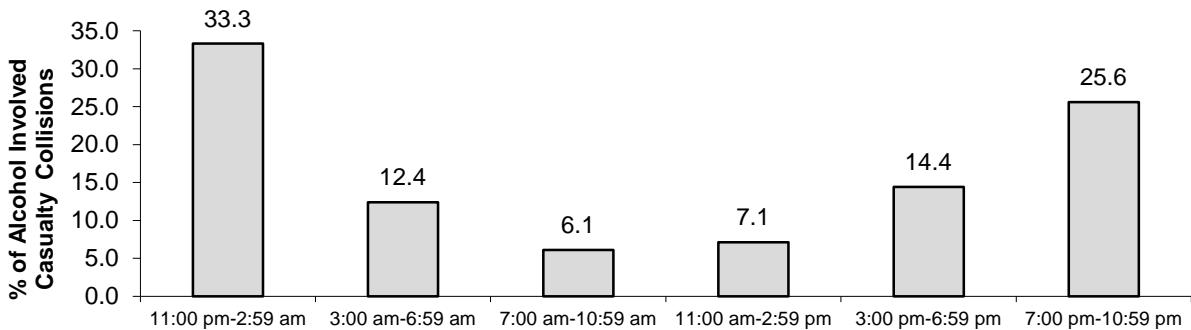
#### By Month of Occurrence



#### By Day of Week



#### By Time Period



## ***Traffic Safety Issues***

### **Restraint Use**

- Collision-involved restraint users had a much lower injury rate (7.0%) than those not using restraints (30.6%).
- Occupants using a restraint reduce the likelihood of sustaining an injury and the severity of injury decreases.

**Table 10.6****Restraint Use of Vehicle Occupants  
and Injury Severity\* (Use versus Non-Use)****2014**

<b>Injury Severity of Occupants</b>	<b>Percentage of Occupants Using Restraints %</b>	<b>Percentage of Occupants Not Using Restraints %</b>
Fatal Injury	0.1	3.6
Major Injury	0.8	10.9
Minor Injury	6.2	16.1
<b>Total Occupants Sustaining Injuries</b>	<b>7.0</b>	<b>30.6</b>
No Apparent Injury	93.0	69.4
<b>Total Occupants</b>	<b>100.0</b>	<b>100.0</b>

**Observations**

Collision involved restraint users had a much lower injury rate (7.0%) than those not using restraints (30.6%). This table illustrates the moderating effect of seat belt use on injury severity. Occupants using a restraint reduce the likelihood of sustaining an injury and the severity of injury decreases.

**Injury Severity**

Fatal – A fatal injury is the death of a person that occurs as a result of a motor vehicle collision within 30 days of the collision.

Major – Persons with injuries or complaint of pain that went to the hospital and were subsequently admitted even if for observation only.

Minor – Persons with injuries or complaint of pain that went to the hospital, were treated in emergency (or refused treatment) and SENT HOME without ever being admitted to the hospital. (Also includes persons who indicated they intend to seek medical attention.)

\*Based on those cases where occupant restraint use and injury severity were specified on the collision report form.