

TRAFFIC COLLISION STATISTICS

**Police-attended
Injury and Fatal Collisions**

British Columbia 2003

Canadian Cataloguing in Publication Data

Main entry under title:

British Columbia traffic collision statistics

/ Motor Vehicle Branch. -- 1994-

Annual

Title from cover.

Continues: Traffic accident statistics.

ISSN 0847-1517.

ISSN 1203-8008 =

British Columbia traffic collision statistics

1. Traffic accidents

- British Columbia - Statistics -

Periodicals. I. British Columbia.

Motor-Vehicle Branch.

HE5614.5.C3B74 363.12_52_09711021

C96-960010-0

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Overview

British Columbia's Traffic Accident System compiles and maintains information on all reported traffic collisions occurring in the Province. Traffic collision information is used to determine collision trends over time and to identify problem factors (e.g., driver, vehicle, environmental). The information supports road safety programs such as CounterAttack. It is used to evaluate new provincial road safety initiatives such as Intersection Safety Cameras; for monitoring of commercial vehicle collision trends and commercial vehicle safety programs; for identification of highway locations which may require improvement; for highway planning; and for guiding the development of new policies and programs to reduce the frequency and severity of collisions in the Province.

Data extracted from the system are also used in planning and research by other provincial government ministries and by the federal government. The Ministry of Transportation and Highways and municipal engineering departments across the Province rely on traffic collision data to assist in the planning, design and improvement of roads and highways. The Royal Canadian Mounted Police (RCMP) and municipal police forces may also use the data to assist in determining law enforcement priorities and locations to target traffic enforcement.

Data collection and processing

Motor vehicle collisions are reportable in British Columbia if they result in personal injury or death or aggregate property damage in excess of \$1,000 (\$600 for a motorcycle). The damage level thresholds were amended on January 1, 1991 from a previous level of \$400. A motorist must report a collision to police within 24 hours of occurrence (48 hours in remote communities).

The Traffic Accident Police Investigation Report (MV6020, formerly known as MV104) is completed by a police officer or employee. When a police officer attends a collision, the report is most often completed at the scene. In many police jurisdictions, the police do not attend all reportable collisions; in the case of unattended collisions, a motorist is required to report the collision to a police station if it meets the injury or aggregate damage criteria. These collision reports are referred to as "unattended" or "self-reports". Several police jurisdictions no

longer accept self-reports at the counter, with the result that these "reportable" collisions do not get recorded and are lost to the system.

The police forward completed MV6020s to the ICBC Office in Victoria. ICBC staff screen and microfilm the forms and then enter the data into an Oracle database. The Traffic Accident System interfaces with the Driver Licensing System so that selected information about a collision is transferred to the Driver Licensing System and included on an individual's driving record.

In 1996, significant changes took place in police reporting of collisions. Many police agencies changed their standards or practices for collision reporting, thus resulting in fewer reported collisions overall, in particular those involving property damage only or minor injury. Such changes rendered year to year comparisons of annual collision statistics untenable. By January 1999, all police jurisdictions had resumed full submission of completed collision reports, although police attendance at collisions has remained well below pre-1996 levels. The reporting level appears to have stabilised between 1998 and 2003, but year-to-year comparisons are not yet recommended.

This publication

In order to maintain this report as a reliable source of annual collisions statistics, information provided includes only police-attended personal injury and fatal collisions. The decision to exclude property damage only collisions and unattended collisions was due to the changes in collision reporting standards and practices by the police, as well as the lack of accuracy of self reported collisions. Following the practice of reports for the past five years, the Annual Traffic Collision Statistics Report has been based on police-reported injury and fatal collisions only.

This publication is based on data extracted from Traffic Accident System on November 1, 2004. Due to the dynamic nature of the database, all numbers reported in this publication may be subject to minor change over time.

Acknowledgement

We would like to take this opportunity to thank Delta Police Department for their photographic contributions to this publication. Their assistance was greatly appreciated.

Further Information

We hope that this publication will provide you with the answers you are seeking about collisions in British Columbia. The ultimate goal is to increase public awareness of the importance

of safe driving and to contribute to improved traffic safety on British Columbia's highways. Better information leads to better solutions.

If you have questions regarding the contents of this publication, please contact:

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Glossary

Air Bag

Inflatable safety device usually stored in vehicle dashboard or steering wheel/column. Upon impact, bag is released and inflated to cushion vehicle occupants and prevent serious injury.

Alcohol Involvement

Any alcohol involvement, suspected or confirmed, e.g., driver had been drinking; odour of liquor.

A.T.V.

A wheeled or tracked vehicle designed primarily for recreational use or for the transportation of property or equipment exclusively on marshland, open country, or other unprepared surfaces and being used for off-highway travel at the time of the accident.

Casualty

A person involved in a motor vehicle or other road vehicle collision who is injured or killed.

Child Restraint

Federally approved child safety seat.

Collision

The encounter of a moving vehicle with another moving vehicle or with a fixed object. Reportable in British Columbia when injury or death occurs or when greater than \$1,000 aggregate property damage is sustained; in the case of a motorcycle when greater than \$600 in damage is sustained; in the case of a cycle, when greater than \$25 in damage is sustained.

Comb. Unit Trk/hvy

Combination Unit - Truck/Heavy: truck and trailer unit over 10,900 kg gvw.

Comb. Unit /Trk/lt

Combination Unit - Truck/Light: truck and trailer unit, trailer under 4,500 kg gvw. and total not over 10,900 kg gvw.

Comb. Unit Tractor Tlr

Combination Unit - Tractor Trailer: tractor and semi-trailer unit, over 10,900 kg gvw.

Comb. Unit Trac/tlr & Pup

Combination Unit - Tractor Trailer & Pup: tractor and semi-trailer and pup trailer (Pup = 4 wheel tractor).

Commercial Vehicle

A vehicle licensed as such under the COMMERCIAL TRANSPORT ACT and used primarily for commercial/business purposes.

Contributing Factor

Those circumstances or events that the attending police officer perceives to directly contribute to a traffic collision.

Driver Training Facility Vehicle

Licensed driving facility vehicle being used for driver training at time of collision.

Emergency Vehicle

Motor vehicle carrying rescue or first aid equipment, whether or not actually responding to an emergency at time of collision. Includes: ambulance, police car, fire truck.

Fatal Collision

Any motor vehicle or other road vehicle collision occurring on a 'public highway' as defined in the MOTOR VEHICLE ACT which results in fatal injuries to one or more persons and these persons are deceased within 30 days of the collision.

General Construction Vehicle

Backhoe, bulldozer, crawler, digger, excavator, forklift, loader, mower, skidder, trencher.

Government Vehicle

Includes: Federal; Provincial; Municipal; Regional District: vehicles primarily used for transporting passengers.
Exclude: emergency vehicles, maintenance vehicles (sweeper, garbage truck).

Heavy Commercial Vehicle

Single or combination truck unit over 10,900 kg gvw.

Holiday

Time period beginning at 6 pm the evening before a holiday or holiday weekend, and ending at midnight the last day of the holiday or holiday weekend.

Illumination

Man-made lighting in the collision vicinity, e.g., street lighting. This does not refer to temporary illumination which comes from passing vehicles or from moonlight, even if those may have contributed to the collision.

Industrial Road

Any road which is constructed or exists for the transportation of natural resources, raw or manufactured, or the transportation of machinery, materials, or personnel by means of motor vehicle; includes all bridges, wharves, log dumps, and works. Excludes public roads, privately owned roads or roads used solely for construction or maintenance of power lines, etc.

Jack-knifing

Attached vehicle fails to follow path of towing vehicle. Vehicle and trailer turn or rise to 90 degrees or less.

Lighting Conditions

DARK/FULL ILLUMINATION: dark condition but collision area is fully illuminated by artificial light.

DARK/NO ILLUMINATION: complete darkness.

DARK/SOME ILLUMINATION: dark condition but some artificial light exists.

Modified Vehicle

A vehicle which deviates from the manufacturer's specifications.

Moped

Vehicle capable of being operated with or without pedals and equipped with a motor under 50 cc. Moped on flat surface not to exceed 70 km/h under power. Maximum GVW 50 kg.

Motor Vehicle

A mechanically or electrically powered device not operated upon rails, upon which or by which any person or property may be transported or drawn upon a highway.

Obstruction/debris

Debris in travelled portion of roadway which contributes to a traffic collision.

Oversize Vehicle

A vehicle more than 12.5 meters in length with width greater than 2.6 meters, and height greater than 4.15 meters.

Off Highway

Private place, field, bush, e.g., all terrain vehicles operating on private road indicated by signs. Off Highway should not be confused with "RAN OFF/LEFT HIGHWAY" (see definition).

Personal Injury Collision

Any motor vehicle or other road vehicle collision occurring on a 'public highway' as defined in the MOTOR VEHICLE ACT which results in injury but not death to one or more persons.

Primary Collision Occurrence

The key event of an collision.

Property Damage Collision

Any motor vehicle or other road vehicle collision occurring on a 'public highway' as defined in the MOTOR VEHICLE ACT in which greater than \$1,000 aggregate property damage, or in the

case of a motorcycle \$600 damage is sustained, but no injury or death occurs.

Ran Off/Left Roadway

Where a vehicle travelling on a roadway, in the course of an accident, leaves the roadway.

Recreational Use

Personal use outside usual environment, e.g., vacation, sightseeing.

Road Construction Vehicle

Grader, paver, roller.

Safety Equipment

Lapbelts, harness belts, motorcycle helmets, airbags, child restraints.

Single Unit Trk/Hvy

Single Unit Truck/Heavy: single unit truck over 10,900 kg gvw.

Single Unit Trk/Lt

Single Unit Truck/Light: single unit truck up to 10,900 kg gvw.

Special Vehicles

Road construction vehicles, general construction vehicles, mobile home in transit, mobile crane.

Vehicle

A device in, upon, or by which a person or thing is, or may be transported or drawn upon a highway, except a device designed to be moved by human power or used exclusively upon stationary rails or tracks. (Please note, in this publication, bicycles are included with vehicles when a collision involves a bicycle and a motor vehicle)

Yaw

Rotation of the vehicle about the vertical center of gravity/body of vehicle is on an exaggerated lean to one side while continuing forward and wheels side slipping while rotating on the surface, forming angular stration on the highway surface: sometimes known as "slideslip".

Reporting

Police-reported collisions do not include all reportable collisions in the province. This is particularly the case since 1996 when major changes in police reporting occurred. Police in some municipalities began to attend only collisions of a more serious nature and some discontinued accepting self-reports at the counter. These changes have had a profound impact on the total number of collisions recorded in the BC traffic collision database. The numbers of reportable collisions are underreported after 1995.

From 1995 to 1996, total reported collisions dropped by 19% (from 93,490 to 75,288). From 1996 to 1997, they fell by a further 37% (to 47,495). During these years, a handful of police jurisdictions ceased to submit collisions report forms altogether. Fortunately, from 1998, the police reporting level appears to have stabilised and all police jurisdictions submit completed MV6020 forms.

The long-term traffic collision trends were also affected by an official reporting level change that occurred on January 1, 1991. On that date the minimum reporting levels for property damage only traffic collisions were increased from \$400 to \$1,000 for vehicles, and to \$600 for motorcycles. As a result, there were more than 55,000 fewer property damage only collisions reported in 1991 than in the previous year. Official criteria for personal injury and fatal collision reporting have not changed. To illustrate trends in reporting, this chapter shows all collisions in the database, including property damage only and self-reports. **In all other chapters of this book, all tables and graphs refer to police-attended injury and fatal collisions only.**

Summary Statistics

Collisions

In 2003, 49,777 traffic collisions were reported. There were 20,876 injury collisions and 395 fatal collisions. Of all reported collisions, 43,658 (87.7%) were attended by police.

Fatalities

The total reported number of fatally injured victims was 443, 24 fewer than in 2002.

On average a fatality occurred every 19.8 hours in 2003.

Injuries

The number of people reported injured in 2003 was 30,692 compared to 29,347 in 2002. On average, 84 people were reported injured each day in 2003.

Drivers Licensed

In 2003, there were 2,837,650 actively licensed drivers holding a BC driver's licence. This number includes 1,462,778 males and 1,372,550 females. Note that the definition of licensed driver has been changed to include only active licensed drivers. Driver counts reported prior to the 1999's publications cannot be compared with the counts reported in the current publication. In 2002, there were 2,802,827 actively licensed drivers.

Vehicles Licensed

In 2003, there were 3,490,565 licensed vehicles, an increase of 1.9% over 2002. Please note that the licensed vehicles included duplicate counts of vehicles that were licenced more than once during the year.

SECTION 1 – Summary Statistics & Historical Trends

Table 1.01 – Long term traffic collision and casualty statistics¹

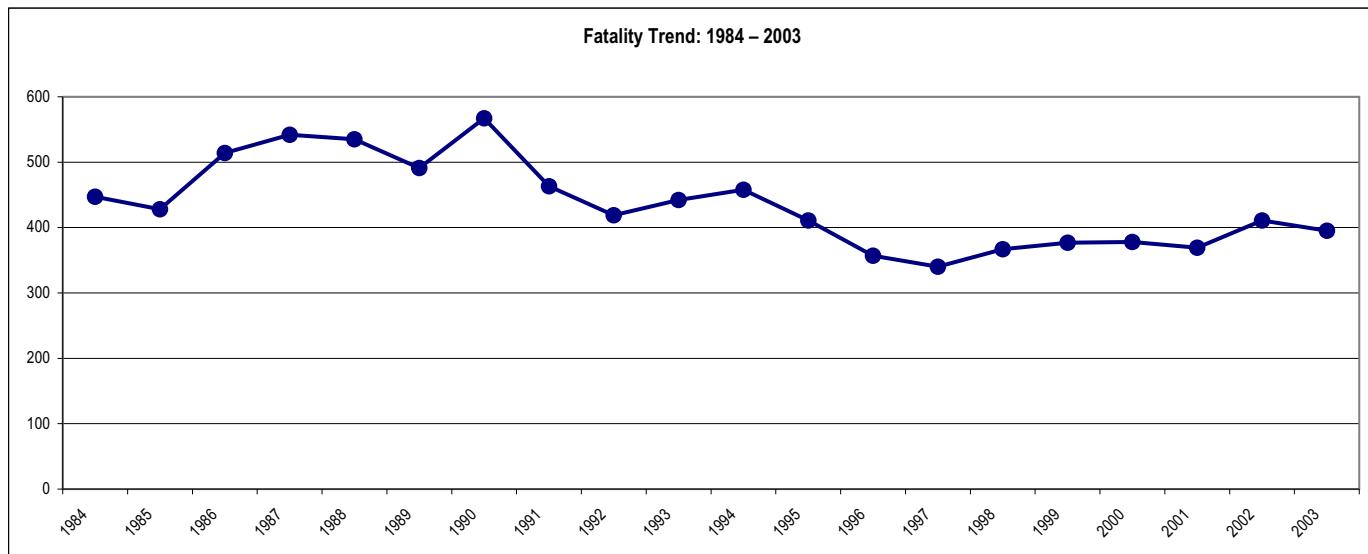
Year	Collisions				Victims		
	Property Damage Only	Injury	Fatal	Total	Injured	Killed	Total
1984	75,113	22,946	447	98,506	32,407	525	32,932
1985	77,777	24,723	428	102,928	34,368	483	34,851
1986	83,902	28,623	514	113,039	40,378	599	40,977
1987	84,630	29,194	542	114,366	41,291	622	41,913
1988	101,277	30,935	535	132,747	44,161	615	44,776
1989	111,300	33,062	491	144,853	47,471	587	48,058
1990	122,291	35,073	567	157,931	50,569	654	51,223
1991 ²	66,563	32,975	463	100,001	47,383	537	47,920
1992	62,331	33,328	419	96,078	48,435	473	48,908
1993	60,984	32,393	442	93,819	46,952	512	47,464
1994	63,362	33,337	458	97,157	48,299	534	48,833
1995	60,398	32,681	411	93,490	47,474	493	47,967
1996	47,783	27,145	357	75,285	40,201	407	40,608
1997	26,094	21,079	340	47,513	31,544	390	31,934
1998	22,115	19,975	367	42,457	29,948	421	30,369
1999	20,998	20,003	377	41,378	30,028	415	30,443
2000	22,254	20,019	378	42,651	29,939	423	30,362
2001	25,312	20,214	369	45,895	29,652	414	30,066
2002	27,156	20,114	411	47,681	29,372	467	29,839
2003	28,506	20,876	395	49,777	30,692	443	31,135

Note:

1) This table is based on total reported collisions, both police attended and unattended.

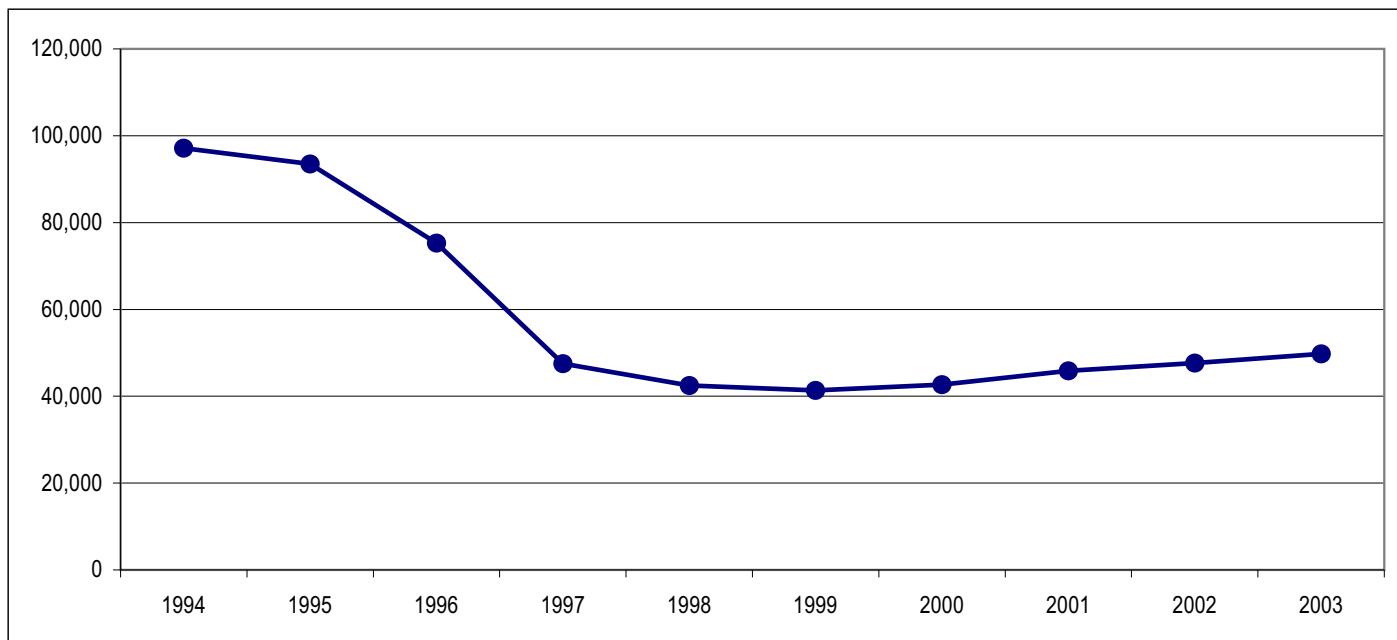
2) On January 1, 1991, the minimum reporting level for property damage collisions was increased from \$400 to \$1,000. This has significantly reduced the number of accidents reported in 1991.

Figure 1.01 – 20 Year Traffic accident fatality trend: 1984 – 2003



Note: Graph is based on total reported collisions, both police attended and unattended.

Figure 1.02 – Ten year total reported collisions, trend: 1994 – 2003



Note: Graph is based on total reported collisions, both police attended and unattended.

Table 1.02 – Summary statistics: Collisions and victims¹

	2000	2001	2002	2003	% Change ²		
					01 – 00	02 – 01	03 – 02
Collisions							
Property Damage Only	22,254	25,312	27,156	28,506	13.74%	7.29%	4.97%
Injury	20,019	20,214	20,114	20,876	0.97%	-0.49%	3.79%
Fatal	378	369	411	395	-2.38%	11.38%	-3.89%
Total Reported Collisions	42,651	45,895	47,681	49,777	7.61%	3.89%	4.40%
Victims							
Number of Persons Injured	29,939	29,652	29,372	30,692	-0.96%	-0.94%	4.49%
Number of Persons Killed	423	414	467	443	-2.13%	12.80%	-5.14%
Total Victims	30,362	30,066	29,839	31,135	-0.97%	-0.76%	4.34%

Note:

1) This table is based on total reported collisions, both police attended and unattended.

2) The percentage change largely reflects changes in number of collisions reported by the police, not the change in actual number of collisions which occurred.

SECTION 1 – Summary Statistics & Historical Trends

Table 1.03 – Summary statistics: Drivers and vehicles

	1998	1999	2000	2001	2002	2003	99 - 98	00 - 99	01 - 00	02 - 01	03 - 02
B.C. Population	3,998,000	4,028,000	4,058,000	4,095,000	4,115,000	4,152,000	0.75%	0.74%	0.91%	0.49%	0.90%
Drivers Licensed											
Male Drivers	1,406,658	1,424,602	1,427,966	1,433,313	1,445,571	1,462,778	1.28%	0.24%	0.37%	0.86%	1.19%
Female Drivers	1,285,203	1,309,009	1,323,730	1,337,719	1,357,120	1,372,550	1.85%	1.12%	1.06%	1.45%	1.14%
Unknown	161	160	152	148	136	2,322					
Total	2,692,022	2,733,771	2,751,848	2,771,180	2,802,827	2,837,650	1.55%	0.66%	0.70%	1.14%	1.24%
Vehicles Licensed											
Passenger Vehicles	2,090,511	2,121,278	2,154,071	2,191,564	2,241,717	2,279,356	1.47%	1.55%	1.74%	2.29%	1.68%
Commercial Vehicles	738,460	744,954	747,951	744,854	747,827	751,665	0.88%	0.40%	-0.41%	0.40%	0.51%
Trailers	353,612	356,506	363,467	370,976	379,535	386,286	0.82%	1.95%	2.07%	2.31%	1.78%
Motorcycles	55,974	56,721	60,934	66,071	69,136	73,258	1.33%	7.43%	8.43%	4.64%	5.96%
Total	3,238,557	3,279,459	3,326,423	3,373,465	3,438,215	3,490,565	1.26%	1.43%	1.41%	1.92%	1.52%

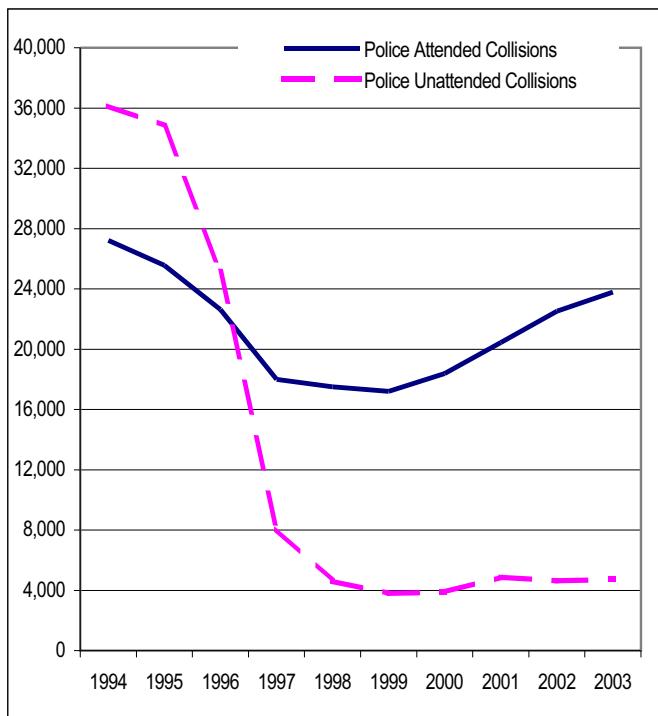
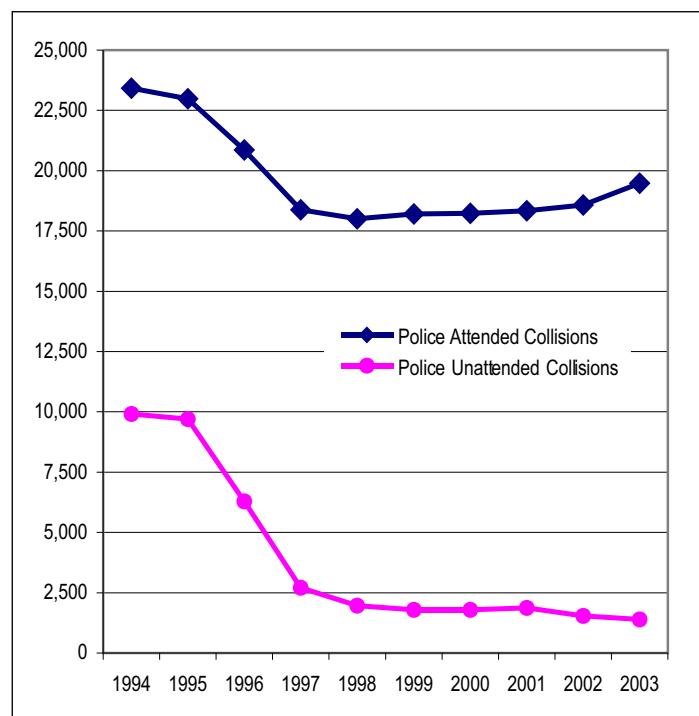
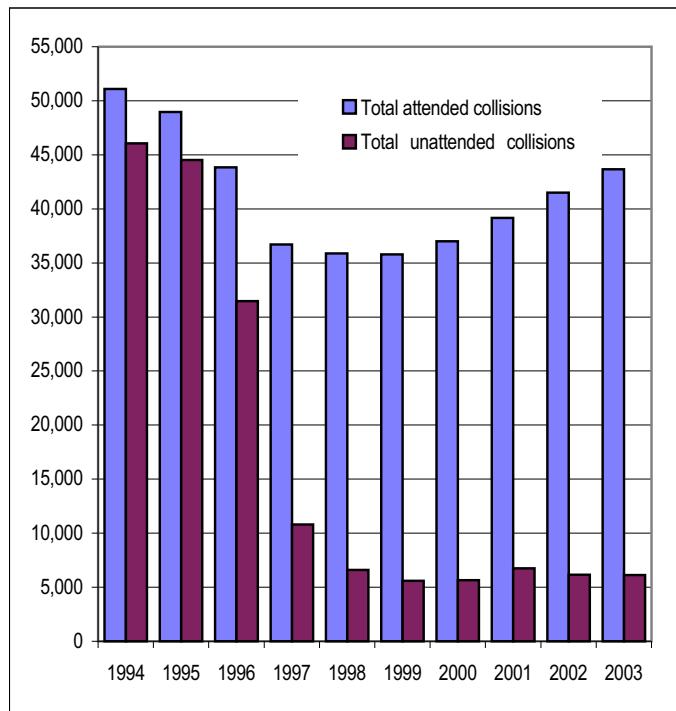
Notes:

- 1) B.C. population estimates is from Statistics Canada.
- 2) Driver counts from publications prior to 1999 can not be compared with the revised driver counts shown above.
- 3) Licenced vehicles were those that had an active policy during 2003, including duplicate counts of vehicles that were licensed more than once during the year.

Table 1.04 – Reported Collisions by police attendance: 1994 – 2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Police Attended Collisions										
Property Damage Only	27,223	25,576	22,619	18,001	17,494	17,208	18,380	20,438	22,523	23,783
Injury	23,426	22,979	20,856	18,373	18,008	18,206	18,233	18,344	18,578	19,480
Fatal	458	411	356	339	367	376	377	367	411	395
Total attended collisions	51,107	48,966	43,831	36,713	35,869	35,790	36,990	39,149	41,512	43,658
Police Unattended Collisions										
Property Damage Only	36,139	34,822	25,164	8,093	4,621	3,790	3,874	4,874	4,633	4,723
Injury	9,911	9,702	6,289	2,706	1,967	1,797	1,786	1,870	1,536	1,396
Fatal	0	0	1	1	0	1	1	2	0	0
Total unattended collisions	46,050	44,524	31,454	10,800	6,588	5,588	5,661	6,746	6,169	6,119
Total Fatal Collisions	458	411	357	340	367	377	378	369	411	395
Total Collisions	97,157	93,490	75,285	47,513	42,457	41,378	42,651	45,895	47,681	49,777
Total Victims	48,833	47,967	40,608	31,934	30,369	30,443	30,362	30,066	29,839	31,135

Note: Collisions which are neither attended by police nor driver self-reported do not get recorded in the database.

Figure 1.03 – Property damage only collisions by police attendance**Figure 1.04 – Injury collisions by police attendance****Figure 1.05 – Total number of collisions by police attendance**

SECTION 1 – Summary Statistics & Historical Trends

Time of Occurrence in 2003 Collisions

SECTION 2

The highest number of reported casualty collisions (those involving injury or fatality) occurred in December of 2003. The lowest number of casualty collisions occurred in February of 2003.

The highest casualty (persons injured or killed) count occurred in November of 2003 (2,880 casualties). The lowest count occurred in February of 2003 (1,674). November also experienced the highest number of fatalities (48), and February had the lowest (22).

As in previous years, more casualty collisions happened on Friday than on any other day of the week (16.1%). Next highest was Saturday (15.5%). However Saturday had the highest number of victims (16.5%). Sunday had the fewest

casualty collisions (13.1%) while Monday had the fewest victims (12.9%).

The greatest number of injury collisions occurred between the hours of 5 pm and 6 pm in 2003 (7.8% of all personal injury collisions). Notably, about 29% of all injury collisions occurred between 3 pm and 7 pm (i.e. the evening rush hour).

The greatest number of fatal collisions happened between 1 pm and 2 pm in 2003 (6.6% of all fatal collisions).

Victims in collisions during the holiday periods in 2003 made up about 6.9% of the total casualties in police attended collisions. Christmas holiday recorded the highest number of casualties including 360 injured and 11 killed.

Table 2.01 – Collisions and victims by month

Month	Collisions			Victims		
	Injury	Fatal	Total	Injured	Killed	Total
January	1,566	46	1,612	2,345	51	2,396
February	1,156	20	1,176	1,652	22	1,674
March	1,524	27	1,551	2,294	30	2,324
April	1,367	22	1,389	2,026	27	2,053
May	1,558	31	1,589	2,324	33	2,357
June	1,655	29	1,684	2,468	32	2,500
July	1,722	37	1,759	2,578	41	2,619
August	1,650	39	1,689	2,565	42	2,607
September	1,733	31	1,764	2,509	36	2,545
October	1,872	35	1,907	2,843	37	2,880
November	1,797	40	1,837	2,606	48	2,654
December	1,880	38	1,918	2,780	44	2,824
Total	19,480	395	19,875	28,990	443	29,433

SECTION 2 – Time Of Occurrence in 2003 Collisions

Figure 2.01 – Distribution of casualty collisions and victims by month

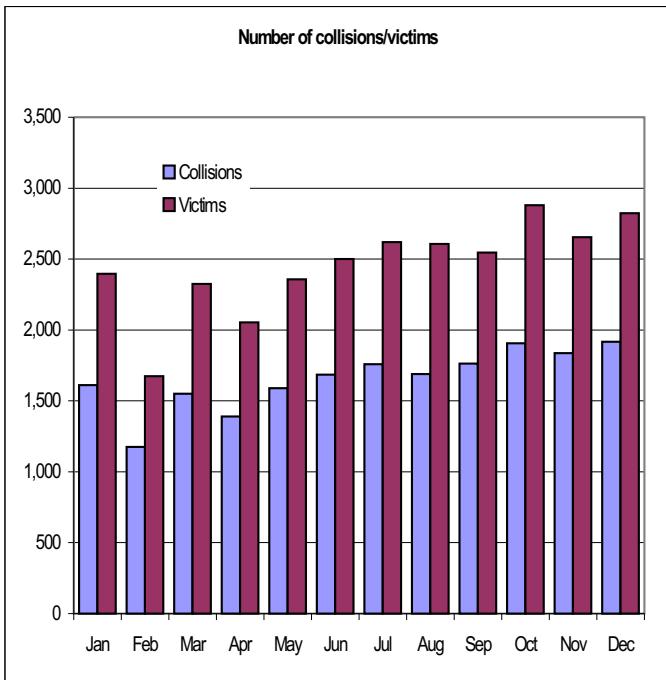


Figure 2.02 Distribution of casualty collisions and victims by day of week

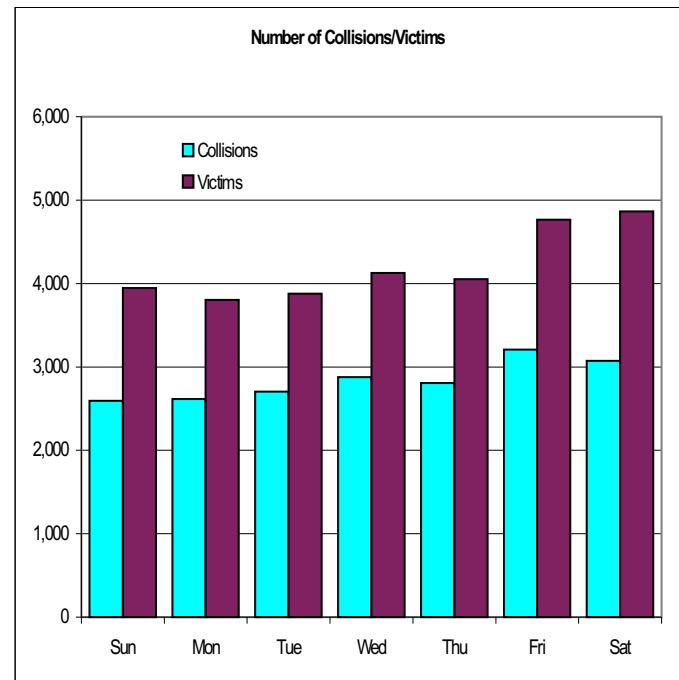


Table 2.02 – Collisions and victims by day of week

Day of Week	Collisions			Victims			Total Victims
	Injury	Fatal	Total	Injured	Killed		
Sunday	2,544	50	2,594	3,887	57	3,944	
Monday	2,566	49	2,615	3,746	56	3,802	
Tuesday	2,651	52	2,703	3,814	63	3,877	
Wednesday	2,826	50	2,876	4,071	57	4,128	
Thursday	2,746	62	2,808	3,989	63	4,052	
Friday	3,147	59	3,206	4,701	64	4,765	
Saturday	3,000	73	3,073	4,782	83	4,865	
Total	19,480	395	19,875	28,990	443		29,433

SECTION 2 – Time Of Occurrence in 2003 Collisions

Table 2.03 – Collisions and victims by hour

Hour	Collisions			Victims		
	Injury	Fatal	Total	Injured	Killed	Total
0000-0059	446	13	459	644	16	660
0100-0159	395	11	406	593	12	605
0200-0259	421	19	440	689	19	708
0300-0359	267	10	277	382	12	394
0400-0459	206	8	214	296	8	304
0500-0559	229	15	244	357	15	372
0600-0659	371	7	378	525	8	533
0700-0759	672	14	686	945	18	963
0800-0859	856	7	863	1207	7	1,214
0900-0959	784	13	797	1119	13	1,132
1000-1059	831	9	840	1137	10	1,147
1100-1159	948	18	966	1401	21	1,422
1200-1259	1101	17	1,118	1635	18	1,653
1300-1359	1120	26	1,146	1658	29	1,687
1400-1459	1223	22	1,245	1893	25	1,918
1500-1559	1432	19	1,451	2157	22	2,179
1600-1659	1453	22	1,475	2188	22	2,210
1700-1759	1517	25	1,542	2215	29	2,244
1800-1859	1192	21	1,213	1794	22	1,816
1900-1959	955	21	976	1466	23	1,489
2000-2059	735	20	755	1119	22	1,141
2100-2159	728	19	747	1192	31	1,223
2200-2259	646	12	658	966	12	978
2300-2359	540	24	564	831	26	857
Unknown	412	3	415	581	3	584
Total	19,480	395	19,875	28,990	443	29,433

Figure 2.03 – Distribution of casualty collisions and victims by collision hour

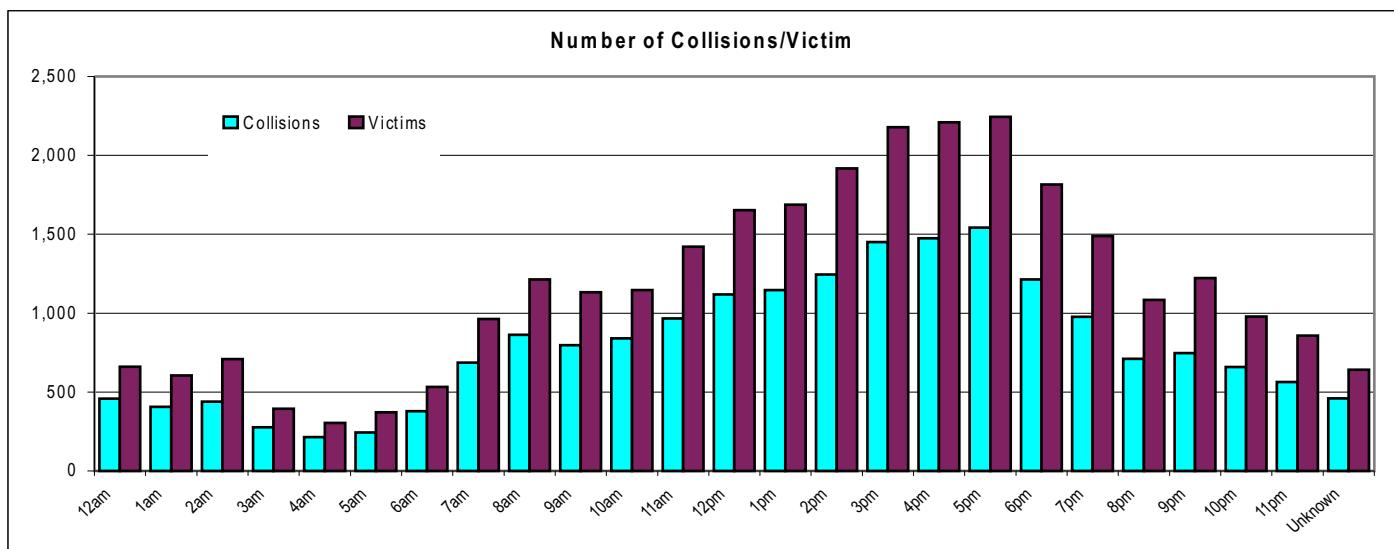


Table 2.04 – Victims in 2003 holiday collisions

Holiday Period	Injured	Killed	Total
Easter (April 17 to April 21)	235	4	239
Victoria Day (May 16 to May 19)	231	6	237
Canada Day (June 30 to July 1)	99	4	103
B.C. Day (August 1 to August 4)	265	10	275
Labour Day (August 29 to September 1)	283	6	289
Thanksgiving (October 10 to October 13)	298	4	302
Remembrance Day (November 10 to November 11)	130	2	132
Christmas (December 24 to December 28)	360	11	371
New Years 03/04 (December 31 to January 1)	89	2	91
Total	1,990	49	2,039

Note: Holiday periods are calculated from 1800 of the first day to 2400 of the last day. For example, Easter holiday period was calculated starting from 1800 on April 17 to 2400 on April 21. Some holidays may occur on a weekend one year but not on a weekend in other years. This will affect year to year comparisons.



Contributing Factors in 2003 Collisions

SECTION 3

The BC Traffic Accident Database recognizes that a collision is often the result of an interaction of events or situations. Contributing factors are those circumstances, events or behaviours that the attending police officer judges to contribute to a traffic collision. The Traffic Accident Police Investigation Report in 2003 permitted up to three contributing factors to be attributed to *each* driver, cyclist or pedestrian involved in a collision.

Procedure for reporting contributing factors

In this document *all* contributing factors assigned to drivers are reflected in the presentation of the data. The report does not differentiate between whether the factors are listed as first, second or third. For example, a collision could result from a combination of “alcohol involvement” (factor 1), “unsafe speed” (factor 2) on the part of Driver 1 and “failure to yield right of way” (factor 1) and “pavement condition” (factor 2) assigned to Driver 2. This totals four different contributing factors assigned to the same collision and represents the complete information available from the Traffic Accident Database on the role of contributing factors in that collision. Tables 3.01 to 3.05 and Figures 3.01 to 3.04 present the number of factors in 2003 collisions.

In addition to the tables and graphs that consider *factors*, tables that display the same data in terms of *collisions* are also presented. These include Tables 3.06 and 3.07 and Figure 3.05 and 3.06. These tables and figures display the number of collisions in which a contributing factor was present and not the total number of occurrences of that factor. For example, if “alcohol involvement” were a factor assigned to both drivers in the same collision, in these tables, it would be counted just once for that collision. If at least one driver were also assigned a second factor (e.g., unsafe speed), the collision would be counted again under “unsafe speed”. To demonstrate the difference between counting factors and counting collisions, we can see that the contributing factor, “driving without due care” was recorded in 6,115 collisions (Table 3.06), however, there were 6,296 occurrences of “driving without due care” in the database (Table 3.03). In other words, 6,296 *drivers* involved in collisions were noted as having been “driving without due care”. Those same 6,296 drivers were involved in 6,115 *collisions* because there may be more than one driver involved in a single collision.

Contributing factors summary

In 2003, 32,515 contributing factors were attributed to 19,875 reported casualty collisions.

Of all contributing factors assigned to collisions during 2003, 83.6% involved human action or condition; 14.8% were related to environmental conditions; 1.6% involved vehicle condition.

The top five most frequently reported contributing factors in 2003 injury collisions (as a percentage of total injury collisions) were, in order of magnitude:

1. Driving without due care (30.8%);
2. Failing to yield to the right of way (20.4%);
3. Unsafe speed (18.7%);
4. Following too closely (11.0%);
5. Weather condition (11.0%).

The top five most frequently reported contributing factors in 2003 fatal collisions (as a percentage of total fatal collisions) were, in order of magnitude:

1. Unsafe speed (34.7%);
2. Driving without due care (28.9%);
3. Alcohol involvement (23.5%);
4. Failing to yield right of way (10.4%);
5. Driving on wrong side of road (10.4%).

Relationships between contributing factors

By examining the co-occurrence of contributing factors, the following relationships can be observed:

“Alcohol involvement” most often occurs together with “driving without due care” (1,011 cases), with “unsafe speed” (648 cases) or as the sole factor (381 cases).

“Unsafe speed” is most frequently cited in combination with “driving without due care” (1,269 cases), with “weather condition” (776 cases) or alone (663 cases).

Driver inexperience most often accompanies the factors of “unsafe speed” (613 cases), failure to yield right of way (269 cases), “weather condition” (284 cases) or as the sole factor (314 cases).

SECTION 3 – Contributing Factors in 2003 Collisions

Table 3.01 – Frequency of contributing factors¹ in collisions by category

Contributing Factor Category	Injury	Fatal	Total Factors	% of Total Factors
Human Action	21,261	422	21,683	66.69
Human Condition	5,315	173	5,488	16.88
Environmental Condition	4,735	85	4,820	14.82
Vehicle Factor	507	17	524	1.61
Total	31,818	697	32,515	100%

Note:

- 1) There were 32,515 contributing factors attributed to 19,875 police attended casualty collisions in 2003. 'Frequency' represents the total number of occurrences of the contributing factors, not the number of collisions in which the contributing factors were present.

Figure 3.02 – Top five human action contributing factors in casualty collision

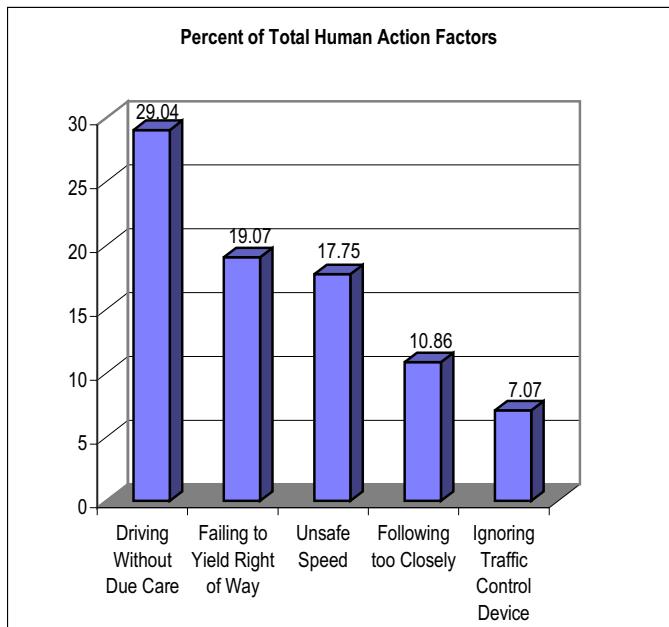


Figure 3.01 – Top five human condition contributing factors in casualty collision

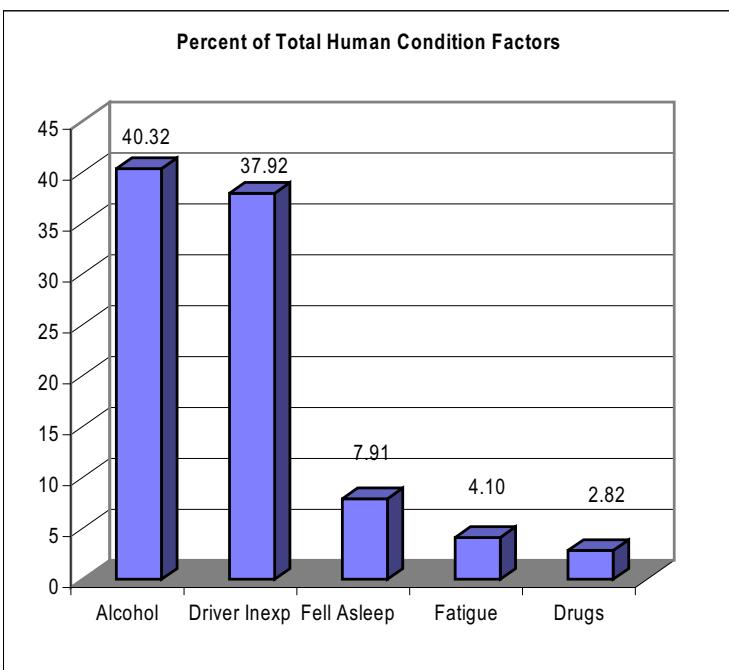


Table 3.02 – Frequency of human condition factors¹ in injury and fatal collisions

Human Condition Factor	% of Human			% of All Factors ²
	Injury	Fatal	Total	
Alcohol Involvement	2,116	97	2,213	40.32
Driver Inexperience	2,052	29	2,081	37.92
Fell Asleep	418	16	434	7.91
Extreme Fatigue	218	7	225	4.10
Drugs (Illegal)	141	14	155	2.82
Illness	133	3	136	2.48
Unconscious	125	3	128	2.33
Medication (Legal Drugs)	59	1	60	1.09
Physical Disability	52	3	55	1.00
Driver Inattentive	1	0	1	0.02
Total	5,315	173	5,488	100%
Note:				

- 1) There were 32,515 contributing factors attributed to 19,875 police attended casualty collisions in 2003. 'Frequency' represents the total number of occurrences of the contributing factors, not the number of collisions in which the contributing factors were present.
- 2) "All factors" refers to all four categories of contributing factors (see Table 3.01). In other words, "Percent of All Factors" shows the percentage each "Human Condition Factor" accounted for across all four categories of contributing factors.

Table 3.03 – Frequency of human action factors¹ in injury and fatal collisions

Human Action Factors	% of Human			% of All Factors ²
	Injury	Fatal	Total	
Driving Without Due Care	6,181	115	6,296	29.04
Failing to Yield Right of Way	4,094	42	4,136	19.07
Unsafe Speed	3,709	139	3,848	17.75
Following too Closely	2,349	5	2,354	10.86
Ignoring Traffic Control Device	1,519	15	1,534	7.07
Improper Turning	1,053	9	1,062	4.90
Driving on Wrong Side of Road	547	41	588	2.71
Pedestrian Error/Confusion	376	24	400	1.84
Avoiding Veh/Ped/Cycle	361	10	371	1.71
Improper Passing	315	10	325	1.50
Cutting In	317	2	319	1.47
Backing Unsafely	217	4	221	1.02
Failing to Signal	98	1	99	0.46
No Driver	59	1	60	0.28
Ignoring Officer/Flagman/Guard	42	1	43	0.20
Suicide Attempt	24	3	27	0.12
Total	21,261	422	21,683	100%
Note:				

- 1) There were 32,515 contributing factors attributed to 19,875 police attended casualty collisions in 2003. 'Frequency' represents the total number of occurrences of the contributing factors, not the number of collisions in which the contributing factors were present.
- 2) "All factors" refers to all four categories of contributing factors (see Table 3.01). In other words, "Percent of All Factors" shows the percentage each "Human Action Factor" accounted for across all four categories of contributing factors.

SECTION 3 – Contributing Factors in 2003 Collisions

Table 3.04 – Frequency of environmental factors¹ in injury and fatal collisions

Environmental Factors				% of Environmental Factors	% of all Factors ²
	Injury	Fatal	Total		
Weather Condition	2,480	36	2,516	52.20	7.74
Visibility Impaired	454	13	467	9.69	1.44
Wild Animal	412	3	415	8.61	1.28
Road Maintenance/Construction	323	14	337	6.99	1.04
Sunlight Glare	288	5	293	6.08	0.90
Obstruction/Debris on Road	175	1	176	3.65	0.54
Road/Intersection Design	125	0	125	2.59	0.38
Previous Traffic Collision	110	5	115	2.39	0.35
Domestic Animal	109	0	109	2.26	0.34
Pavement Condition	88	3	91	1.89	0.28
Insufficient Traffic Control	66	2	68	1.41	0.21
Roadside Hazard	56	1	57	1.18	0.18
Artificial Glare	24	2	26	0.54	0.08
Sign Obstruction	21	0	21	0.44	0.06
Road Condition	2	0	2	0.04	0.01
Windows Obstructed	1	0	1	0.02	0.00
Defective Traffic Control Device	1	0	1	0.02	0.00
Total	4,735	85	4,820	100%	14.82%

Note:

- 1) There were 32,515 contributing factors attributed to 19,875 police attended casualty collisions in 2003. 'Frequency' represents the total number of occurrences of the contributing factors, not the number of collisions in which the contributing factors were present.
- 2) "All factors" refers to all four categories of contributing factors (see Table 3.01). In other words, "Percent of All Factors" shows the percentage each "Environmental Factor" accounted for across all four categories of contributing factors.

Figure 3.03 – Top five environmental factors in casualty collisions

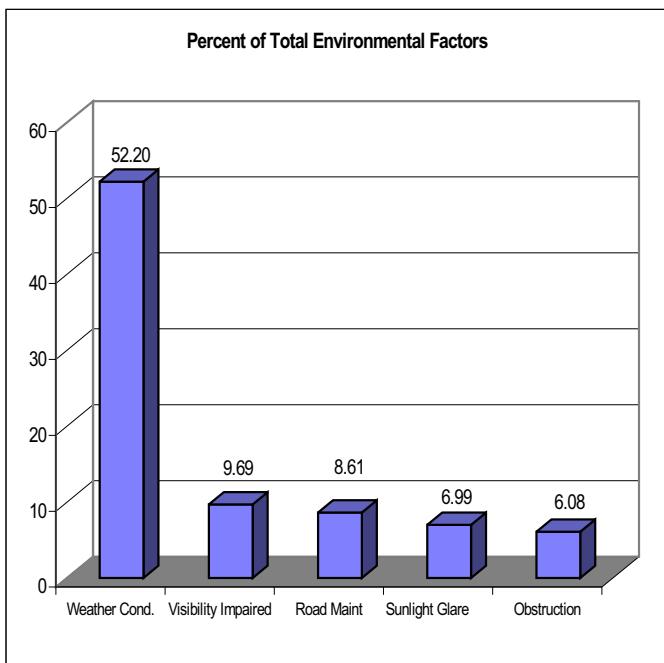


Table 3.05 – Frequency of vehicle condition factors¹ in injury and fatal collisions

Vehicle Condition Factors	Injury	Fatal	Total	% of Vehicle Factors	% of all Factors ²
Defective Tires	147	5	152	29.01	0.47
Defective Brakes	125	3	128	24.43	0.39
Defective Headlights	43	2	45	8.59	0.14
Defective Steering	34	1	35	6.68	0.11
Insecure Load	27	0	27	5.15	0.08
Defective Engine	26	0	26	4.96	0.08
Defective Alternator	23	2	25	4.77	0.08
Vehicle Modification	16	3	19	3.63	0.06
Oversize Vehicle	17	0	17	3.24	0.05
Defective Suspension	17	0	17	3.24	0.05
Defective Brakelights	11	0	11	2.10	0.03
Defective Turn Signals	10	0	10	1.91	0.03
Defective Tow Hitch	8	0	8	1.53	0.02
Restraint System	2	1	3	0.57	0.01
Defective Windshield	1	0	1	0.19	0.00
Total	507	17	524	100%	1.61%

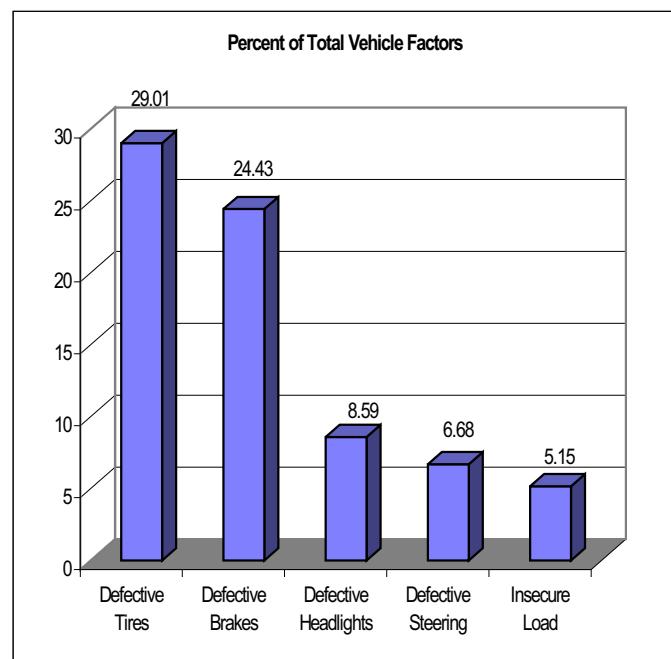
Note:

1) There were 32,515 contributing factors attributed to 19,875 police attended casualty collisions in 2003. 'Frequency' represents the total number of occurrences of the contributing factors, not the number of collisions in which the contributing factors were present.

2) "All factors" refers to all four categories of contributing factors (see Table 3.01).

In other words, "Percent of All Factors" shows the percentage each "Vehicle Condition Factor" accounted for across all four categories of contributing factors.

Figure 3.04 – Top five vehicle condition factors in casualty collisions



SECTION 3 – Contributing Factors in 2003 Collisions

Table 3.06 – Contributing factors in collisions in order of magnitude: By number of collisions¹

Contributing Factors	Injury	Fatal	Total	% of Total Collisions
Driving Without Due Care	6,001	114	6,115	30.77
Failing to Yield Right of Way	3,977	41	4,018	20.22
Unsafe Speed	3,639	137	3,776	19.00
Alcohol Involvement	2,095	93	2,188	11.01
Weather Condition	2,139	33	2,172	10.93
Following too Closely	2,146	5	2,151	10.82
Driver Inexperience	1,994	29	2,023	10.18
Ignoring Traffic Control Device	1,465	15	1,480	7.45
Improper Turning	1,043	9	1,052	5.29
Driving on Wrong Side of Road	534	41	575	2.89
Fell Asleep	418	16	434	2.18
Visibility Impaired	396	10	406	2.04
Wild Animal	400	3	403	2.03
Pedestrian Error/Confusion	358	22	380	1.91
Avoiding Veh/Ped/Cycle	338	7	345	1.74
Improper Passing	314	10	324	1.63
Cutting In	314	2	316	1.59
Road Maintenance/Construction	293	14	307	1.54
Sunlight Glare	279	5	284	1.43
Extreme Fatigue	218	7	225	1.13
Backing Unsafely	209	4	213	1.07
Other	8,919	147	9,066	45.62
Unknown	1,818	45	1,863	9.37

Note:

1) "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions will occur in the data presented in this table. For example, a two vehicle fatal collision involving a driver traveling at unsafe speed and a second driver operating under the influence of alcohol will be counted above as both a fatal unsafe speed related collision, and as a fatal alcohol related collision. 'Percent of Total' represents occurrence of the collisions as a percentage of total police-attended casualty collisions (i.e. 19,875) recorded in British Columbia during 2003. Due to multiple occurrences of factors in a single accident, 'Percent of Total Collisions' does not add up to 100.

2) "Other" includes specified factors with less than 200 occurrences plus unspecified other.

Figure 3.05 – Top ten contributing factors in collisions by percentage of total collisions

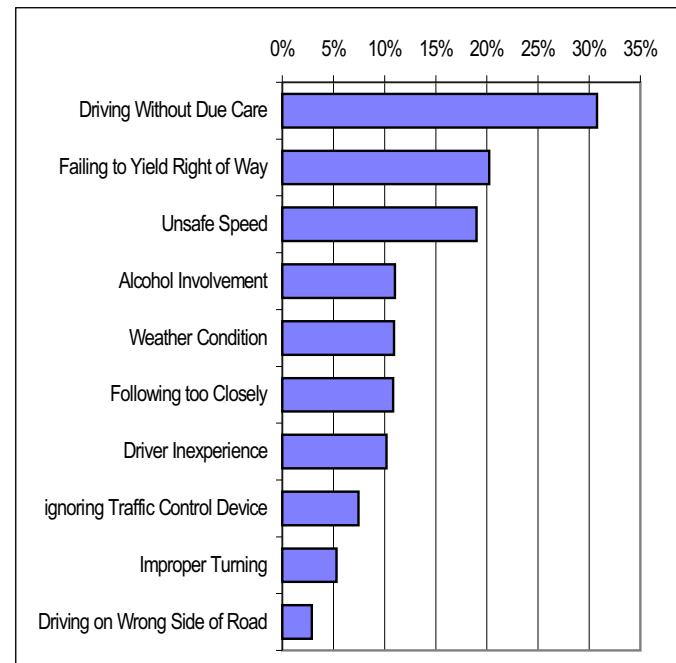


Table 3.07 – Contributing factors in fatal collisions in order of magnitude: By number of collisions¹

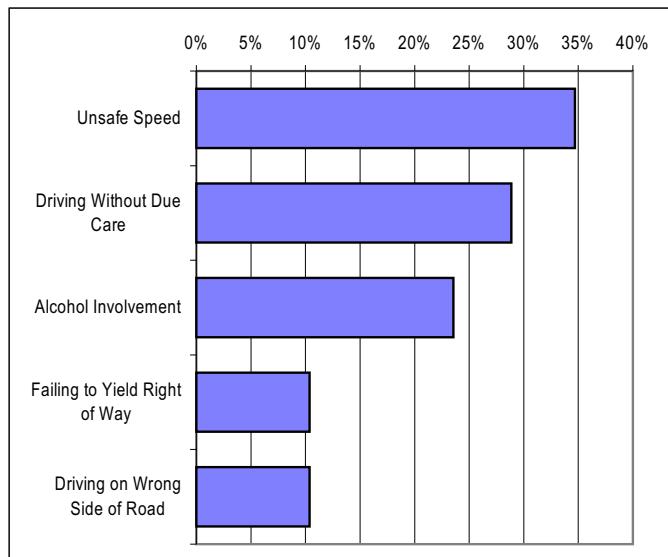
Contributing Factors	Fatal	% of Total Fatal Collisions
Unsafe Speed	137	34.68
Driving Without Due Care	114	28.86
Alcohol Involvement	93	23.54
Failing to Yield Right of Way	41	10.38
Driving on Wrong Side of Road	41	10.38
Weather Condition	33	8.35
Driver Inexperience	29	7.34
Pedestrian Error/Confusion	22	5.57
Fell Asleep	16	4.05
Ignoring Traffic Control Device	15	3.80
Drugs (Illegal)	14	3.54
Road Maintenance/Construction	14	3.54
Improper Passing	10	2.53
Visibility Impaired	10	2.53
Improper Turning	9	2.28
Extreme Fatigue	7	1.77
Avoiding Veh/Ped/Cycle	7	1.77
Following too Closely	5	1.27
Defective Tires	5	
Sunlight Glare	5	
Previous Traffic Collision	5	1.27
		0.00
Other	132	33.42
Unknown	45	11.39

Note:

1) "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions will occur in the data presented in this table. For example, a two vehicle fatal collision involving a driver traveling at unsafe speed and a second driver operating under the influence of alcohol will be counted above as both a fatal unsafe speed related collision, and as a fatal alcohol related collision. 'Percent of Total' represents the number of collisions with the factor as a percentage of total police-attended fatal collisions (i.e. 395) recorded in British Columbia during 2003. Due to multiple occurrences of factors in a single accident, 'Percent of Total Fatal Collisions' does not add up to 100.

2) "Other" includes specified factors with less than 5 occurrences plus unspecified other.

Figure 3.06 – Top five contributing factors in fatal collisions by percentage of total fatal collisions



SECTION 3 – Contributing Factors in 2003 Collisions

Table 3.08 – Top Ten Contributing Factors*: First contributing factors and corresponding second contributing factors

First Contributing Factors	Second Contributing Factors									
	Alcohol Involve	Driving Without Care	Driver Inexperience	Fail to Yield	Follow too Closely	Driving On Wrong Side	Ignore Traffic Control Device	Improper Turning	Unsafe Speed	Weather condition
Alcohol Involvement	–	750	37	62	32	62	47	12	314	23
Driving Without Due Care	60	–	304	433	330	54	172	77	400	95
Driver Inexperience	3	69	–	112	52	11	25	25	185	78
Failing to Yield Right of Way	11	214	87	–	4	10	143	199	30	77
Following too Closely	3	263	39	5	–	2	11	0	109	101
Driving on Wrong Side of Road	5	32	9	5	0	–	4	6	39	14
Ignoring Traffic Control Device	6	99	23	76	1	2	–	11	54	21
Improper Turning	1	44	15	62	2	2	7	–	15	19
Unsafe Speed	39	229	183	16	27	43	20	8	–	367
Weather Condition	5	27	33	10	31	4	6	6	93	–

* These are the top ten contributing factors listed in Figure 3.05.

** Numbers presented in this table are frequencies of contributing factors, not number of collisions.

Table 3.09 – Top Ten Contributing Factors*: First contributing factors and corresponding third contributing factors

First Contributing Factors	Third Contributing Factors									
	Alcohol Involve	Driving Without Care	Driver Inexperience	Fail to Yield	Follow too Closely	Driving On Wrong Side	Ignore Traffic Control Device	Improper Turning	Unsafe Speed	Weather condition
Alcohol Involvement	–	143	45	31	24	30	44	22	245	45
Driving Without Due Care	30	–	77	51	43	20	83	61	186	95
Driver Inexperience	2	32	–	9	8	3	13	18	40	71
Failing to Yield Right of Way	6	36	13	–	0	0	17	23	11	32
Following too Closely	3	31	18	2	–	0	2	1	18	41
Driving on Wrong Side of Road	2	11	3	1	0	–	2	0	10	13
Ignoring Traffic Control Device	3	18	13	12	0	0	–	0	12	7
Improper Turning	0	11	8	8	0	0	2	–	2	5
Unsafe Speed	20	59	58	3	4	8	4	3	–	109
Weather Condition	1	11	5	4	8	1	0	2	34	–

Table 3.10 – Top Ten Contributing Factors*: Second contributing factors and corresponding third contributing factors

Second Contributing Factors	Third Contributing Factors									
	Alcohol Involve	Driving Without Care	Driver Inexperience	Fail to Yield	Follow too Closely	Driving On Wrong Side	Ignore Traffic Control Device	Improper Turning	Unsafe Speed	Weather condition
Alcohol Involvement	–	13	10	0	1	1	1	1	14	5
Driving Without Due Care	15	–	81	47	35	28	45	26	249	72
Driver Inexperience	3	37	–	30	21	7	10	11	87	60
Failing to Yield Right of Way	5	38	18	–	8	2	68	65	30	21
Following too Closely	5	24	13	0	–	1	0	2	36	23
Driving on Wrong Side of Road	2	17	7	3	0	–	4	5	15	14
Ignoring Traffic Control Device	6	21	4	20	2	3	–	15	30	16
Improper Turning	2	20	3	9	0	0	6	–	15	14
Unsafe Speed	16	146	60	10	18	15	21	7	–	144
Weather Condition	4	17	37	10	3	3	7	4	29	–

Table 3.11 Drivers with one contributing factor assigned

Top ten contributing factors	# of Drivers
Alcohol Involvement	381
Driving Without Due Care	1,660
Driver Inexperience	314
Failing to Yield Right of Way	2,059
Following too Closely	1,126
Driving on Wrong Side of Road	85
Ignoring Traffic Control Device	531
Improper Turning	327
Unsafe Speed	663
Weather Condition	673
Total	7,819

Note: 7,819 vehicle drivers were assigned one of the ten top contributing factors
(refer to Figure 3.06) as sole factor.

SECTION 3 –Contributing Factors in 2003 Collisions

Victims in 2003 Collisions

SECTION 4

In 2003, the number of persons killed in police-attended traffic collisions in British Columbia was 443. The number of persons reported injured in police attended collisions was 28,990.

Male victims made up 52.5% of all casualties (persons injured or killed), slightly down from previous year's 53.5%. females made up 47.1%, up from 45.8% in 2002. The remaining 0.4% was unidentified as to gender.

Of all fatally injured victims in 2003, 69.8% were male (309 victims), and 29.8% (132 victims) were female.

The distribution of fatally injured victims among the various road user class categories in 2003 is as follows:

1. Drivers (43.3%);
2. Passengers (28.7%);
3. Pedestrians (16.7%);
4. Motorcycle Drivers (7.0%);
5. Bicycle drivers (1.4%);
6. Motorcycle Passengers (0.9%);
7. Unknown/Other (2.0%).

Of all persons reported injured in 2003, 16.6% were between the ages of 16 and 20, and 12.8% were between the ages of 21 and 25. The proportion of injured victims aged 6 to 15 was 5.7%, and 1.2% for those aged 5 and under.

Of all persons killed in 2003, 11.7% were between the ages of 16 and 20, 13.8% were between the ages of 21 and 25. The proportion of victims aged 6 to 15 was 5.0%. The number of children killed aged five and under was 5 (1.1%).



SECTION 4 – Victims in 2003 Collisions

Table 4.01 – Victims injured by road user class and month

Month	Bicycle		Bicycle		Motorcycle		Motorcycle		Total Victims	% of Total		
	Driver	Passenger	Hanging on	Pedestrian	Driver	Passenger	Driver	Passenger	Other	Unknown		
January	1,354	733	3	180	56	0	10	0	8	1	2,345	8.09
February	969	469	8	134	48	0	15	1	4	4	1,652	5.70
March	1,355	722	4	134	48	0	24	0	5	2	2,294	7.91
April	1,177	603	4	125	60	0	43	4	6	4	2,026	6.99
May	1,278	714	6	122	88	0	92	10	8	6	2,324	8.02
June	1,283	771	6	130	121	0	130	14	9	4	2,468	8.51
July	1,328	790	5	124	109	1	174	30	11	6	2,578	8.89
August	1,284	847	13	122	111	0	154	21	6	7	2,565	8.85
September	1,409	707	8	122	105	1	130	9	7	11	2,509	8.65
October	1,624	871	7	181	85	1	53	3	8	10	2,843	9.81
November	1,571	749	6	193	51	0	17	1	11	7	2,606	8.99
December	1,675	819	6	208	44	0	12	3	11	2	2,780	9.59
Total	16,307	8,795	76	1,775	926	3	854	96	94	64	28,990	100%

Figure 4.01 Classification of Injured Victims by Road User Class – 2003

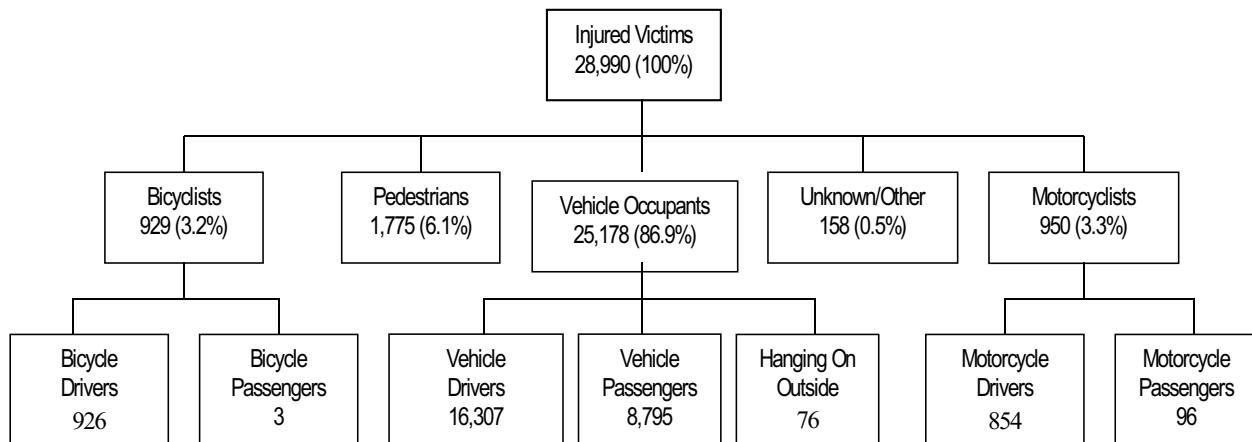
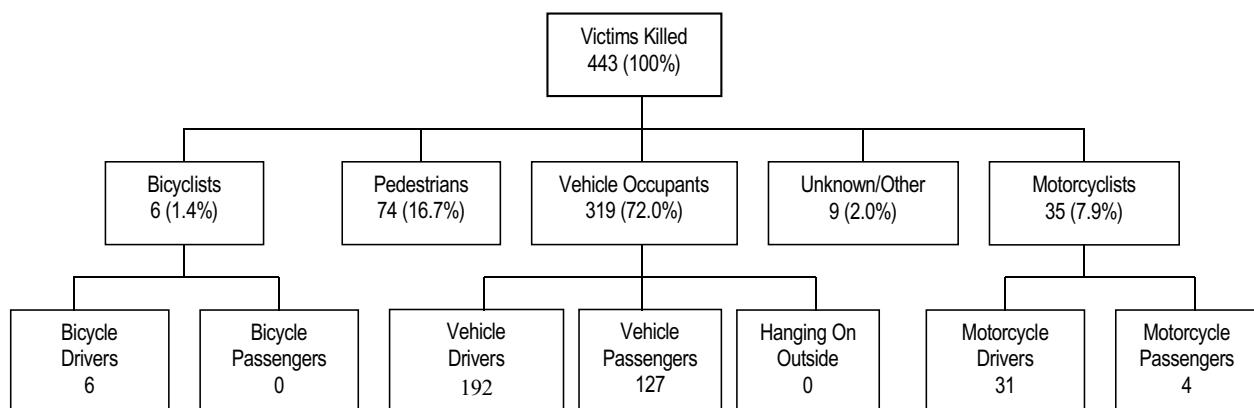


Table 4.02 – Victims killed by road user class and month

Month	Driver	Passenger	Pedestrian	Bicycle	Motorcycle	Motorcycle	Other	Unknown	Total	% of
				Driver	Driver	Passenger			Victims	Total
January	22	15	11	0	0	0	0	3	51	11.51
February	11	5	6	0	0	0	0	0	22	4.97
March	14	6	8	0	1	0	1	0	30	6.77
April	13	9	5	0	0	0	0	0	27	6.09
May	16	9	3	0	5	0	0	0	33	7.45
June	11	8	5	1	4	2	0	1	32	7.22
July	12	15	2	1	8	0	1	2	41	9.26
August	17	15	5	0	4	1	0	0	42	9.48
September	16	8	4	0	6	1	1	0	36	8.13
October	15	10	8	2	2	0	0	0	37	8.35
November	24	14	8	1	1	0	0	0	48	10.84
December	21	13	9	1	0	0	0	0	44	9.93
Total	192	127	74	6	31	4	3	6	443	100%

Figure 4.02 Classification of Killed by Road User Class – 2003

SECTION 4 – Victims in 2003 Collisions

Table 4.03 – Victims injured by road user class and age

Victim Age	Driver	Passenger	Hanging on	Pedestrian	Bicycle Driver	Bicycle Passenger	Motorcycle Driver	Motorcycle Passenger	Other	Unknown	Total Victims	% of Total
1	0	50	0	1	0	0	0	0	0	1	52	0.18
2	0	44	0	9	0	0	0	0	1	0	54	0.19
3	0	60	0	9	0	0	0	0	0	0	69	0.24
4	0	69	0	8	1	0	0	0	3	0	81	0.28
5	0	87	0	6	6	0	0	0	0	0	99	0.34
6	0	78	0	8	4	0	0	0	2	0	92	0.32
7	0	68	1	13	7	0	0	0	0	0	89	0.31
8	0	99	1	9	7	0	0	0	1	0	117	0.40
9	1	114	0	15	15	0	0	0	0	0	145	0.50
10	0	88	0	13	15	0	0	0	2	0	118	0.41
11	0	99	0	20	21	0	0	0	0	0	140	0.48
12	1	126	0	32	31	0	0	2	0	2	194	0.67
13	3	105	1	34	36	0	1	0	3	0	183	0.63
14	12	153	0	36	31	0	4	2	2	1	241	0.83
15	19	214	1	53	29	0	1	3	2	2	324	1.12
16	264	358	1	40	23	0	4	2	3	4	699	2.41
17	495	475	3	41	15	0	7	2	2	1	1,041	3.59
18	565	411	4	35	27	0	10	2	7	3	1,064	3.67
19	595	353	3	41	14	0	18	4	0	0	1,028	3.55
20	533	340	5	59	22	0	21	5	6	1	992	3.42
21	541	273	1	32	16	0	24	2	2	1	892	3.08
22	462	251	1	34	18	0	32	4	2	2	806	2.78
23	424	236	1	21	20	0	30	3	2	0	737	2.54
24	398	177	0	34	16	0	25	3	1	0	654	2.26
25	374	194	1	30	13	0	21	1	1	1	636	2.19
26-30	1609	594	7	143	73	0	88	7	6	4	2,531	8.73
31-35	1576	459	7	129	94	0	100	10	1	2	2,378	8.20
36-40	1684	448	5	113	89	0	98	9	5	5	2,456	8.47
41-45	1635	401	9	122	85	0	86	5	6	3	2,352	8.11
46-50	1393	378	3	100	79	0	127	8	4	4	2,096	7.23
51-55	1096	300	7	88	34	0	87	10	1	5	1,628	5.62
56-60	801	242	4	78	28	2	32	2	1	2	1,192	4.11
61-65	537	209	3	53	16	0	16	1	0	1	836	2.88
66-70	359	170	1	47	11	1	10	0	0	1	600	2.07
71-75	344	171	1	55	6	0	6	0	2	3	588	2.03
76-80	255	139	1	63	6	0	0	0	1	2	467	1.61
81-85	172	80	1	40	3	0	2	0	0	4	302	1.04
86-90	77	35	0	21	1	0	0	0	0	0	134	0.46
91-95	7	9	0	9	0	0	0	0	0	1	26	0.09
95+	1	0	0	2	0	0	0	0	0	0	3	0.01
Unknown	74	638	3	79	14	0	4	9	25	8	854	2.95
Total	16,307	8,795	76	1,775	926	3	854	96	94	64	28,990	100%

Note: Age 1 includes victims less than 12 months of age.

Table 4.04 – Victims killed by road user class and age

Victim Age	Driver	Passenger	Pedestrian	Bicycle Driver	Motorcycle Driver	Motorcycle Passenger	Other	Unknown	Total	% of Total
1	0	2	0	0	0	0	0	0	2	0.45
4	0	1	0	0	0	0	0	0	1	0.23
5	0	0	2	0	0	0	0	0	2	0.45
7	0	0	0	0	0	0	1	0	1	
8	0	2	0	0	0	0	0	0	2	0.45
9	0	0	0	1	0	0	0	0	1	0.23
										0.00
10	0	1	0	0	0	0	0	1	2	
12	0	2	0	0	0	0	0	0	2	0.45
13	1	5	0	0	1	0	0	0	7	1.58
										0.00
14	0	1	1	0	0	0	0	0	2	
15	0	5	0	0	0	0	0	0	5	1.13
16	2	3	0	0	0	0	0	0	5	1.13
										0.00
17	5	8	0	0	1	0	1	0	15	
18	4	3	0	0	1	0	0	0	8	1.81
19	6	6	1	0	1	0	0	0	14	3.16
										0.00
20	3	4	1	0	2	0	0	0	10	
21	4	8	5	0	0	1	0	0	18	4.06
22	7	1	0	0	2	0	0	0	10	2.26
										0.00
23	5	5	1	1	1	0	0	0	13	
24	6	5	1	0	1	0	0	0	13	2.93
25	3	2	0	0	2	0	0	0	7	1.58
										0.00
26-30	19	12	1	0	3	0	0	0	35	
31-35	9	4	4	0	3	0	0	0	20	4.51
36-40	25	4	6	1	3	1	1	1	42	9.48
										0.00
41-45	16	4	3	1	4	0	0	0	28	
46-50	16	5	3	0	3	0	0	0	27	6.09
51-55	14	1	4	1	1	0	0	0	21	4.74
										0.00
56-60	11	4	2	0	0	0	0	0	17	
61-65	7	4	6	0	0	1	0	0	18	4.06
66-70	6	6	6	0	2	0	0	0	20	4.51
										0.00
71-75	5	6	6	0	0	0	0	0	17	
76-80	11	2	6	0	0	0	0	1	20	4.51
81-85	5	4	10	1	0	0	0	0	20	4.51
										0.00
86-90	2	2	2	0	0	0	0	2	8	
91-95	0	0	1	0	0	0	0	0	1	0.23
95+	0	0	1	0	0	0	0	0	1	0.23
Unknown	0	5	1	0	0	1	0	1	8	1.81
Total	192	127	74	6	31	4	3	6	443	67%

SECTION 4 – Victims in 2003 Collisions

Table 4.05 – Victims Injured by age and gender

Victim Age	Male	Female	Unknown	Total
1	29	23	0	52
2	33	20	1	54
3	35	34	0	69
4	40	41	0	81
5	58	41	0	99
6	50	41	1	92
7	46	43	0	89
8	58	58	1	117
9	80	64	1	145
10	60	57	1	118
11	82	58	0	140
12	106	88	0	194
13	95	87	1	183
14	117	124	0	241
15	137	187	0	324
16	313	386	0	699
17	475	566	0	1,041
18	595	469	0	1,064
19	577	451	0	1,028
20	564	428	0	992
21	500	392	0	892
22	432	374	0	806
23	430	307	0	737
24	360	293	1	654
25	373	263	0	636
26-30	1461	1069	1	2,531
31-35	1260	1118	0	2,378
36-40	1298	1158	0	2,456
41-45	1263	1089	0	2,352
46-50	1085	1010	1	2,096
51-55	841	787	0	1,628
56-60	590	602	0	1,192
61-65	376	460	0	836
66-70	289	311	0	600
71-75	281	307	0	588
76-80	203	264	0	467
81-85	130	172	0	302
86-90	66	68	0	134
91-95	13	13	0	26
95+	0	3	0	3
Unknown	338	397	119	854
Total	15,139	13,723	128	28,990

Figure 4.03 – Number of injured victims by age and gender

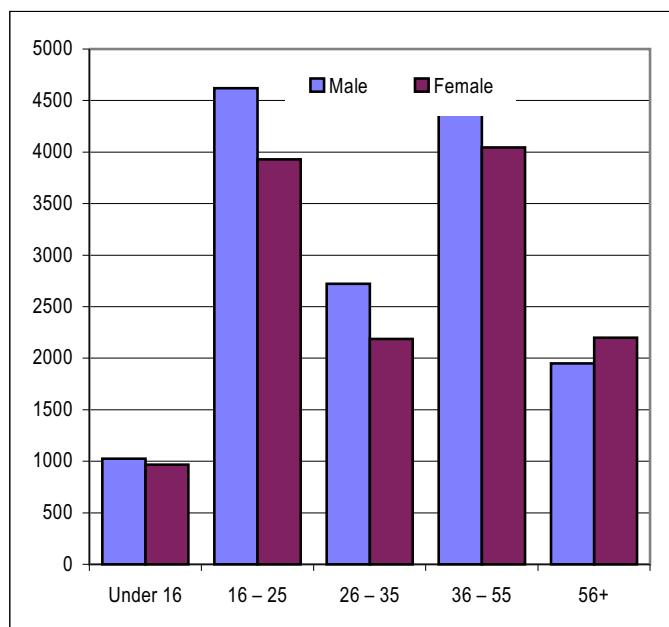
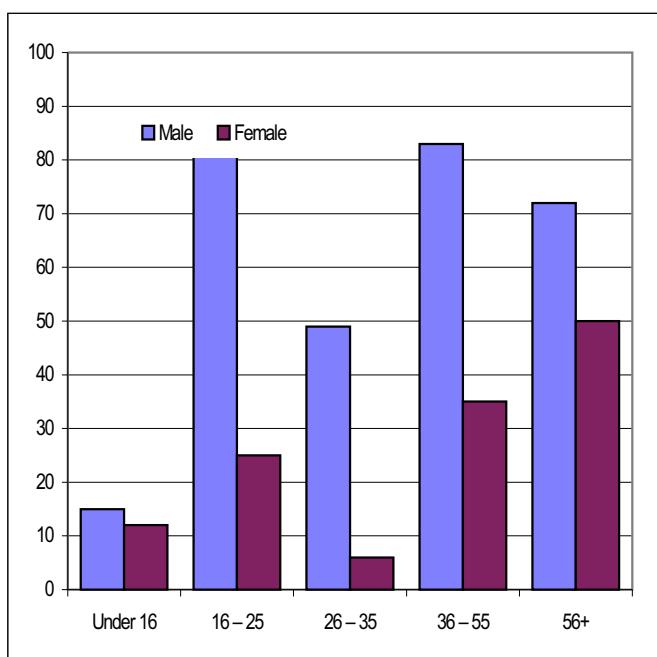


Table 4.06 – Victims killed by age and gender

Victim Age	Male	Female	Unknown	Total
1	0	2	0	2
4	0	1	0	1
5	2	0	0	2
7	0	1	0	1
8	2	0	0	2
9	1	0	0	1
10	1	1	0	2
12	1	1	0	2
13	6	1	0	7
14	0	2	0	2
15	2	3	0	5
16	4	1	0	5
17	12	3	0	15
18	6	2	0	8
19	14	0	0	14
20	8	2	0	10
21	11	7	0	18
22	9	1	0	10
23	9	4	0	13
24	10	3	0	13
25	5	2	0	7
26-30	34	1	0	35
31-35	15	5	0	20
36-40	29	13	0	42
41-45	21	7	0	28
46-50	18	9	0	27
51-55	15	6	0	21
56-60	6	11	0	17
61-65	14	4	0	18
66-70	13	7	0	20
71-75	12	5	0	17
76-80	13	7	0	20
81-85	8	12	0	20
86-90	5	3	0	8
91-95	0	1	0	1
95+	1	0	0	1
Unkn	2	4	2	8
Total	309	132	2	443

Figure 4.04 – Number of victims killed by age and gender

SECTION 4 – Victims in 2003 Collisions

Table 4.07 – Location of most severe injury and injury type (fatal and non-fatal injuries)

Injury Type	Head	Nose	Eye	Neck	Chest	Back	Elbow		Knee/		Entire Body	Unknown	Total	
							Shoulder	Lower	Abdomen	Hip/Upper				
Whiplash	451	29	3	5,879	227	1,410	237	23	42	27	34	203	112	8,677
Bruises	1,040	317	22	522	1,242	742	785	590	347	474	1,208	223	122	7,634
Abrasion	679	366	21	198	160	117	160	542	54	90	398	73	67	2,925
Lacerations	922	424	25	57	28	30	60	398	17	24	167	54	35	2,241
Fracture	170	82	1	61	156	65	163	276	105	146	386	139	16	1,766
Bleeding	587	423	17	29	35	20	20	161	35	13	67	85	20	1,512
Concussion	473	3	0	40	26	13	3	4	6	4	2	23	9	606
Dislocation	11	2	2	17	4	28	101	38	11	24	36	8	3	285
Burns	2	6	2	2	4	0	11	20	1	1	5	15	1	70
Drowning	5	0	0	10	2	3	4	1	0	0	0	15	3	43
Amputations	3	2	1	0	3	0	4	4	1	1	5	7	1	32
Other	39	6	4	30	55	36	17	10	16	9	19	22	77	340
Unknown	279	56	13	487	249	323	124	104	77	74	184	89	1,243	3,302
Total	4,661	1,716	111	7,332	2,191	2,787	1,689	2,171	712	887	2,511	956	1,709	29,433

Note: Injury type was recorded by the attending police officer and may not be confirmed by medical examination. Non-observable injuries may be based on victim's testimony only.

Table 4.08 – Victims by location of most severe injury

Injury Location	Injured	Killed	Total
Neck	7,305	27	7,332
Head	4,481	180	4,661
Back	2,786	1	2,787
Knee/Lower Leg/Foot	2,507	4	2,511
Chest	2,154	37	2,191
Elbow/Lower Arm/Hand	2,170	1	2,171
Face/Nose	1,715	1	1,716
Shoulder/Upper Arm	1,689	0	1,689
Entire Body	806	150	956
Hip/Upper Leg	883	4	887
Abdomen/Pelvis	698	14	712
Eye	111	0	111
Unknown	1,685	24	1,709
Total	28,990	443	29,433

Table 4.09 – Victims by injury type

Injury Type	Injured	Killed	Total
Whiplash	8,672	5	8,677
Bruises	7,625	9	7,634
Abrasion	2,921	4	2,925
Lacerations	2,217	24	2,241
Fracture	1,602	164	1,766
Bleeding	1,412	100	1,512
Concussion	585	21	606
Dislocation	281	4	285
Burns	55	15	70
Drowning	24	19	43
Amputations	23	9	32
Other	326	14	340
Unknown	3,247	55	3,302
Total	28,990	443	29,433

Note: Injury type was determined by the attending police officer and may not always be confirmed by medical examination.

Motor Vehicle Drivers in 2003 Collisions

SECTION 5

Drivers licensed to operate a motor vehicle in British Columbia totalled 2,837,296 at the end of 2003. The number of drivers licensed in 2003 showed an increase of 1.2% over the previous year.

Driver counts from prior to 1999 publications can not be compared with the revised driver counts in this chapter. Driver counts are calculated using the active driver definition. An Active Licenced Driver is one who holds a valid BC photo licence (including a Learner or Novice licence). To be valid the licence must not be suspended, cancelled or expired at the end of 2003.

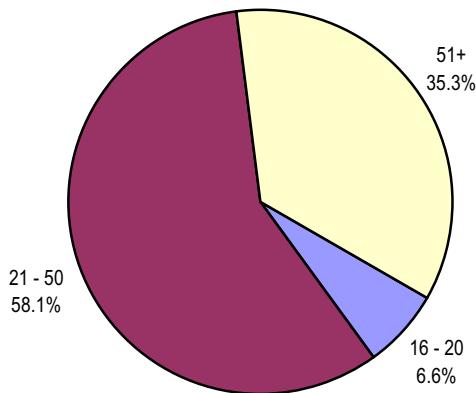
There were 33,148 licensed drivers involved in injury and fatal collisions in 2003. Certain age groups are over-represented in traffic collisions. However, note that these comparisons do not take into account differences in the amount of driving done by different age groups. In general, the oldest and youngest age groups drive less than does the mid-age group.

Young drivers (16 to 20) made up only 6.6% of all licensed drivers in 2003, but they accounted for 14.4% of all drivers involved in 2003 collisions.

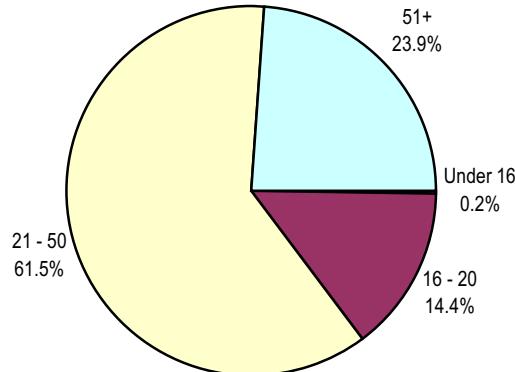
Older age groups are more likely to be under-represented in both the total driver population and the population of drivers involved in collisions. Drivers over 50 made up 35.3% of the total driver population in 2003, and comprised 23.9% of drivers involved in collisions in 2003.

Finally, drivers between the ages of 21 and 50 made up 58.1% of the total driver population in 2003. They accounted for 61.5% of drivers involved in collisions.

More males were involved in collisions than females in all age categories.



Licensed Driver Population By Age



Drivers Involved in 2003 Collisions by Age

SECTION 5 – Motor Vehicle Drivers in 2003 Collisions

Table 5.01 – Comparison of licensed drivers and drivers involved in injury and fatal collisions by age

	Licensed Drivers	% of Total Driver Population	# of Drivers Involved in Injury and Fatal Collisions	% of Total Drivers Involved in Injury and Fatal Collisions ²	% of Age Group Driver Population
					Involved in Injury and Fatal Collisions ³
Under 16 ¹	2	0	58	0.18	NA
16	26,380	0.93	519	1.60	1.97
17	35,299	1.24	963	2.97	2.73
18	39,757	1.40	1,077	3.32	2.71
19	42,853	1.51	1,082	3.34	2.52
20	43,517	1.53	1,036	3.20	2.38
21	44,805	1.58	982	3.03	2.19
22	46,026	1.62	861	2.66	1.87
23	44,725	1.58	766	2.36	1.71
24	44,612	1.57	742	2.29	1.66
25	44,504	1.57	683	2.11	1.53
26-30	230,634	8.13	3,044	9.40	1.32
31-35	266,167	9.38	3,132	9.67	1.18
36-40	294,558	10.38	3,430	10.59	1.16
41-45	323,965	11.42	3,340	10.31	1.03
46-50	308,814	10.88	2,943	9.09	0.95
51-55	271,512	9.57	2,315	7.15	0.85
56-60	218,406	7.70	1,656	5.11	0.76
61-65	157,849	5.56	1,123	3.47	0.71
66-70	123,854	4.37	815	2.52	0.66
71-75	104,450	3.68	738	2.28	0.71
76-80	73,590	2.59	591	1.82	0.80
80+	51,017	1.80	496	1.53	0.97
Total	2,837,296	100%	32,392	100%	

Note:

- 1) Includes unlicensed drivers and excludes drivers whose age is unknown.
- 2) Total number of collision involved drivers in the age group as a percentage of the total number of drivers involved in injury and fatal collisions.
- 3) Data source for active licensed drivers is Business Information Warehouse. The total number of active licensed drivers is 2,837,650 in 2003.
The number in this table does not include drivers whose age is unknown (354).

Table 5.02 – Driver age by gender by collision type

Driver Age	Collision Type								Total Drivers					
	Injury				Fatal				Male			Female		
	Male	Female	Unknown	Total		Male	Female	Unknown	Total		Male	Female	Unknown	Total
9	0	1	0	1		0	0	0	0		0	1	0	1
10	0	0	0	0		0	1	0	1		0	1	0	1
12	2	0	0	2		0	0	0	0		2	0	0	2
13	3	1	0	4		2	0	0	2		5	1	0	6
14	15	4	0	19		1	0	0	1		16	4	0	20
15	15	12	0	27		0	1	0	1		15	13	0	28
16	273	241	0	514		2	3	0	5		275	244	0	519
17	546	402	0	948		10	5	0	15		556	407	0	963
18	678	380	0	1058		12	7	0	19		690	387	0	1,077
19	664	402	0	1066		15	1	0	16		679	403	0	1,082
20	656	368	0	1024		11	1	0	12		667	369	0	1,036
21	615	354	0	969		9	4	0	13		624	358	0	982
														5,140
22	531	315	0	846		13	2	0	15		544	317	0	861
23	505	247	0	752		11	3	0	14		516	250	0	766
24	470	257	0	727		12	3	0	15		482	260	0	742
25	433	235	0	668		11	4	0	15		444	239	0	683
26-30	1916	1070	0	2986		47	11	0	58		1,963	1,081	0	3,044
31-35	1920	1172	1	3093		34	5	0	39		1,954	1,177	1	3,132
36-40	2054	1307	0	3361		54	15	0	69		2,108	1,322	0	3,430
41-45	2037	1251	0	3288		45	7	0	52		2,082	1,258	0	3,340
46-50	1827	1060	0	2887		43	13	0	56		1,870	1,073	0	2,943
51-55	1456	813	0	2269		39	7	0	46		1,495	820	0	2,315
56-60	1035	593	0	1628		19	9	0	28		1,054	602	0	1,656
61-65	717	385	0	1102		19	2	0	21		736	387	0	1,123
66-70	538	264	0	802		12	1	0	13		550	265	0	815
71-75	490	236	0	726		10	2	0	12		500	238	0	738
76-80	353	221	0	574		12	5	0	17		365	226	0	591
81-85	204	126	0	330		5	2	0	7		209	128	0	337
86-90	82	48	0	130		5	1	0	6		87	49	0	136
91-95	12	6	0	18		0	0	0	0		12	6	0	18
95+	1	3	0	4		1	0	0	1		2	3	0	5
Unknown	16	7	727	750		0	0	6	6		16	7	733	756
Total	20,064	11,781	728	32,573		454	115	6	575		20,518	11,896	734	33,148

Note: Drivers in this table include all persons operating a motor vehicle, both licensed and unlicensed (including children).

SECTION 5 – Motor Vehicle Drivers in 2003 Collisions

**Table 5.03 – BC driver license class by driver type:
Drivers involved in injury collisions**

Driver	Motorcycle	Other Driver ¹	Total
License Class	Driver	Driver	
000 ²	584	27	611
100	1,198	9	0
160	369	54	0
			423
200	90	1	0
230	36	10	0
260	30	6	0
			91
300	289	5	0
340	42	0	0
346	22	2	0
			294
360	106	21	0
400	862	3	0
460	121	34	0
			127
500	19,884	166	0
560	1,504	417	0
600	0	9	0
			20,050
700	4,228	27	0
800	0	1	0
997 ³	1,202	75	0
998 ⁴	1,066	18	55
			1,277
Total	31,633	885	55
			32,573

Note:

- 1) "Other Driver" refers to drivers of snow mobiles, road construction, mobile cranes etc.
- 2) Indicates 'No Class'. It includes out-of-province drivers.
- 3) Indicates 'Out-Of-Province' drivers.
- 4) Indicates 'License Class Unknown'. It includes out-of-province drivers.
- 5) "100" to "800" refers to driver licence classes 1 to 8. "340", for example, is a combination of class 3 and class 4.

**Table 5.04 – BC driver license class by driver type:
Drivers involved in fatal collisions**

Driver	Motorcycle	Other Driver ¹	Total
License Class	Driver	Driver	
000 ²	15	2	17
100	54	0	0
160	19	3	0
			22
200	3	0	0
260	0	1	0
300	8	0	0
			3
340	1	0	0
346	2	0	0
360	2	2	0
			2
400	10	0	0
460	3	0	0
500	274	7	0
			281
560	30	13	0
700	45	1	0
997 ³	56	5	0
998 ⁴	14	1	4
Total	536	35	4
			575

Note:

- 1) "Other Driver" refers to drivers of snow mobiles, road construction, mobile cranes etc.
- 2) Indicates 'No Class'. It includes out-of-province drivers.
- 3) Indicates 'Out-Of-Province' drivers.
- 4) Indicates 'License Class Unknown'. It includes out-of-province drivers.
- 5) "100" to "800" refers to driver licence classes 1 to 8. "340", for example, is a combination of class 3 and class 4.

Table 5.05 – Definitions of BC driver license class

Class	Definition
100	Permits operation of any vehicle or combination of vehicles of any size or weight except a motorcycle.
200	Permits operation of any vehicle in unrestricted class 400 and class 500.
300	Permits operation of any vehicle in class 500, 3-axle or greater (no maximum towed gross vehicle weight), multi-axle mobile crane, combination vehicle where towed vehicle does not exceed 4600 kg gross vehicle weight, combination vehicle without air brakes where the towed vehicle does exceed 4600 kg gross vehicle weight.
400	Restricted class 400 permits operation of any motor vehicle described in class 500, ambulance, taxi, special vehicle (vehicle designed/modified to carry maximum 10 persons).
500	Permits operation of any 2 axle motor vehicle (except bus, taxi, ambulance, etc), vehicle and all terrain cycle, construction vehicle (including 3-axle grader, excluding 3-axle truck, mobile crane, truck mounted backhoe), 2-axle recovery vehicle (maximum towed vehicle 4600 kg.).
600	Permits operation of motorcycles, scooters, limited speed motorcycles (mopeds, etc.), all terrain vehicles/cycles.
700	For a GLP novice driver, permits operation of any 2 axle motor vehicle (except bus, taxi, ambulance, etc.), motorhome (including 3-axle motorhome), limited speed motorcycle, all terrain vehicle and all terrain cycle, construction vehicle (including 3-axle grader, excluding 3-axle truck, mobile crane, truck mounted backhoe), 2-axle recovery vehicle (maximum towed vehicle 4600 kg.).
800	For a GLP novice driver, permits operation of motorcycles, scooters, limited speed motorcycles (mopeds, etc.), all terrain vehicles/cycles.

Note: Driver class definitions are based on Driver Licensing System data dictionary.

SECTION 6

Vehicles in 2003 Collisions

This section includes information on all types of vehicles including bicycles, snowmobiles and other off-road vehicles, farm and construction vehicles and others (see Table 6.03 for a complete list).

There were 35,013 vehicles involved in police-attended injury and fatal collisions in 2003, compared to 33,184 vehicles during 2002. Note that if the same vehicle were involved in two or more separate collisions in 2003, it would be counted each time as if it were a different vehicle.

Passenger cars were by far the most frequently involved vehicles in 2003 police attended casualty collisions, accounting

for 74.5% of all vehicles involved in collisions. A total of 26,067 passenger cars were involved in 16,769 collisions.

Vehicles driven for personal use comprised 81.8% of the vehicles involved in police-attended casualty collisions.

Vehicles used for commercial and business purposes accounted for only 8.4% of the vehicles in collisions.

There were 171 stolen vehicles involved in collisions, 12 of them in fatal collisions.

Table 6.01 – Number of vehicles involved in collisions by month

Month	Injury	Fatal	Total Vehicles	% of Total
January	2,668	74	2,742	7.83
February	2,094	31	2,125	6.07
March	2,720	45	2,765	7.90
April	2,491	35	2,526	7.21
May	2,821	39	2,860	8.17
June	2,924	43	2,967	8.47
July	3,001	54	3,055	8.73
August	2,864	51	2,915	8.33
September	3,153	44	3,197	9.13
October	3,396	51	3,447	9.84
November	3,025	66	3,091	8.83
December	3,258	65	3,323	9.49
Total	34,415	598	35,013	100%

Note: Includes motor vehicles, bicycles, and miscellaneous unclassified vehicle types.

Table 6.02 – Number of vehicles involved in collisions by vehicle use

Vehicle Use	Injury	Fatal	Total	% of Total
Personal	28,221	417	28,638	81.79
Business/Commercial	2,829	120	2,949	8.42
Parked	908	15	923	2.64
Recreational	907	11	918	2.62
Taxi	243	5	248	0.71
Stolen	159	12	171	0.49
Emergency	143	3	146	0.42
Government	63	0	63	0.18
Farm Use	45	1	46	0.13
Towing/Towed	12	0	12	0.03
Driver Training Facility	5	0	5	0.01
Military	4	0	4	0.01
Class 1 - Explosives	1	0	1	0.00
Class 3 - Flam Liquids	1	0	1	0.00
Other	78	1	79	0.23
Unknown	796	13	809	2.31
Total	34,415	598	35,013	100%

Note: Includes motor vehicles, bicycles, and miscellaneous unclassified vehicle types.

SECTION 6 – Vehicles in 2003 Collisions

Table 6.03 – Collisions by vehicle type

Vehicle Type	Injury	Fatal	Total
Passenger Car	16,520	249	16,769
Single Unit Truck/ Light	4,293	122	4,415
Bicycle	926	7	933
Motorcycle	812	32	844
Single Unit Truck/ Heavy*	331	12	343
Tractor Trailer & Pup*	230	24	254
Truck & Camper	236	4	240
Tractor Trailer*	195	16	211
Local Transit Bus	128	4	132
Heavy Truck/Trailer*	108	12	120
Motor Home	85	4	89
Logging Truck & Pole Trailer*	76	8	84
Light Truck/Trailer	76	0	76
Truck/ Camper & Trailer	73	1	74
Car & Trailer	49	1	50
School Bus	43	0	43
Moped	39	1	40
Tow Truck	39	0	39
Intercity Bus	28	1	29
All-Terrain Cycle	16	1	17
4 Wheel Drive Vehicle	12	0	12
Trailer Only	11	0	11
General Construction	9	1	10
Snow Mobile	8	0	8
Motor Home/Trailer	4	1	5
Farm Vehicle	5	0	5
Road Construction	5	0	5
Mobile Crane	3	0	3
Sport Utility Vehicle	2	0	2
Trailer Bike	2	0	2
Dune Buggy	1	0	1
Mini Bike	1	0	1
Mobile Home	1	0	1
Other	99	6	105
Unknown	151	1	152
Total	24,617	508	25,125

Note:

- 1) * These vehicles are defined as weighing 10,900 kg or over.
- 2) Includes motor vehicles, bicycles, and miscellaneous unclassified vehicle types.
- 3) The purpose of the above table is to illustrate the occurrences of particular vehicle types in collisions. As the table is counting "collisions" rather than "vehicles" (please see Table 6.04 for a vehicle count), some double counting of collisions occurs in the data. For example, a two vehicle fatal collision involving a passenger car and a logging truck will be counted above as both a fatal passenger car collision, and a fatal logging truck collision.

Table 6.04 – Number of Vehicles involved in collisions by Vehicle type

Vehicle Type	Injury	Fatal	Total	% of Total
			Vehicles	
Passenger Car	25,740	327	26,067	74.45
Single Unit Truck/ Light	4,779	129	4,908	14.02
Bicycle	935	8	943	2.69
Motorcycle	827	33	860	2.46
Single Unit Truck/ Heavy*	337	12	349	1.00
Tractor Trailer & Pup*	239	26	265	0.76
Truck & Camper	253	4	257	0.73
Tractor Trailer*	198	16	214	0.61
Local Transit Bus	130	4	134	0.38
Heavy Truck/Trailer*	112	12	124	0.35
Motor Home	89	4	93	0.27
Logging Truck & Pole Trailer*	82	9	91	0.26
Light Truck/Trailer	77	0	77	0.22
Truck/ Camper & Trailer	76	1	77	0.22
Car & Trailer	53	1	54	0.15
School Bus	44	0	44	0.13
Moped	40	1	41	0.12
Tow Truck	39	0	39	0.11
Intercity Bus	28	1	29	0.08
All-Terrain Cycle	16	1	17	0.05
4 Wheel Drive Vehicle	13	0	13	0.04
Trailer Only	11	0	11	0.03
General Construction	9	1	10	0.03
Snow Mobile	8	0	8	0.02
Motor Home/Trailer	4	1	5	0.01
Farm Vehicle	5	0	5	0.01
Road Construction	5	0	5	0.01
Mobile Crane	3	0	3	0.01
Sport Utility Vehicle	2	0	2	0.01
Trailer Bike	2	0	2	0.01
Dune Buggy	1	0	1	0.00
Mini Bike	1	0	1	0.00
Mobile Home	1	0	1	0.00
Other	100	6	106	0.30
Unknown	155	1	156	0.45
Total	34,414	598	35,012	100%

Note:

- 1) * These vehicles are defined as weighing 10,900 kg or over.
- 2) Includes motor vehicles, bicycles, and miscellaneous unclassified vehicle types.

Table 6.05 – Vehicles involved in collisions by vehicle use and type

	Vehicle Use														Class 3-			
	Bus/		Drv												Class 1-		Flam	
	Parked	Personal	Com- mercial	Facility	Train	Recrea- tional	Emer- gency	Mili- tary	Taxi	Farm	Govt	Towing /Towed	Stolen	Explosive	Liquids	Other	Ukn	Total
Passenger Car	706	23,462	807	3	13	106	2	241	2	33	3	134	1	0	37	517	26,067	
Single Unit Truck/ Light	146	3,734	806	0	6	16	1	2	30	18	1	28	0	0	11	109	4,908	
Bicycle	1	127	4	0	797	2	0	0	0	0	0	2	0	0	0	2	8	943
Motorcycle	1	808	5	2	23	4	0	0	0	1	0	5	0	0	1	10	860	
Single Unit Truck/ Heavy	12	55	259	0	0	13	0	1	2	4	0	0	0	0	0	0	3	349
Tractor Trailer & Pup	5	0	259	0	0	0	0	0	0	0	0	0	0	0	0	0	1	265
Truck & Camper	6	186	58	0	0	0	0	1	2	0	0	0	0	0	0	1	3	257
Tractor Trailer	5	2	203	0	0	0	0	0	0	1	0	1	0	1	0	1	1	214
Local Transit Bus	1	0	130	0	0	0	0	0	0	3	0	0	0	0	0	0	0	134
Heavy Truck/Trailer	3	3	114	0	0	2	0	0	1	0	0	0	0	0	0	0	1	124
Motor Home	9	45	4	0	34	0	0	0	0	0	0	0	0	0	0	0	1	93
Logging Truck & Pole Trl	0	1	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91
Light Truck/Trailer	0	27	44	0	1	0	0	0	2	0	2	0	0	0	0	0	1	77
Truck/ Camper & Trailer	6	42	23	0	2	0	1	0	1	0	0	0	0	0	0	0	2	77
Car & Trailer	0	46	5	0	1	0	0	0	0	0	0	0	0	0	0	0	2	54
School Bus	3	4	35	0	0	0	0	1	0	0	0	1	0	0	0	0	0	44
Moped	0	30	5	0	5	0	0	0	0	0	0	0	0	0	0	1	0	41
Tow Truck	4	0	28	0	0	0	0	0	0	0	6	0	0	0	0	1	0	39
Intercity Bus	2	1	25	0	0	0	0	0	0	0	0	0	0	0	0	0	1	29
All-Terrain Cycle	0	4	1	0	12	0	0	0	0	0	0	0	0	0	0	0	0	17
4 Wheel Drive Vehicle	0	4	0	0	7	0	0	0	1	0	0	0	0	0	0	0	1	13
Trailer Only	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
General Construction	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Snow Mobile	0	2	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	8
Motor Home/Trailer	1	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Farm Vehicle	0	1	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	5
Road Construction	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Mobile Crane	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Sport Utility Vehicle	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Trailer Bike	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Dune Buggy	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Mini Bike	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Mobile Home	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Other	1	36	21	0	8	3	0	2	2	3	0	0	0	0	0	24	6	106
Unknown	5	6	2	0	0	0	0	0	0	0	0	0	0	0	0	1	142	156
Total	922	28,638	2,949	5	918	146	4	248	46	63	12	171	1	1	79	809	35,012	

SECTION 6 – Vehicles in 2003 Collisions

Occupant Restraint Use in 2003 Collisions

SECTION 7

The use of seat belts by motor vehicle drivers and passengers has been mandatory in British Columbia since 1977. In March 1985, child restraint legislation was passed, making it compulsory for children 18 kg and under to be secured in an approved child restraint.

In police-attended injury collisions where driver restraint use was known, 88.0% of injured drivers were wearing a lap and harness (standard lap and shoulder belt assembly). Only 52.1% of drivers killed were wearing a lap and harness.

Among victims killed in passenger cars, 41.0% were unrestrained whereas for victims killed in light trucks, 56.8% were unrestrained.

The tables and graphs in this section strongly indicate the effectiveness of occupant restraints in reducing casualties. In 2003, 83.6% of the drivers involved in casualty collisions who did not use restraints were injured or killed, while 51.6% of those who used the standard lap and harness restraint system were injured or killed.

Similarly, among vehicle passengers involved in casualty collisions, 82.2% of those not using a restraint were injured or killed compared to 52.4% using the standard lap and harness assembly. Among 760 passengers in child restraints, 167 (22.0%) were injured and 2 were killed. Note that these data include only casualty collisions (those in which at least one person was killed or injured). Therefore the data do not address the overall effectiveness of safety devices in preventing injury across all levels of crash severity.

Statistics on occupants ejected from vehicles show that ejection carries a very high risk of injury or death. Among ejected or partially ejected drivers, 16.2% were killed and another 76.8% were injured. Similarly, 12.5% of ejected or partially ejected passengers were killed and 81.2% were injured.

Table 7.01 – Type of restraint used by drivers

Safety Equipment	Not Injured		% Injured		% Killed		% Total		%
	Injured	%	Injured	%	Killed	%	Total	%	
Lap & Harness	12,572	48.4	13,333	51.3	86	0.3	25,991	81.31	
No Restraint Used	219	16.4	1,043	78.0	75	5.6	1,337	4.18	
Lap Belt Only	350	54.7	289	45.2	1	0.2	640	2.00	
Air Bag	173	28.8	424	70.7	3	0.5	600	1.88	
Vehicle Not Equipped	75	57.7	55	42.3	0	0.0	130	0.41	
Harness Only	3	50.0	3	50.0	0	0.0	6	0.02	
Other	1	100.0	0	0.0	0	0.0	1	0.00	
Unknown	2,098	64.3	1,137	34.9	27	0.8	3,262	10.20	
Total	15,491		16,284		192		31,967	100%	

Note:

1) Accident form only allows one type of restraint to be coded, making Air Bag category difficult to interpret.

2) Excludes occupants of motorcycles, snowmobiles and bicycles.

Table 7.02 – Type of restraint used by passengers

Safety Equipment	Not Injured		% Injured		% Killed		% UKN		%
	Injured	%	Injured	%	Killed	%	Killed	%	
Lap & Harness	5,803	47.6	6,342	52.0	58	0.5	0	12,203	71.71
No Restraint Used	219	17.7	959	77.7	56	4.5	1	1,235	7.26
Lap Belt Only	554	51.8	511	47.8	5	0.5	0	1,070	6.29
Child Restraint	591	77.8	167	22.0	2	0.3	0	760	4.47
Vehicle Not Equipped	118	42.6	158	57.0	1	0.4	0	277	1.63
Air Bag	49	27.2	131	72.8	0	0.0	0	180	1.06
Not Applicable	1	3.2	30	96.8	0	0.0	0	31	0.18
Harness Only	9	60.0	6	40.0	0	0.0	0	15	0.09
Unknown	559	44.9	676	54.3	10	0.8	0	1,245	
Total	7,903		8,980		132		1	17,016	93%

Note:

1) Accident form only allows one type of restraint to be coded, making Air Bag category difficult to interpret.

2) Excludes occupants of motorcycles, snowmobiles and bicycles.

SECTION 7 – Occupant Restraint Use in 2003 Collisions

Table 7.03 – Restraint use by victims injured in collisions by position in vehicle

Safety Equipment	Drivers	Front	Front	Back	Back	Back	In the	Hanging				% of Total
		Seat	Seat	Seat	Seat	Seat	Cargo Area	on Outside	Other	Unknown	Total	
Lap & Harness	13,333	489	4,338	554	118	750	58	2	5	28	19,675	77.88
No Restraint Used	1,043	78	445	124	86	132	56	16	6	16	2,002	7.92
Lap Belt Only	289	66	86	93	115	126	18	1	1	5	800	3.17
Air Bag	424	11	109	4	2	5	0	0	0	0	555	2.20
Vehicle Not Equipped	55	4	27	3	10	10	83	2	15	4	213	0.84
Child Restraint	0	2	10	55	48	46	5	0	1	0	167	0.66
Harness Only	3	0	2	0	1	3	0	0	0	0	9	0.04
Not Applicable	0	0	0	0	0	0	0	30	0	0	30	0.12
Unknown	1,137	70	307	74	41	80	30	23	13	38	1,813	7.18
Total	16,284	720	5,324	907	421	1,152	250	74	41	91	25,264	100%

Note:

- 1) Accident form only allows one type of restraint to be coded, making Air Bag category difficult to interpret.
- 2) Excludes occupants of motorcycles, snowmobiles and bicycles.

Table 7.04 – Restraint use by victims killed in collisions by position in vehicle

Safety Equipment	Drivers	Front	Front	Back	Back	Back	In the				% of Total
		Seat	Seat	Seat	Seat	Seat	Cargo Area	Other	Unknown	Total	
Lap & Harness	86	1	48	6	0	1	2	0	0	144	44.44
No Restraint Used	75	2	27	8	4	9	3	1	2	131	40.43
Lap Belt Only	1	2	1	0	1	1	0	0	0	6	1.85
Air Bag	3	0	0	0	0	0	0	0	0	3	0.93
Child Restraint	0	0	0	0	0	2	0	0	0	2	0.62
Vehicle Not Equipped	0	0	0	0	0	0	0	1	0	1	0.31
Unknown	27	1	6	1	1	0	0	0	1	37	11.41975
Total	192	6	82	15	6	13	5	2	3	324	100%

Note:

- 1) Accident form only allows one type of restraint to be coded, making Air Bag category difficult to interpret.
- 2) Excludes occupants of motorcycles, snowmobiles and bicycles.

Table 7.05 – Driver age by restraint use for drivers injured

Driver Age	Vehicle Not Equipped	No Restraint Used	Lap Belt	Harness	Lap & Harness Air Bag		Unknown	Total	% of Total
			Only	Only	Harness	Air Bag			
12	0	0	0	0	1	0	0	1	0.01
13	0	0	0	0	2	0	0	2	0.01
14	1	6	0	0	2	1	2	12	0.07
15	1	6	0	0	11	1	0	19	0.12
16	3	23	5	0	216	5	12	264	1.62
17	1	28	6	0	423	11	29	498	3.06
18	1	44	8	0	454	16	40	563	3.46
19	1	41	6	0	485	15	44	592	3.64
20	1	42	6	0	433	12	40	534	3.28
21	2	40	9	0	424	11	52	538	3.30
22	1	45	8	0	356	17	35	462	2.84
23	0	40	8	0	339	10	25	422	2.59
24	1	38	6	0	307	17	28	397	2.44
25	2	33	5	0	307	7	20	374	2.30
26-30	10	154	20	1	1263	37	124	1,609	9.88
31-35	5	112	22	1	1264	37	131	1,572	9.65
36-40	4	114	37	0	1388	28	111	1,682	10.33
41-45	7	82	46	0	1344	39	112	1,630	10.01
46-50	3	69	29	0	1150	38	102	1,391	8.54
51-55	1	47	23	0	922	37	65	1,095	6.72
56-60	1	30	15	0	684	20	51	801	4.92
61-65	3	10	6	0	479	10	29	537	3.30
66-70	3	4	7	1	311	14	20	360	2.21
71-75	0	10	7	0	300	16	10	343	2.11
76-80	0	3	5	0	225	11	11	255	1.57
81-85	0	7	3	0	145	9	8	172	1.06
86-90	1	3	2	0	61	2	8	77	0.47
91-95	0	1	0	0	6	0	0	7	0.04
95+	0	0	0	0	1	0	0	1	0.01
Unknown	2	11	0	0	30	3	28	74	0.45
Total	55	1,043	289	3	13,333	424	1,137	16,284	100%

Note:

- 1) Accident form only allows one type of restraint to be coded, making Air Bag category difficult to interpret.
- 2) Excludes drivers of motorcycles, snowmobiles and bicycles.

SECTION 7 – Occupant Restraint Use in 2003 Collisions

Table 7.06 – Driver age by restraint use for drivers killed

Driver	No Restraint Used	Lap Belt Only	Lap & Harness	Air Bag	Unknown	Total	% of Total
Age							
13	1	0	0	0	0	1	0.52
16	1	0	0	0	1	2	1.04
17	0	0	4	0	1	5	2.60
18	2	0	2	0	0	4	2.08
19	4	0	2	0	0	6	3.13
20	1	0	2	0	0	3	1.56
21	2	0	2	0	0	4	2.08
22	6	0	1	0	0	7	3.65
23	3	0	1	0	1	5	2.60
24	1	0	2	1	2	6	3.13
25	2	0	1	0	0	3	1.56
26-30	6	0	10	0	3	19	9.90
31-35	2	0	5	0	2	9	4.69
36-40	12	0	10	1	2	25	13.02
41-45	7	0	8	0	1	16	8.33
46-50	4	0	6	1	5	16	8.33
51-55	10	0	1	0	3	14	7.29
56-60	3	0	6	0	2	11	5.73
61-65	3	1	3	0	0	7	3.65
66-70	0	0	5	0	1	6	3.13
71-75	3	0	1	0	1	5	2.60
76-80	1	0	8	0	2	11	5.73
81-85	1	0	4	0	0	5	2.60
86-90	0	0	2	0	0	2	1.04
Total	75	1	86	3	27	192	100%

Note:

1) Accident form only allows one type of restraint to be coded, making Air Bag category difficult to interpret.

2) Excludes drivers of motorcycles, snowmobiles and bicycles.

SECTION 7 – Occupant Restraint Use in 2003 Collisions

Figure 7.01 – Restraint use by drivers injured

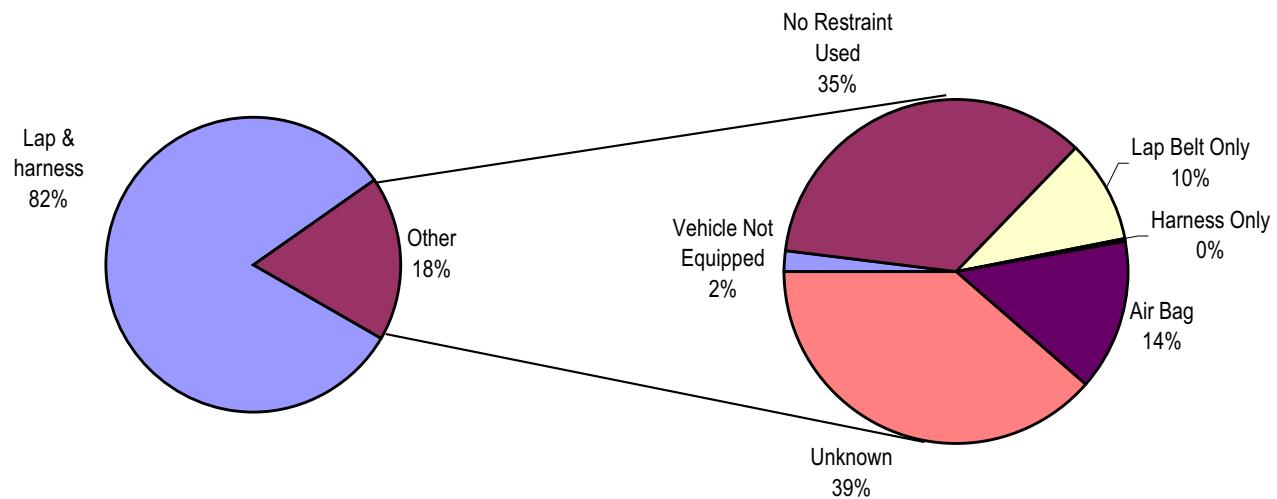


Figure 7.02 – Restraint use by drivers killed

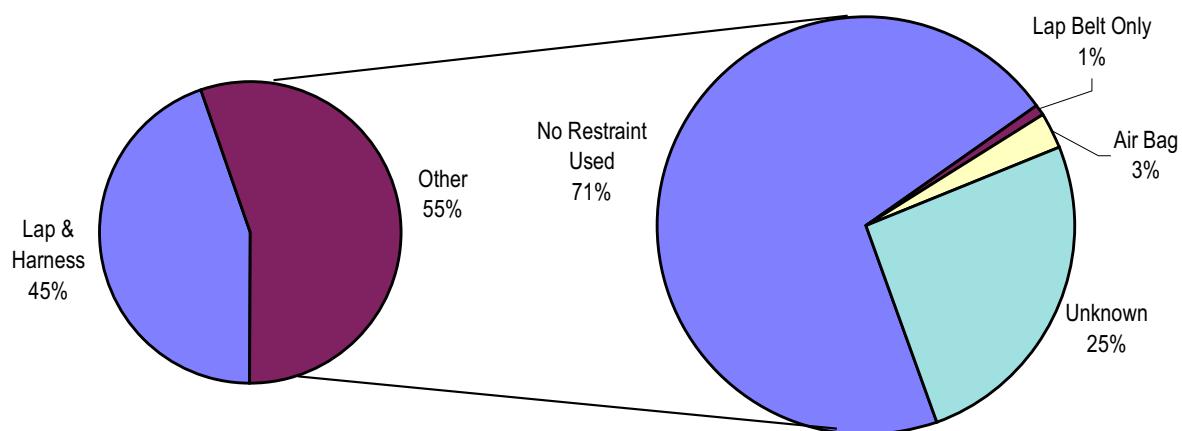
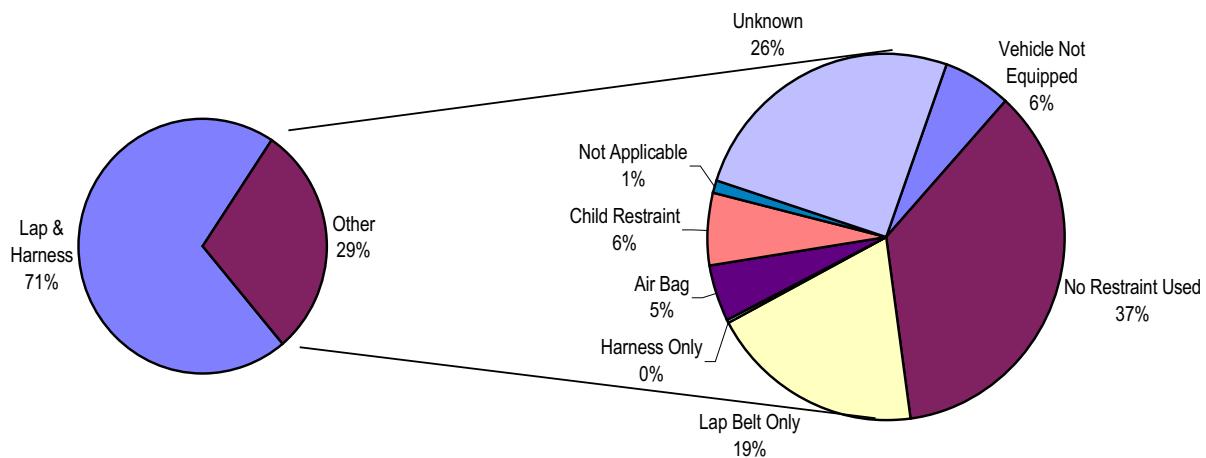
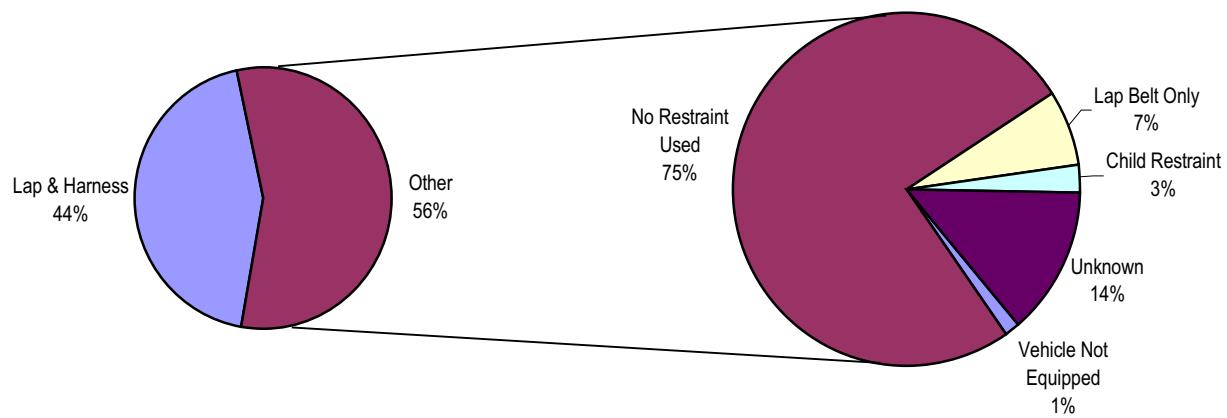


Table 7.07 – Passenger age by restraint use for passengers injured

Passenger Age	Vehicle Not Equipped	No Restraint Used	Lap Belt Only	Harness Only	Lap & Harness	Air Bag	Child - Restraint	Not Applicable	Unknown	Total	% of Total
1	0	2	1	1	6	0	39	0	2	51	0.57
2	0	1	2	0	9	0	31	0	2	45	0.50
3	1	4	6	0	14	0	31	0	4	60	0.67
4	1	3	8	1	28	0	30	0	1	72	0.80
5	1	4	15	0	47	0	15	0	5	87	0.97
6	2	1	12	0	51	1	11	0	2	80	0.89
7	1	3	10	0	49	1	1	0	4	69	0.77
8	0	7	15	0	67	0	2	0	9	100	1.11
9	1	4	23	0	80	1	0	0	5	114	1.27
10	1	2	12	0	69	0	1	0	5	90	1.00
11	1	7	11	0	77	0	0	0	3	99	1.10
12	1	10	6	1	99	2	1	0	7	127	1.41
13	5	10	8	0	79	2	0	0	5	109	1.21
14	6	26	12	0	99	2	0	0	9	154	1.71
15	3	41	19	0	135	2	0	0	17	217	2.42
16	7	56	22	0	244	3	0	0	31	363	4.04
17	4	77	47	1	308	7	0	0	36	480	5.35
18	6	81	29	0	265	6	0	0	32	419	4.67
19	8	38	27	0	258	4	0	0	21	356	3.96
20	4	63	15	0	229	11	0	1	28	351	3.91
21	7	48	15	0	176	5	0	1	23	275	3.06
22	2	47	13	0	172	6	0	0	15	255	2.84
23	5	37	14	0	164	3	0	0	15	238	2.65
24	2	25	11	0	123	4	0	0	13	178	1.98
25	3	20	6	0	147	4	0	1	16	197	2.19
26-30	11	66	23	0	441	10	0	4	52	607	6.76
31-35	15	53	20	0	338	8	0	2	33	469	5.22
36-40	10	47	17	0	351	7	0	2	28	462	5.14
41-45	6	30	13	0	329	6	0	5	28	417	4.64
46-50	6	21	14	1	313	4	0	2	24	385	4.29
51-55	3	18	10	0	249	4	0	4	22	310	3.45
56-60	4	16	7	0	202	2	0	2	14	247	2.75
61-65	4	6	6	0	176	5	0	1	14	212	2.36
66-70	6	5	7	0	139	5	0	1	8	171	1.90
71-75	5	3	5	0	149	3	0	1	9	175	1.95
76-80	0	7	3	0	124	1	0	1	5	141	1.57
81-85	2	2	3	0	69	2	0	1	2	81	0.90
86-90	1	3	4	0	25	0	0	0	2	35	0.39
91-95	0	1	0	0	8	0	0	0	0	9	0.10
Unknown	13	64	20	1	434	10	5	1	125	673	7.49
Total	158	959	511	6	6,342	131	167	30	676	8,980	100%

SECTION 7 – Occupant Restraint Use in 2003 Collisions
Table 7.08 – Passenger age by restraint use for passengers killed

Passenger Age	Vehicle Not Equipped	No Restraint Used	Lap Belt Only	Lap & Harness	Child Restraint	Unknown	Total	% of Total
1	0	0	0	0	2	0	2	1.52
4	0	1	0	0	0	0	1	0.76
7	0	0	0	0	0	1	1	0.76
8	0	0	0	2	0	0	2	1.52
10	0	0	0	1	0	0	1	0.76
12	0	1	0	0	0	1	2	1.52
13	0	2	1	2	0	0	5	3.79
14	0	0	0	1	0	0	1	0.76
15	0	3	0	1	0	1	5	3.79
16	0	2	0	1	0	0	3	2.27
17	0	6	0	3	0	0	9	6.82
18	0	1	0	2	0	0	3	2.27
19	0	3	0	2	0	1	6	4.55
20	0	3	0	0	0	1	4	3.03
21	0	2	1	5	0	0	8	6.06
22	0	0	0	1	0	0	1	0.76
23	0	4	0	1	0	0	5	3.79
24	0	2	0	2	0	1	5	3.79
25	0	0	0	2	0	0	2	1.52
26-30	0	9	0	2	0	1	12	9.09
31-35	0	3	0	1	0	0	4	3.03
36-40	0	2	1	3	0	0	6	4.55
41-45	0	0	0	3	0	1	4	3.03
46-50	0	2	0	2	0	1	5	3.79
51-55	0	0	0	1	0	0	1	0.76
56-60	0	2	0	2	0	0	4	3.03
61-65	0	1	0	3	0	0	4	3.03
66-70	0	0	0	5	0	1	6	4.55
71-75	0	4	0	2	0	0	6	4.55
76-80	0	0	0	2	0	0	2	1.52
81-85	0	0	1	3	0	0	4	3.03
86-90	0	0	1	1	0	0	2	1.52
Unknown	1	3	0	2	0	0	6	4.55
Total	1	56	5	58	2	10	132	100%

Figure 7.03 – Restraint use by passengers injured**Figure 7.04 – Restraint use by passengers killed**

SECTION 7 – Occupant Restraint Use in 2003 Collisions

Table 7.09 – Ejection of drivers and injury outcome in casualty collisions

Ejection	Not				Total
	Injured	Injured	Killed		
Not Ejected	15,432	16,066	152		31,650
Partially Ejected	3	62	11		76
Ejected	14	123	28		165
Unknown	42	33	1		76
Total	15,491	16,284	192		31,967

Note: Excludes drivers of motorcycles, snowmobiles and bicycles.

Table 7.10 – Ejection of passengers and injury outcome in casualty collision

Ejection	Not				Total
	Injured	Injured	Killed	Unknown	
Not Ejected	7,873	8,716	99	1	16,688
Ejected	12	158	28	0	198
Partially Ejected	4	49	4	0	57
Not Applicable	1	30	0	0	31
Unknown	13	27	1	0	41
Total	7,903	8,980	132	1	17,016

Note: Excludes occupants of motorcycles, snowmobiles and bicycles.

Table 7.11 – Restraint use and occupant ejection

Safety Equipment	Not		Partially			Not	Total
	Ejected	Ejected	Ejected	Applicable	Unknown		
Lap & Harness	38,097	37	51	0	15	38,200	
No Restraint Used	2,232	71	262	2	5	2,572	
Lap Belt Only	1,703	2	3	0	2	1,710	
Air Bag	776	3	1	0	2	782	
Child Restraint	757	0	2	0	1	760	
Vehicle Not Equipped	383	4	14	0	6	407	
Harness Only	20	1	0	0	0	21	
Other	1	0	0	0	0	1	
Not Applicable	1	0	1	29	0	31	
Unknown	4,379	15	29	0	86	4,509	
Total	48,349	133	363	31	117	48,993	

Note:

- 1) Excludes occupants of motorcycles, snowmobiles and bicycles.
- 2) Accident form only allows one type of restraint to be coded, making Air Bag category difficult to interpret.

Table 7.12 – Restraint use by victims injured by vehicle type

Vehicle Type	Vehicle Not Equipped	No Restraint Used	Lap Belt Only	Harness Only	Lap & Harness	Air Bag	Child - Restraint	Not Applicable	Unknown	Total
Passenger Car	77	1,428	604	9	16,650	510	159	16	1,445	20,898
Single Unit Truck/ Light	19	438	140	0	2,422	39	8	7	251	3,324
Single Unit Truck/ Heavy	2	31	12	0	107	5	0	1	19	177
Truck & Camper	0	10	4	0	103	1	0	1	21	140
Tractor Trailer & Pup	2	26	8	0	80	0	0	0	5	121
Tractor Trailer	0	11	4	0	55	0	0	0	9	79
Local Transit Bus	31	2	6	0	15	0	0	1	11	66
Intercity Bus	54	2	1	0	3	0	0	0	1	61
Motor Home	1	4	3	0	38	0	0	1	14	61
Logging Truck & Pole Trailer	0	17	3	0	26	0	0	0	2	48
Heavy Truck/Trailer	1	11	3	0	28	0	0	0	4	47
Truck/ Camper & Trailer	0	3	2	0	36	0	0	0	5	46
Car & Trailer	1	0	0	0	37	0	0	0	4	42
Light Truck/Trailer	0	3	3	0	29	0	0	0	5	40
School Bus	9	9	5	0	7	0	0	0	6	36
Tow Truck	0	5	0	0	7	0	0	1	4	17
4 Wheel Drive Vehicle	4	0	0	0	0	0	0	0	3	7
Trailer Only	0	0	1	0	3	0	0	0	0	4
General Construction	1	0	0	0	0	0	0	0	1	2
Mobile Crane	0	1	0	0	1	0	0	0	0	2
Motor Home/Trailer	0	0	1	0	0	0	0	0	0	1
Dune Buggy	1	0	0	0	0	0	0	0	0	1
Road Construction	0	0	0	0	0	0	0	0	1	1
Mobile Home	0	0	0	0	1	0	0	0	0	1
Other	9	1	0	0	12	0	0	1	1	24
Unknown	1	0	0	0	15	0	0	1	1	18
Total	213	2,002	800	9	19,675	555	167	30	1,813	25,264

Note: Excludes occupants of motorcycles, snowmobiles and bicycles.

SECTION 7 – Occupant Restraint Use in 2003 Collisions

Table 7.13 – Restraint use by victims killed by vehicle type

Vehicle Type	Vehicle Not Equipped	No Restraint Used	Lap Belt Only	Lap & Harness	Air Bag	Child Restraint	Unknown	Total
Passenger Car	1	82	4	109	3	1	27	227
Single Unit Truck/ Light	0	42	2	29	0	1	6	80
Tractor Trailer & Pup	0	1	0	3	0	0	2	6
Logging Truck & Pole Trailer	0	3	0	0	0	0	1	4
Truck & Camper	0	1	0	0	0	0	1	2
Motor Home	0	0	0	2	0	0	0	2
Car & Trailer	0	0	0	1	0	0	0	1
Heavy Truck/Trailer	0	1	0	0	0	0	0	1
Tractor Trailer	0	1	0	0	0	0	0	1
Total	1	131	6	144	3	2	37	324

Note:

- 1) Excludes occupants of motorcycles, snowmobiles and bicycles.
- 2) Accident form only allows one type of restraint to be coded, making Air Bag category difficult to interpret.

Environmental Conditions and Collision Context

SECTION 8

The environmental conditions that are reported in police attended casualty collisions do not vary greatly from year to year. Environmental factors were reported to be a contributing factor in 14.8% of the collisions in which factors were reported in 2003. The figure was 15.2% in 2002.

In general, the degree to which certain environmental conditions are represented in collisions reflects the degree to which these conditions are found in the overall environment. For example, the majority of collisions occur on asphalt roads because asphalt is the predominant road surface in the province.

In 2003, of the 19,875 casualty collisions, 95.7% occurred on asphalt roads; 62.8% happened in daylight; 62.2% took place on dry road surfaces and 51.0% occurred under clear weather conditions.

More than half of the injury collisions in 2003 took place in urban residential areas or business or shopping districts. These two areas accounted for 57.3% of all 2003 casualty collisions.

However, for fatal collisions, about 35.4% occurred in agricultural or undeveloped areas while urban residential and business or shopping districts together accounted for 32.9% of the fatal collisions.

A little more than one half of all casualty collisions (51.5%) took place on roads where the posted speed limit is 50 km/h. This is likely because a 50 km/h speed limit applies to the largest distance of roads in the province. Speed limits of 80 km/h and greater accounted for 18.5% of all injury collisions and 39.5% of all fatal collisions.

In 2003, 56.4% of all casualty collisions occurred in locations without traffic control devices and 17.4% of these collisions took place at intersections. Locations with illuminated traffic signals accounted for 19.3% of all 2003 casualty collisions and locations with stops signs accounted for 12.1%. Overall, 43.5% of casualty collisions occurred at intersections.

Table 8.01 – Collisions by road surface type

Road Surface Type	Injury	Fatal	Total	% of Total
Asphalt	18,644	366	19,010	95.65
Gravel	464	21	485	2.44
Concrete	157	2	159	0.80
Earth	70	3	73	0.37
Oiled Gravel	14	1	15	0.08
Wood	12	0	12	0.06
Brick/Stone	11	0	11	0.06
Other	9	0	9	0.05
Unknown	99	2	101	0.51
Total	19,480	395	19,875	100%

Table 8.02 – Collisions by roadway surface condition

Road Surface	Injury	Fatal	Total	% of Total
Dry	12,121	243	12,364	62.21
Wet	5,469	96	5,565	28.00
Ice	910	24	934	4.70
Snow	543	13	556	2.80
Slush	258	12	270	1.36
Muddy	33	0	33	0.17
Other	24	4	28	0.14
Unknown	122	3	125	0.63
Total	19,480	395	19,875	100%

SECTION 8 – Environmental Conditions and Collision Context in 2003

Table 8.03 – Collisions by lighting condition

Lighting condition	Injury	Fatal	Total	% of Total
Daylight	12,282	191	12,473	62.76
Dark/Some Illumination	2,671	60	2,731	13.74
Dark/No Illumination	1,680	88	1,768	8.90
Dark/Full Illumination	1,579	23	1,602	8.06
Dusk	747	14	761	3.83
Dawn	381	14	395	1.99
Other	3	1	4	0.02
Unknown	137	4	141	0.71
Total	19,480	395	19,875	100%

Table 8.04 – Collisions by weather condition

Weather Condition	Injury	Fatal	Total	% of Total
Clear	9,958	182	10,140	51.02
Cloudy	5,189	134	5,323	26.78
Raining	3,210	50	3,260	16.40
Snowing	715	17	732	3.68
Fog	173	7	180	0.91
Smog/Smoke	31	2	33	0.17
Hail	28	0	28	0.14
Strong Wind	24	0	24	0.12
Other	7	0	7	0.04
Unknown	145	3	148	0.74
Total	19,480	395	19,875	100%

Table 8.05 – Collisions by land usage

Land Use	Injury	Fatal	Total	% of Total
Urban Residential	6,240	71	6,311	31.75
Business / Shopping	5,019	59	5,078	25.55
Agricultural / Undeveloped	2,795	140	2,935	14.77
Rural Residential	2,481	78	2,559	12.88
Industrial / Manufacturing	1,142	15	1,157	5.82
Apartment Residential	788	12	800	4.03
School/Playground	391	3	394	1.98
Recreational / Park / Camping	378	13	391	1.97
Other	56	0	56	0.28
Unknown	190	4	194	0.98
Total	19,480	395	19,875	100%

Table 8.06 – Collisions by collision location

Collision Location	Injury	Fatal	Total	% of Total
At intersection	8,558	85	8,643	43.49
Between Intersection:Exchanges	7,892	259	8,151	41.01
Intersection of Road & Driveway or Alley	972	11	983	4.95
Off Highway	460	10	470	2.36
Parking Lot:Single/Multilevel	426	5	431	2.17
Bridge	292	8	300	1.51
Exit Ramp	116	0	116	0.58
Entrance Ramp	88	1	89	0.45
Entrance Intersection	85	1	86	0.43
Entrance Acceleration Lane	41	1	42	0.21
Industrial Road	37	5	42	0.21
Railroad crossing	35	1	36	0.18
Exit Intersection	33	0	33	0.17
Exit Deceleration lane	23	0	23	0.12
Tunnel	18	0	18	0.09
Ferry or Dock	9	0	9	0.05
Transit -Express Lane	9	0	9	0.05
Other	175	5	180	0.91
Unknown	211	3	214	1.08
Total	19,480	395	19,875	100%

Table 8.07 – Collisions by road jurisdiction

Road Jurisdiction	Injury	Fatal	Total	% of Total
City/Municipality Street	13,093	157	13,250	66.67
Provincial Highway	5,147	201	5,348	26.91
Rural Road	1,240	37	1,277	6.43
Total	19,480	395	19,875	100%

Table 8.09 – Collisions by posted speed limit

Speed	Injury	Fatal	Total	% Fatal	% of Total
Posted at 10 km/hr	64	0	64	0.00	0.32
Posted at 20 km/hr	48	0	48	0.00	0.24
Posted at 30 km/hr	321	2	323	0.62	1.63
Posted at 40 km/hr	104	0	104	0.00	0.52
Posted at 50 km/hr	10,133	109	10,242	1.06	51.53
Posted at 60 km/hr	2,294	49	2,343	2.09	11.79
Posted at 70 km/hr	495	16	511	3.13	2.57
Posted at 80 km/hr	1,498	48	1,546	3.10	7.78
Posted at 90 km/hr	934	44	978	4.50	4.92
Posted at 100 km/hr	903	54	957	5.64	4.82
Posted at 110 km/hr	221	6	227	2.64	1.14
Advisory - 10 km/hr	14	1	15	6.67	0.08
Advisory - 20 km/hr	51	1	52	1.92	0.26
Advisory - 30 km/hr	124	2	126	1.59	0.63
Advisory - 40 km/hr	67	5	72	6.94	0.36
Advisory - 50 km/hr	836	11	847	1.30	4.26
Advisory - 60 km/hr	112	3	115	2.61	0.58
Advisory - 70 km/hr	27	7	34	20.59	0.17
Advisory - 80 km/hr	36	3	39	7.69	0.20
Advisory - 90 km/hr	2	1	3	33.33	0.02
Special - 10 km/hr	11	1	12	8.33	0.06
Special - 20 km/hr	8	0	8	0.00	0.04
Special - 30 km/hr	26	0	26	0.00	0.13
Special - 40 km/hr	2	0	2	0.00	0.01
Special - 50 km/hr	18	3	21	14.29	0.11
Special - 60 km/hr	14	0	14	0.00	0.07
Special - 70 km/hr	5	0	5	0.00	0.03
Special - 80 km/hr	10	0	10	0.00	0.05
Other	191	6	197	3.05	0.99
Unknown	911	23	934	2.46	4.70
Total	19,480	395	19,875	1.99%	100%

Note: "% Fatal" is fatal collisions out of the total of a given speed category.

SECTION 8 – Environmental Conditions and Collision Context in 2003

Figure 8.01 - Proportion of fatal to total casualty collisions by speed limit

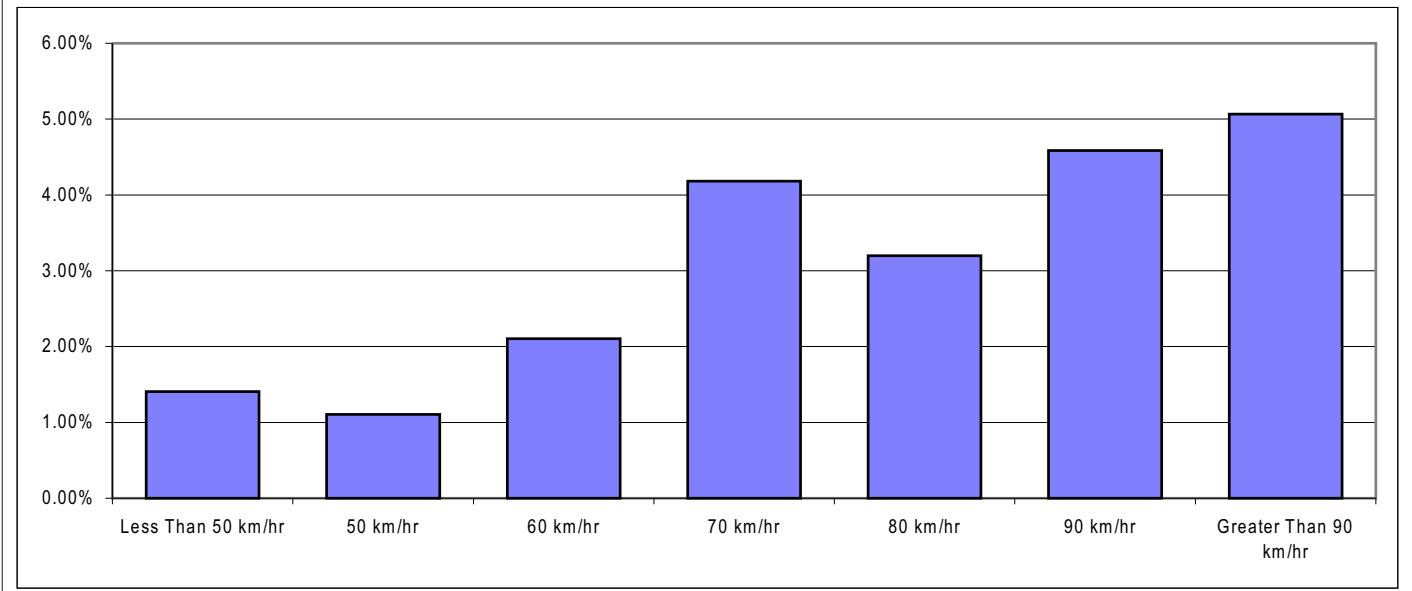


Table 8.10 – Traffic control device and collision location

Control Device	Stop Sign		Yield Sign		Officer/Flag/ School Guard		Railroad Xing Sign	Lane Use		Signal with			Land Use			
	Stop Sign	Yield Sign	School Guard	Xing Sign	Railroad Control Sign	Lane Use Turn	Traffic Signal	Adv. Flashers	Flashing Signal	Signal	None	Other	Unk	NA	Total	
At intersection	2,206	189		19	6	56	3,510	242	155	5	1,954	65	236	0	8,643	
Between Intersection:Exchanges	100	14		40	8	39	239	14	11	4	7,549	30	103	0	8,151	
Intersection of Road & Driveway or Alley	54	3		1	1	13	20	0	3	0	872	8	8	0	983	
Off Highway	0	0		0	0	0	0	0	0	0	0	0	0	0	470	
Parking Lot:Single/Multilevel	0	0		0	0	0	0	0	0	0	0	0	0	0	431	
Bridge	3	11		1	3	12	4	0	0	7	248	8	3	0	300	
Exit Ramp	7	18		2	0	3	2	0	0	0	79	1	4	0	116	
Entrance Ramp	2	18		0	0	2	2	0	0	0	65	0	0	0	89	
Entrance Intersection	10	8		1	0	1	29	1	1	0	33	0	2	0	86	
Entrance Acceleration Lane	1	9		0	0	0	2	0	0	0	28	0	2	0	42	
Industrial Road	0	0		0	0	0	0	0	0	0	40	1	1	0	42	
Railroad crossing	2	0		0	17	0	0	0	2	0	13	1	1	0	36	
Exit Intersection	6	4		1	0	0	10	0	0	0	10	1	1	0	33	
Exit Deceleration lane	1	1		0	0	2	0	0	0	1	17	0	1	0	23	
Tunnel	0	0		0	0	4	0	0	0	3	11	0	0	0	18	
Ferry or Dock	0	0		1	0	0	0	0	0	0	8	0	0	0	9	
Transit -Express Lane	0	0		0	0	0	1	0	0	0	7	0	1	0	9	
Other	6	2		1	0	2	4	0	1	0	150	9	5	0	180	
Unknown	4	4		0	3	0	14	0	1	0	130	1	57	0	214	
Total	2,402	281		67	38	134	3,837	257	174	20	11,214	125	425	901	19,875	

Collision Configurations in 2003

SECTION 9

The distribution of police-attended casualty collisions among the various collision configurations changes little from year to year.

About 71.1% of police attended casualty collisions involved multiple vehicles and 28.9% were single vehicle collisions. Of all fatal collisions, 39.7% involved a single vehicle. Thus multiple vehicle collisions are more common, but single vehicle collisions are more often fatal.

Rear-end collisions are the most common type of multiple vehicle casualty collision, accounting for 27.8% of all such collisions in 2003. The next most frequent type is right-angle collisions, which made up 22.1% of the multiple vehicle collisions, followed by turning left across on-coming traffic at 13.2%. Head-on collisions were the most frequent occurrence among fatal multiple vehicle collisions.

Of all single vehicle casualty collisions, 44.8% involved travelling off the road to the right, followed by travelling off the road to the left (31.5%).

Single and multiple vehicle collisions by collision type

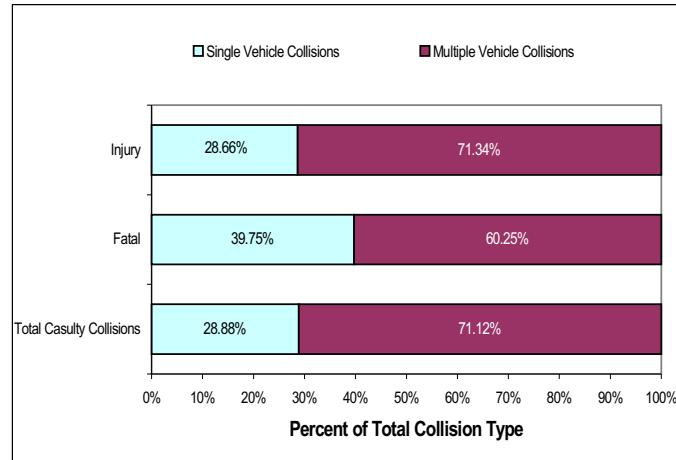


Table 9.01 – Collisions by primary collision occurrence

Primary Collision occurrence	% of			
	Injury	Fatal	Total	Total
Rear End	3,930	15	3,945	19.85
Intersection - Right Angle	3,113	32	3,145	15.82
Off Road Right	2,623	79	2,702	13.59
Off Road Left	1,885	58	1,943	9.78
Left Turn-Across Oncoming Traffic	1,871	15	1,886	9.49
Head On	693	76	769	3.87
Left Turn - Head On	525	4	529	2.66
Side Swipe-Opposite Direction	482	7	489	2.46
Overtaking	323	1	324	1.63
Backing Up	215	6	221	1.11
Left Turn - One Way	159	0	159	0.80
Right Turn - Rear End	124	0	124	0.62
Right Turn - Head On	112	2	114	0.57
Right Turn - Same Direction	49	2	51	0.26
One Way Street	46	1	47	0.24
Right Turn-Opposite Direction	30	1	31	0.16
Other	2,697	83	2,780	13.99
Unknown	603	13	616	3.10
Total	19,480	395	19,875	100%

Table 9.02 – Single vehicle collisions by primary collision occurrence

Primary Collision occurrence	% of			
	Injury	Fatal	Total	Total
Off Road Right	2,497	73	2,570	44.77
Off Road Left	1,752	55	1,807	31.48
Head On	97	1	98	1.71
Backing Up	31	2	33	0.57
Side Swipe-Opposite Direction	30	0	30	0.52
Overtaking	26	0	26	0.45
Intersection - Right Angle	22	0	22	0.38
Left Turn-Across Oncoming Traffic	16	0	16	0.28
Left Turn - Head On	15	0	15	0.26
Rear End	13	1	14	0.24
One Way Street	12	0	12	0.21
Right Turn - Same Direction	6	0	6	0.10
Left Turn - One Way	6	0	6	0.10
Right Turn-Opposite Direction	5	0	5	0.09
Right Turn - Rear End	4	0	4	0.07
Right Turn - Head On	1	0	1	0.02
Other	894	20	914	15.92
Unknown	156	5	161	2.80
Total	5,583	157	5,740	100%

Note: Single vehicle collisions are those that do not involve any other entities. For example, a collision involving a vehicle and a pedestrian is not a single vehicle collision.

SECTION 9 – Collision Configurations in 2003

Table 9.03 – Non-single vehicle collisions by primary collision occurrence

Primary Collision occurrence	Injury	Fatal	Total	% of Total
Rear End	3,917	14	3,931	27.81
Intersection - Right Angle	3,091	32	3,123	22.09
Left Turn-Across Oncoming Traffic	1,855	15	1,870	13.23
Head On	596	75	671	4.75
Left Turn - Head On	510	4	514	3.64
Side Swipe-Opposite Direction	452	7	459	3.25
Overtaking	297	1	298	2.11
Backing Up	184	4	188	1.33
Left Turn - One Way	153	0	153	1.08
Off Road Left	133	3	136	0.96
Off Road Right	126	6	132	0.93
Right Turn - Rear End	120	0	120	0.85
Right Turn - Head On	111	2	113	0.80
Right Turn - Same Direction	43	2	45	0.32
One Way Street	34	1	35	0.25
Right Turn-Opposite Direction	25	1	26	0.18
Other	1,803	63	1,866	13.20
Unknown	447	8	455	3.22
Total	13,897	238	14,135	100%

Note: Non-single vehicle collisions are those that involve either more than one vehicle or a vehicle and another entity, such as a pedestrian or a cyclist.

Alcohol Related Collisions in 2003

SECTION 10

Alcohol-related collisions presented in this report are those police-attended collisions where alcohol involvement was judged to be a contributing factor to the collision. These also include collisions where a pedestrian or bicyclist was judged to be affected by alcohol. This is a judgement made by an attending police officer and is very often (but not always) supported by breathalyser tests, toxicology reports or other formal measures of alcohol presence. Furthermore, the alcohol involvement factor does not always implicate the laying of charges in this connection. Police reports tend to underestimate the presence of alcohol in collisions. Where toxicology reports are available for fatally injured victims, they show a higher proportion of alcohol involvement.

Collisions

In 2003, 2,095 (10.8%) of all police attended injury collisions and 93 (23.5%) of all reported fatal collisions involved alcohol. The proportion of fatal alcohol-related collisions in 2002 was 105 (25.5%), 12 more than that in 2003. The number and proportion of alcohol-related injury collisions were up from 1,935 in 2002 to 2,095 in 2003. Close to 4.3% of the alcohol-related casualty collisions resulted in death in 2003 compared to 5.1% in 2002.

Casualties

Approximately 23.0% (102) of all persons killed in motor vehicle collisions in 2003 were victims of collisions involving alcohol, compared to 24.4% (126) in 2002.

Of all the injured victims (3,248) in 2003 alcohol-related collisions, 71.2% were in or on the drinking driver's vehicle. Similarly, 83.3% of all victims killed (102) in 2003 alcohol-related collisions were in the drinking-driver's vehicle.

There were 17 (out of 102) persons killed that were not in the drinking drivers' vehicle.

Collisions involving drinking drivers only (i.e. Excluding collisions that involved drinking pedestrians and bicyclists) resulted in 3,149 injured and 95 killed victims.

Driver age and gender

Of all drivers with the alcohol factor involved in police attended casualty collisions, 79.3% were male. With respect to age, 7.0% of the alcohol-involved drivers were under the legal drinking age of 19. Young male drinking drivers are predominately responsible for alcohol-related collisions. The group 21 – 25 year old males, followed by 16-20 year old males, accounted for the highest number of drinking drivers. For females, alcohol involvement in collisions peaked in the 16-20 age group. It went down in the 26-30 and 31-35 age groups and up again in the 36-40 and 41-45 groups. After the age of 45, the likelihood of alcohol-involvement declines.

Time of occurrence

Consistent with previous years, alcohol-related casualty collisions are more likely to occur on weekends (Friday, Saturday, Sunday) than on weekdays. In 2003, approximately 61.0% of all alcohol-related injury collisions occurred on weekends. Likewise, 63.4% of all alcohol-related fatal collisions happened on weekends.

The peak occurrence for alcohol-related injury collisions is between the hours of 9:00pm and 3:00 a.m. Collisions occurring during this period accounted for about 48.4% of all alcohol-related casualty collisions. The peak for alcohol-related fatal collisions occurred between 11:00pm and 12:00am.



SECTION 10 – Alcohol Related Collisions in 2003

Table 10.01 – Alcohol related collisions and victims by month

Month	Collisions			Victims		
	Injury	Fatal	Total	Injured	Killed	Total
January	143	7	150	205	8	213
February	109	4	113	178	4	182
March	173	5	178	274	5	279
April	146	4	150	222	4	226
May	180	12	192	276	13	289
June	184	8	192	279	8	287
July	211	8	219	325	9	334
August	213	10	223	350	12	362
September	193	11	204	290	14	304
October	175	9	184	295	9	304
November	178	3	181	266	4	270
December	190	12	202	288	12	300
Total	2,095	93	2,188	3,248	102	3,350

Note: Includes pedestrians with the alcohol factor who were responsible for the collision.

Figure 10.01 – Alcohol related collisions: Collisions and victims by month

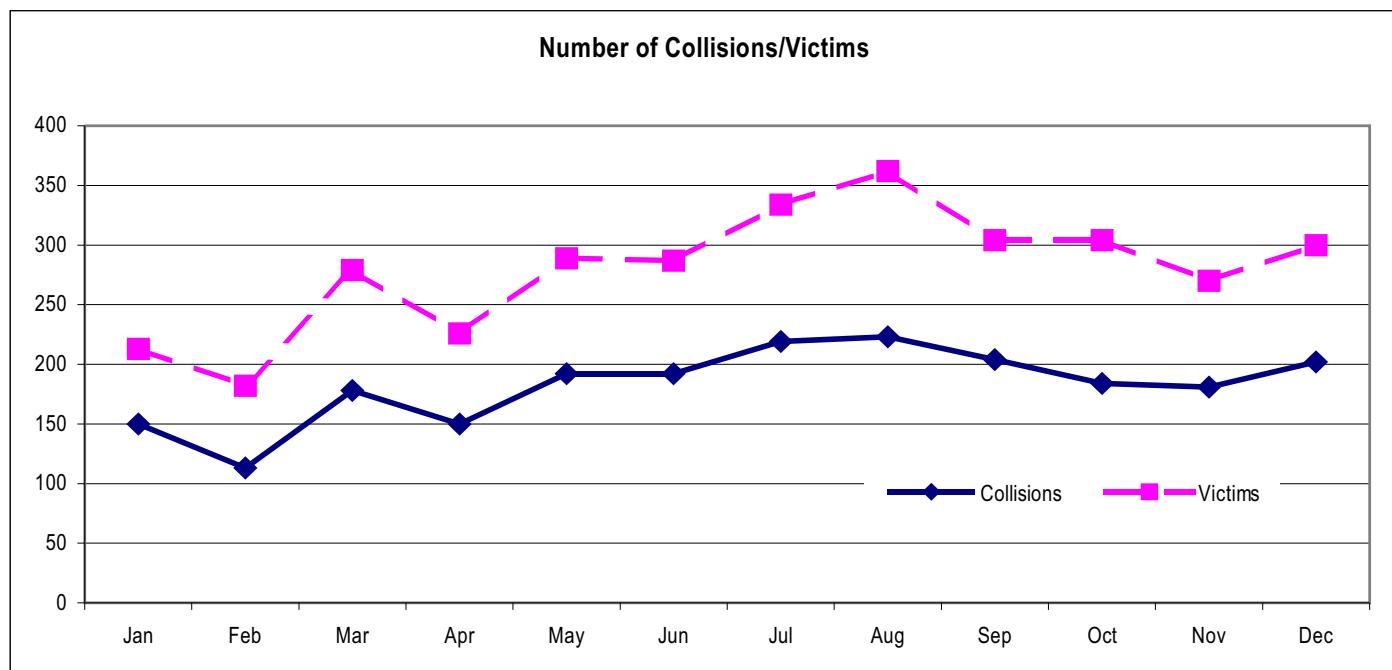


Table 10.02 – Alcohol related injury collisions by day of week and collision hour

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total Collisions	% of Total
0000-0059	43	14	15	16	22	19	40	169	8.07
0100-0159	45	14	14	19	16	20	43	171	8.16
0200-0259	56	13	11	13	20	20	64	197	9.40
0300-0359	32	9	7	12	12	14	32	118	5.63
0400-0459	19	6	5	9	1	7	27	74	3.53
0500-0559	12	3	3	3	2	6	20	49	2.34
0600-0659	7	5	3	3	5	2	7	32	1.53
0700-0759	12	1	2	2	4	1	8	30	1.43
0800-0859	3	1	2	3	0	1	3	13	0.62
0900-0959	4	0	2	4	4	2	4	20	0.95
1000-1059	5	0	3	2	0	0	3	13	0.62
1100-1159	3	0	0	2	1	1	3	10	0.48
1200-1259	4	1	0	4	4	2	11	26	1.24
1300-1359	10	5	5	4	4	0	7	35	1.67
1400-1459	7	5	4	6	5	2	10	39	1.86
1500-1559	10	8	7	5	4	10	10	54	2.58
1600-1659	7	10	7	5	12	12	14	67	3.20
1700-1759	16	10	8	14	6	20	23	97	4.63
1800-1859	18	6	10	12	14	11	34	105	5.01
1900-1959	20	14	14	20	9	24	23	124	5.92
2000-2059	25	11	17	9	17	24	19	122	5.82
2100-2159	21	18	14	21	18	29	30	151	7.21
2200-2259	26	11	13	16	18	39	30	153	7.30
2300-2359	22	16	16	21	12	50	35	172	8.21
Unknown	17	8	3	5	4	10	7	54	2.58
Total	444	189	185	230	214	326	507	2,095	100%

SECTION 10 – Alcohol Related Collisions in 2003

Figure 10.02 – Distribution of alcohol related collisions and victims by collision hour

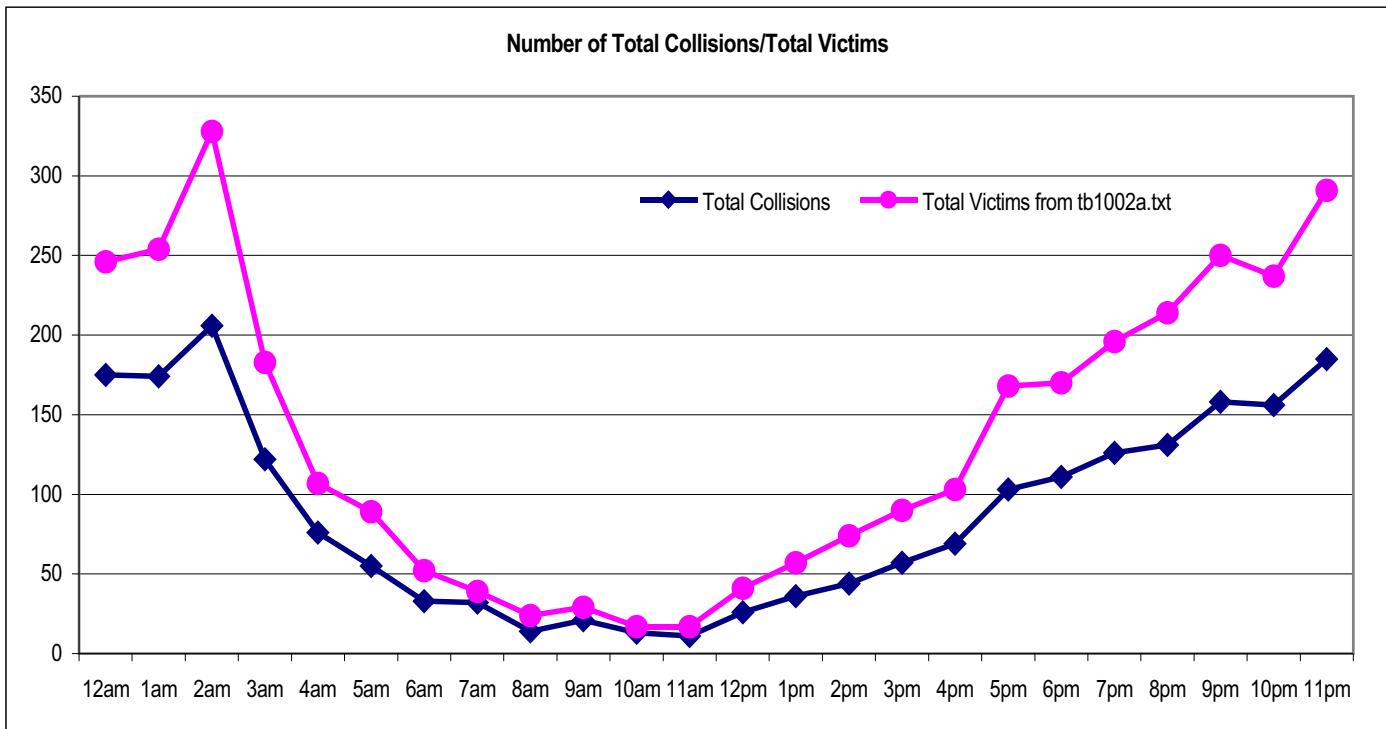
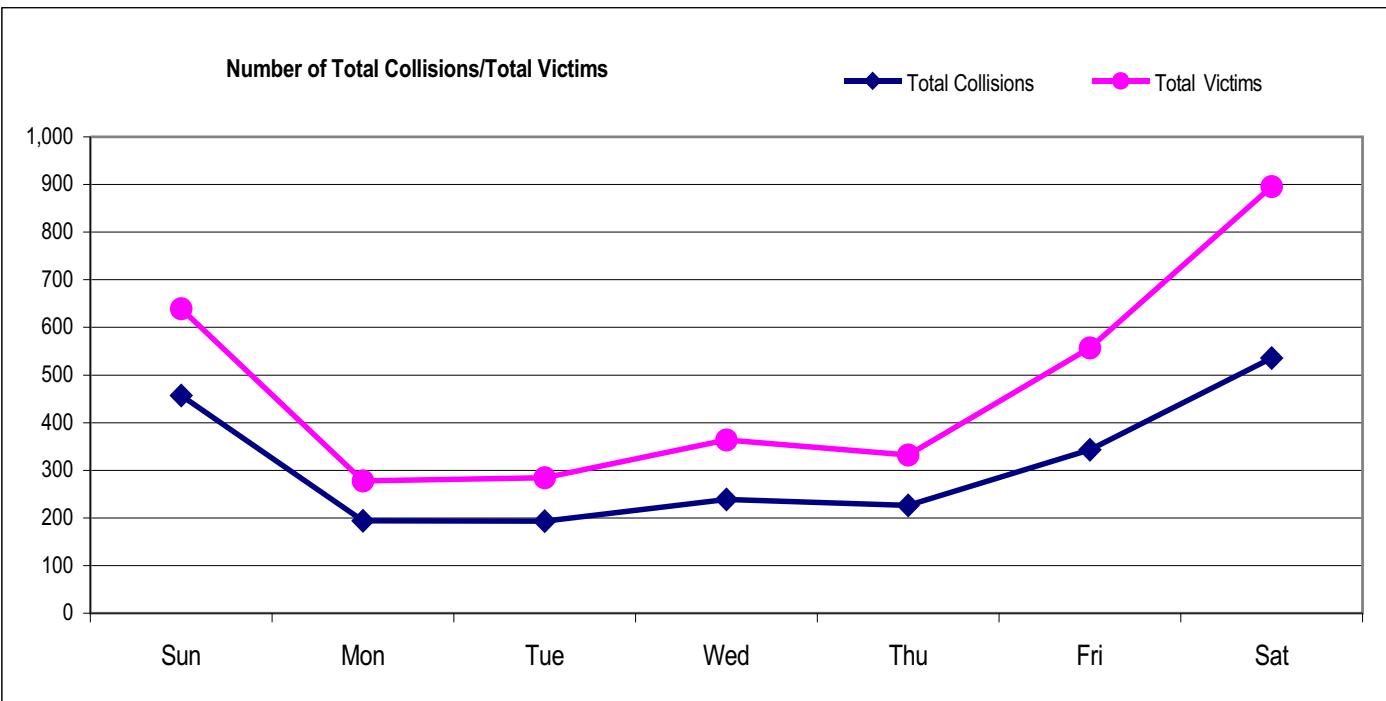


Figure 10.03 – Distribution of alcohol related collisions and victims by day of week



Note: Includes both injury and fatal collisions and both injured and killed victims.

Table 10.03 – Alcohol related fatal collisions by day of week and collision hour

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total Collisions	% of Total
0000-0059	0	1	0	0	3	1	1	6	6.45
0100-0159	0	0	1	0	1	0	1	3	3.23
0200-0259	2	0	0	0	0	3	4	9	9.68
0300-0359	0	0	1	0	1	1	1	4	4.30
0400-0459	1	0	0	0	0	0	1	2	2.15
0500-0559	3	1	0	0	0	0	2	6	6.45
0600-0659	0	0	0	0	0	1	0	1	1.08
0700-0759	1	0	0	0	0	0	1	2	2.15
0800-0859	0	0	0	1	0	0	0	1	1.08
0900-0959	0	0	0	0	1	0	0	1	1.08
1100-1159	0	1	0	0	0	0	0	1	1.08
1200-1259	0	0	0	0	0	0	0	0	0.00
1300-1359	0	0	0	1	0	0	0	1	1.08
1400-1459	1	0	0	0	1	2	1	5	5.38
1500-1559	0	0	0	0	0	1	2	3	3.23
1600-1659	0	0	0	1	0	1	0	2	2.15
1700-1759	1	2	0	1	0	1	1	6	6.45
1800-1859	2	0	1	0	1	1	1	6	6.45
1900-1959	0	0	0	0	1	1	0	2	2.15
2000-2059	2	0	0	2	2	0	3	9	9.68
2100-2159	0	0	1	2	0	3	1	7	7.53
2200-2259	0	0	1	0	0	0	2	3	3.23
2300-2359	0	0	3	1	1	1	7	13	13.98
Total	13	5	8	9	12	17	29	93	100

SECTION 10 – Alcohol Related Collisions in 2003

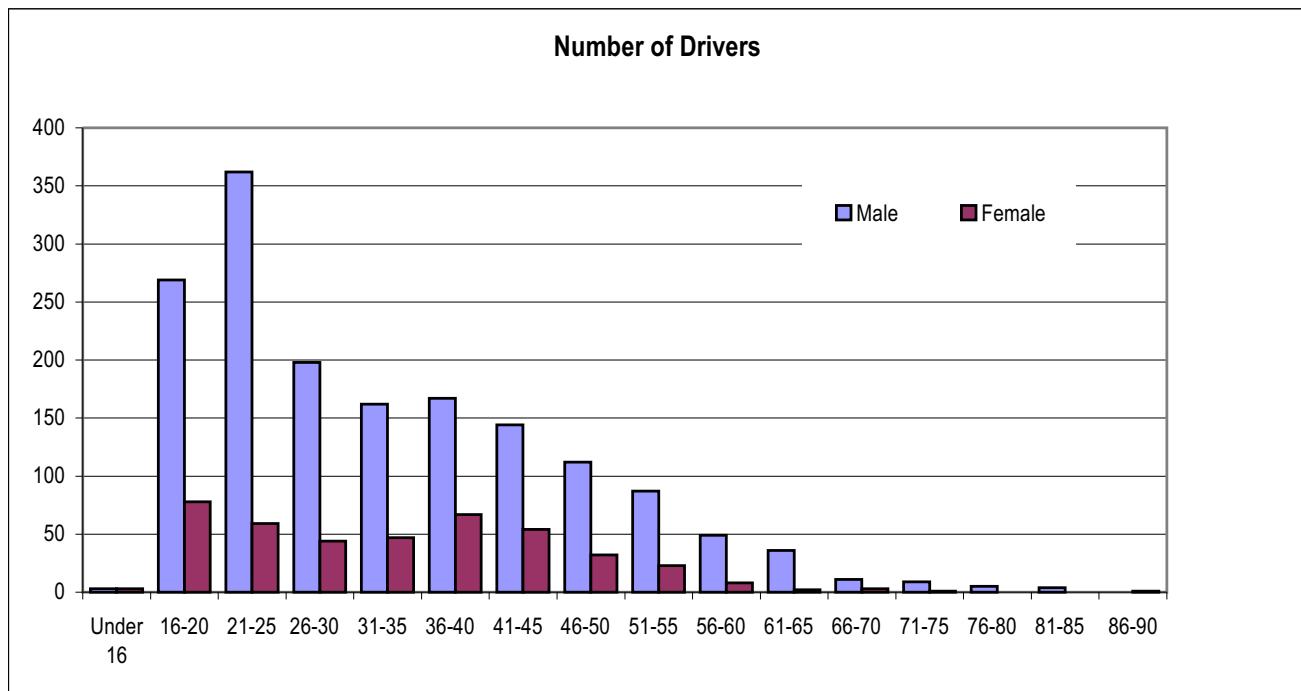
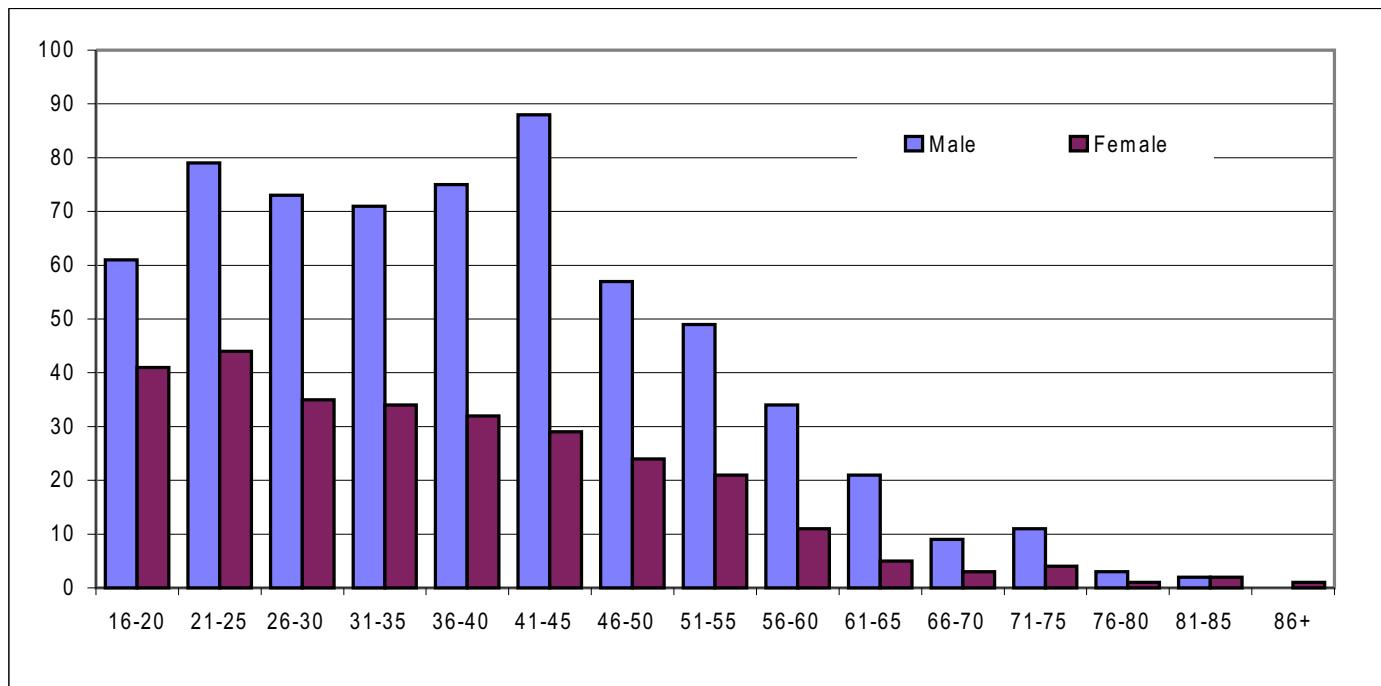
Table 10.04 – Drinking drivers* involved in alcohol related collisions by driver age and gender.

Age	Injury			Fatal		
	Male	Female	Total	Male	Female	Total
14	1	0	1	1	0	1
15	1	3	4	0	0	0
16	16	10	26	0	0	0
17	28	6	34	1	2	3
18	50	20	70	4	0	4
19	89	21	110	5	0	5
20	75	19	94	1	0	1
21	90	14	104	2	1	3
22	65	18	83	5	0	5
23	66	11	77	4	1	5
24	64	8	72	6	0	6
25	57	6	63	3	0	3
26-30	188	44	232	10	0	10
31-35	159	47	206	3	0	3
36-40	157	65	222	10	2	12
41-45	136	53	189	8	1	9
46-50	112	32	144	0	0	0
51-55	80	22	102	7	1	8
56-60	46	7	53	3	1	4
61-65	34	2	36	2	0	2
66-70	10	3	13	1	0	1
71-75	9	1	10	0	0	0
76-80	5	0	5	0	0	0
81-85	4	0	4	0	0	0
86-90	0	1	1	0	0	0
Unknown	1	0	1	0	0	0
Total	1,543	413	1,956	76	9	85

Note: Motor vehicle drivers only

Table 10.05 – Drivers in alcohol-related collisions by age and gender – Non drinking drivers

Age	Injury			Fatal		
	Male	Female	Total	Male	Female	Total
16	1	2	3	0	0	0
17	8	9	17	0	0	0
18	19	9	28	1	0	1
19	18	11	29	0	0	0
20	13	10	23	1	0	1
21	21	11	32	0	1	1
22	14	8	22	1	0	1
23	15	10	25	0	0	0
24	13	7	20	0	0	0
25	15	6	21	0	1	1
26-30	69	35	104	4	0	4
31-35	68	34	102	3	0	3
36-40	66	32	98	9	0	9
41-45	85	29	114	3	0	3
46-50	55	23	78	2	1	3
51-55	46	20	66	3	1	4
56-60	31	11	42	3	0	3
61-65	19	5	24	2	0	2
66-70	9	3	12	0	0	0
71-75	11	4	15	0	0	0
76-80	3	1	4	0	0	0
81-85	1	2	3	1	0	1
86+	0	1	1	0	0	0
Total	600	283	883	33	4	37

Figure 10.04 – Drinking drivers involved in alcohol related collisions by driver age and gender**Figure 10.05 – Non drinking drivers involved in alcohol related collisions**

SECTION 10 – Alcohol Related Collisions in 2003

Table 10.06 – Drinking drivers involved in alcohol related collisions compared to all licensed drivers by age

	Active Licensed Drivers	% of Total Driver Population	# of Drivers Involved in Alcohol-related Collisions	% of Total Drivers Involved in Alcohol-related Collisions ²
Under 16 ¹	2	0.00	6	0.29
16	26,380	0.93	26	1.27
17	35,299	1.24	37	1.81
18	39,757	1.40	74	3.63
19	42,853	1.51	115	5.64
20	43,517	1.53	95	4.66
16-20	187,806	6.62	347	17.30
21	44,805	1.58	107	5.25
22	46,026	1.62	88	4.31
23	44,725	1.58	82	4.02
24	44,612	1.57	78	3.82
25	44,504	1.57	66	3.24
21-25	224,672	7.92	421	20.64
26-30	230,634	8.13	242	11.86
31-35	266,167	9.38	209	10.25
36-40	294,558	10.38	234	11.47
41-45	323,965	11.42	198	9.71
46-50	308,814	10.88	144	7.06
51-55	271,512	9.57	110	5.39
56-60	218,406	7.70	57	2.79
61-65	157,849	5.56	38	1.86
66-70	123,854	4.37	14	0.69
71-75	104,450	3.68	10	0.49
76-80	73,590	2.59	5	0.25
80-103	51,017	1.80	5	0.25
Total	2,837,296	100%	2,040	100%

Note:

1) Includes unlicensed drivers.

2) Total number of collision involved drivers in the age group as a percentage of the total number of drivers involved in alcohol-related collisions.

3) Data source for active licensed drivers is Business Information Warehouse. The total number of active licensed drivers is 2,837,650 in 2003.

The number in this table does not include drivers whose age is unknown (354).

Table 10.07 – Victims injured in alcohol related collisions by victim age and road user class

Victim Age	Hanging			Bicycle Driver	Motorcycle Driver	Motorcycle Passenger	Other	Unknown	
Age	Driver	Passenger	on	Pedestrian	Driver	Driver	Passenger		
1	0	1	0	0	0	0	0	0	1
2	0	1	0	0	0	0	0	0	1
3	0	6	0	1	0	0	0	0	7
4	0	4	0	0	0	0	0	0	4
5	0	6	0	1	1	0	0	0	8
6	0	6	0	0	0	0	0	0	6
7	0	4	0	1	0	0	0	0	5
8	0	9	0	0	0	0	0	0	9
9	0	4	0	0	0	0	0	0	4
10	0	4	0	0	0	0	0	0	4
11	0	7	0	0	1	0	0	0	8
12	0	7	0	2	0	0	0	0	9
13	0	7	0	0	0	0	0	1	8
14	2	14	0	0	0	0	0	1	17
15	3	27	0	0	1	0	0	1	32
16	23	41	0	3	1	0	0	1	69
17	31	61	0	2	0	0	0	0	94
18	68	75	1	0	0	0	0	3	147
19	93	72	0	4	0	1	0	0	170
20	73	82	0	5	0	1	1	0	164
21	84	69	0	0	0	1	0	0	154
22	75	53	0	2	0	2	0	0	132
23	69	55	0	2	0	4	1	0	132
24	67	32	0	2	1	3	0	0	105
25	52	35	1	1	0	1	0	1	91
26-30	224	100	0	3	0	8	2	1	340
31-35	192	68	0	7	0	14	0	2	1
36-40	210	64	0	6	5	6	0	1	294
41-45	184	52	1	6	3	9	0	0	259
46-50	125	30	0	0	5	7	1	0	169
51-55	100	29	1	1	1	4	0	0	136
56-60	56	19	0	0	1	0	0	0	76
61-65	25	11	0	1	0	1	0	0	38
66-70	13	7	0	0	1	0	0	0	21
71-75	13	7	0	0	0	0	0	1	21
76-80	7	1	0	1	0	0	0	0	9
81-85	4	2	0	0	0	0	0	0	6
86-90	1	1	0	0	0	0	0	0	2
Unknown	15	78	0	6	0	0	2	9	110
Total	1,809	1,151	4	57	21	62	5	7	3,146

SECTION 10 – Alcohol Related Collisions in 2003
Table 10.08 – Victims killed in alcohol related collisions by victim age and road user class

Victim Age	Driver	Passenger	Pedestrian	Bicycle Driver	Motorcycle Driver	Motorcycle Passenger	Other	Unknown	Total
8	0	1	0	0	0	0	0	0	1
13	0	2	0	0	0	0	0	0	2
14	0	1	0	0	0	0	0	0	1
16	0	1	0	0	0	0	0	0	1
17	0	3	0	0	0	0	0	1	4
18	2	1	0	0	0	0	0	0	3
19	1	3	1	0	0	0	0	0	5
20	0	3	0	0	0	0	0	0	3
21	1	2	2	0	0	1	0	0	6
22	4	0	0	0	1	0	0	0	5
23	1	2	0	0	0	0	0	0	3
24	2	1	0	0	0	0	0	0	3
25	1	1	0	0	1	0	0	0	3
26-30	3	6	0	0	1	0	0	0	10
31-35	2	2	1	0	0	0	0	0	5
36-40	11	1	0	0	2	1	1	1	17
41-45	4	2	2	1	1	0	0	0	10
46-50	0	0	1	0	0	0	0	0	1
51-55	7	0	1	0	0	0	0	0	8
56-60	2	0	0	0	0	0	0	0	2
61-65	2	0	1	0	0	1	0	0	4
66-70	0	0	2	0	0	0	0	0	2
76-80	0	0	1	0	0	0	0	0	1
Unknown	0	2	0	0	0	0	0	0	2
Total	43	34	12	1	6	3	1	2	102

Table 10.09 – Victims injured in alcohol-related collisions in drinking drivers' vehicles by victim age and road user class (or where pedestrian was drinking¹)

Victim Age	Driver	Passenger	Hanging on ²	Pedestrian	Bicycle Driver	Motorcycle Driver	Motorcycle Passenger	Other	Unknown	Total
2	0	1	0	0	0	0	0	0	0	1
3	0	2	0	0	0	0	0	0	0	2
5	0	2	0	0	0	0	0	0	0	2
7	0	1	0	0	0	0	0	0	0	1
8	0	4	0	0	0	0	0	0	0	4
9	0	2	0	0	0	0	0	0	0	2
10	0	1	0	0	0	0	0	0	0	1
12	0	5	0	0	0	0	0	0	0	5
13	0	5	0	1	0	0	0	0	0	6
14	2	10	0	1	0	0	0	0	1	14
15	3	19	0	0	0	0	0	0	1	23
16	20	30	0	0	0	0	0	0	1	51
17	21	46	0	1	0	0	0	0	0	68
18	55	65	1	1	0	0	0	0	2	124
19	78	59	0	3	1	1	0	0	0	142
20	60	67	0	5	1	1	1	0	2	137
21	67	57	0	0	1	0	0	0	0	125
22	64	42	0	0	1	2	0	0	0	109
23	52	39	0	1	3	3	1	0	1	100
24	55	19	0	2	1	2	0	0	0	79
25	41	28	1	1	0	1	0	1	0	73
26-30	162	76	0	7	2	7	2	1	2	259
31-35	135	45	0	6	5	12	0	1	0	204
36-40	150	36	0	7	8	5	0	1	1	208
41-45	128	32	0	10	7	7	0	0	3	187
46-50	82	15	0	9	3	6	1	0	0	116
51-55	66	14	1	3	1	3	0	0	0	88
56-60	38	8	0	4	0	0	0	0	0	50
61-65	18	2	0	2	0	1	0	0	0	23
66-70	9	5	0	2	0	0	0	0	0	16
71-75	5	3	0	1	0	0	0	0	0	9
76-80	4	1	0	0	0	0	0	0	0	5
81-85	3	1	0	0	0	0	0	0	0	4
86-90	1	1	0	0	0	0	0	0	0	2
Unknown	9	53	0	2	0	0	0	0	6	70
Total	1,328	796	3	69	34	51	5	4	20	2,310

Note:

- 1) The alcohol contributing factor is only assigned to drivers and pedestrians. Passengers and hanging-on included in this report were victims who were in/on a drinking driver's vehicle.
- 2) 'Hanging-on' refers to those hanging on a vehicle at the time of collision.

SECTION 10 – Alcohol Related Collisions in 2003

Figure 10.06 – Victims injured in alcohol related collisions

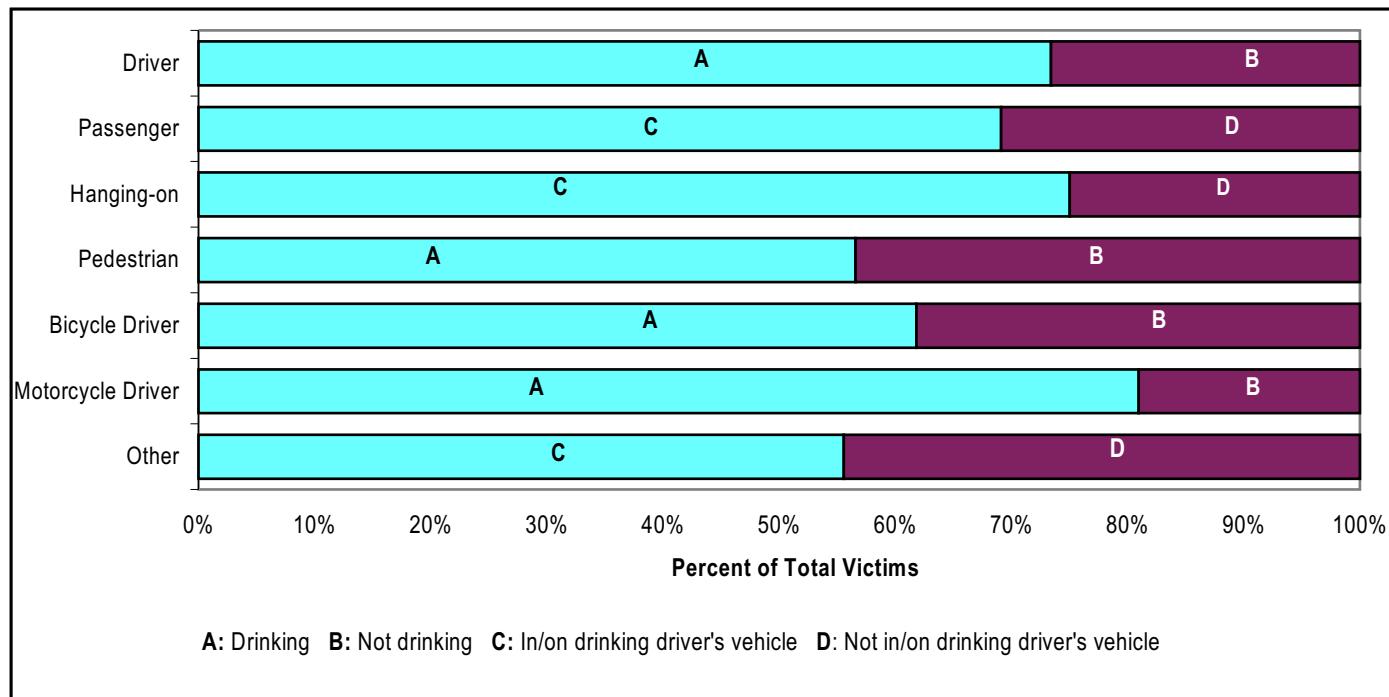


Figure 10.07 – Victims killed in alcohol related collisions

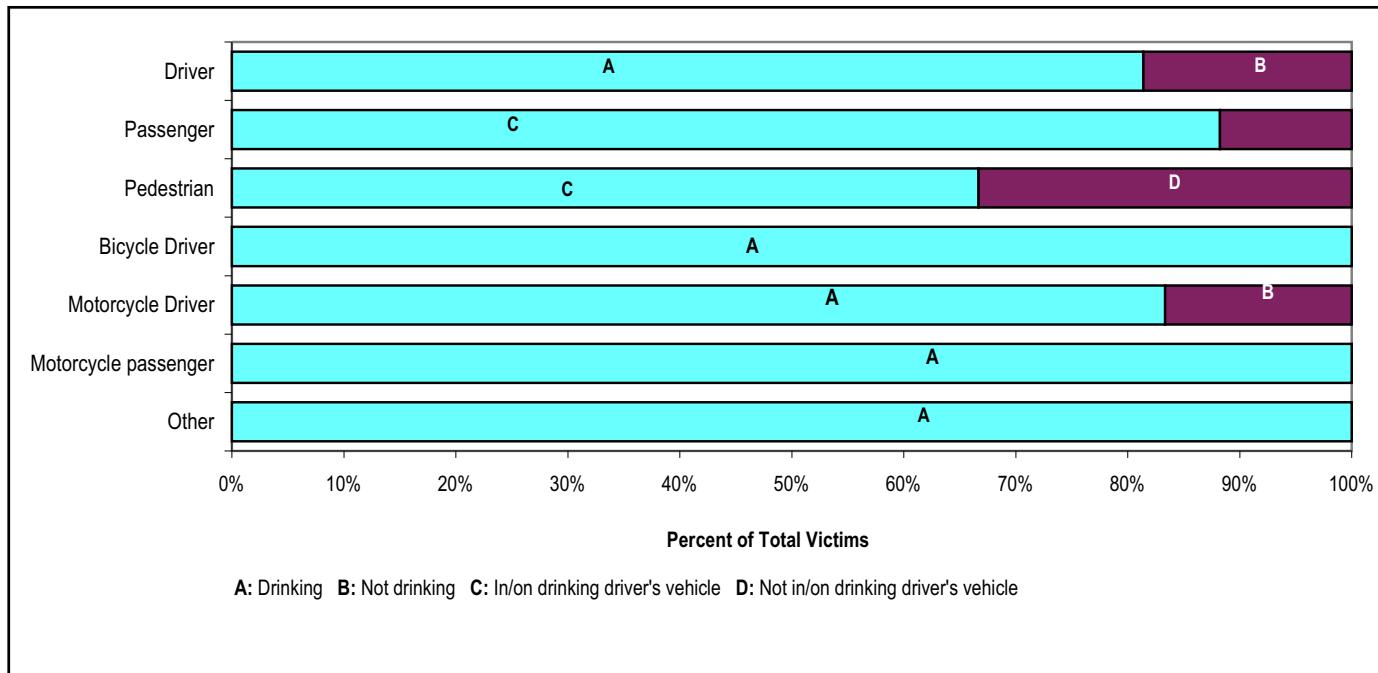


Table 10.10 – Victims killed in alcohol-related collisions in drinking drivers' vehicles by age and road user class (or where pedestrian was drinking)

Victim		Bicycle	Motorcycle	Motorcycle					
Age	Driver	Passenger	Pedestrian	Driver	Driver	Passenger	Other	Unknown	Total
8	0	1	0	0	0	0	0	0	1
13	0	2	0	0	0	0	0	0	2
16	0	1	0	0	0	0	0	0	1
17	0	2	0	0	0	0	0	1	3
18	1	1	0	0	0	0	0	0	2
19	1	3	1	0	0	0	0	0	5
20	0	3	0	0	0	0	0	0	3
21	1	2	2	0	0	1	0	0	6
22	3	0	0	0	1	0	0	0	4
23	1	2	0	0	0	0	0	0	3
24	2	1	0	0	0	0	0	0	3
25	1	1	0	0	1	0	0	0	3
26-30	1	6	0	0	1	0	0	0	8
31-35	2	2	1	0	0	0	0	0	5
36-40	9	0	0	0	1	1	1	1	13
41-45	3	1	1	1	1	0	0	0	7
46-50	0	0	1	0	0	0	0	0	1
51-55	7	0	1	0	0	0	0	0	8
56-60	2	0	0	0	0	0	0	0	2
61-65	1	0	1	0	0	1	0	0	3
Unknown	0	2	0	0	0	0	0	0	2
Total	35	30	8	1	5	3	1	2	85

Note: The alcohol contributing factor is only assigned to drivers and pedestrians. Passengers included in this report were victims who were in/on a drinking driver's vehicle.

SECTION 10 – Alcohol Related Collisions in 2003

Table 10.11 – Victims injured by victim age and road user class for victims not in drinking driver's vehicle in alcohol related collisions

Victim Age	Driver	Passenger	Hanging on	Pedestrian	Bicycle	Motorcycle	Other	Unknown	Total
					Driver	Driver			
1	0	1	0	0	0	0	0	0	1
3	0	4	0	1	0	0	0	0	5
4	0	4	0	0	0	0	0	0	4
5	0	4	0	1	1	0	0	0	6
6	0	6	0	0	0	0	0	0	6
7	0	3	0	1	0	0	0	0	4
8	0	5	0	0	0	0	0	0	5
9	0	2	0	0	0	0	0	0	2
10	0	3	0	0	0	0	0	0	3
11	0	7	0	0	1	0	0	0	8
12	0	2	0	2	0	0	0	0	4
13	0	2	0	0	0	0	0	1	3
14	0	4	0	0	0	0	0	0	4
15	0	8	0	0	1	0	0	0	9
16	3	11	0	3	1	0	0	0	18
17	10	15	0	2	0	0	0	0	27
18	13	10	0	0	0	0	0	1	24
19	15	13	0	4	0	0	0	0	32
20	13	15	0	5	0	0	0	0	33
21	17	12	0	0	0	1	0	0	30
22	11	11	0	2	0	0	0	0	24
23	17	16	0	2	0	1	0	0	36
24	12	13	0	2	1	1	0	0	29
25	11	7	0	1	0	0	0	0	19
26-30	62	24	0	2	0	1	0	0	89
31-35	57	23	0	7	0	3	1	1	92
36-40	60	28	0	4	5	1	0	1	99
41-45	56	20	1	5	3	2	0	1	88
46-50	43	15	0	0	5	1	0	1	65
51-55	34	15	0	1	1	1	0	0	52
56-60	18	11	0	0	1	0	0	0	30
61-65	7	9	0	1	0	0	0	0	17
66-70	4	2	0	0	1	0	0	0	7
71-75	8	4	0	0	0	0	1	1	14
76-80	3	0	0	1	0	0	0	0	4
81-85	1	1	0	0	0	0	0	0	2
Unknown	6	26	0	6	0	0	2	3	43
Total	481	356	1	53	21	12	4	10	938

Table 10.12 – Victims killed in alcohol-related collisions by victim age and road user class for victims not in drinking driver's vehicle

Victim Age	Driver	Passenger	Pedestrian	Motorcycle Driver	Total
14	0	1	0	0	1
17	0	1	0	0	1
18	1	0	0	0	1
22	1	0	0	0	1
26-30	2	0	0	0	2
36-40	2	1	0	1	4
41-45	1	1	1	0	3
61-65	1	0	0	0	1
66-70	0	0	2	0	2
76-80	0	0	1	0	1
Total	8	4	4	1	17

SECTION 10 – Alcohol Related Collisions in 2003

Unsafe Speed Related Collisions in 2003

SECTION 11

Unsafe speed collisions in this report are those police-reported casualty collisions where unsafe speed was judged to be a contributing factor to the collision. This is a judgement made by the attending police officer and may not always be accompanied by the laying of speed-related charges. However, the judgment will generally be supported by evidence presented by witnesses, indications of excessive skidding or severe crush zones on the damaged vehicles.

Collisions

During 2003 unsafe speed was involved in 3,639 (18.7%) of all reported injury collisions, and 137 (34.7%) of reported fatal collisions.

In 2003, unsafe speed was the single most cited contributing factor to fatal collisions (See Table 3.07 in Section 3).

Casualties

A total of 5,839 victims were injured and another 162 victims were killed in collisions involving unsafe speed in 2003.

About 3.6% of the unsafe speed related casualty collisions resulted in death in 2003 while about 1.6% of collisions caused by contributing factors other than unsafe speed resulted in death in the same year. Approximately 36.6% of persons killed in motor vehicle collisions in 2003 were victims of collisions caused by unsafe speed.

During 2003, 76.6% (4,475) of victims injured in unsafe speed related collisions were in vehicles travelling at unsafe speed. Similarly, 87.7% (142) of all victims killed in unsafe speed related collisions were in vehicles travelling at unsafe speed.

Driver age and gender

Of all drivers travelling at unsafe speed resulting in a casualty collision in 2003, 70.9% were male. Of these male drivers, about 25.2% were between the ages of 16 and 20, and 31.6% were between the ages of 21 and 30. Of female drivers travelling at unsafe speed resulting in a casualty collision, 28.0% of them were between the ages of 16 and 20, and 25.5% were between the ages of 21 and 30.

Time of occurrence

Casualty collisions involving unsafe speed are more likely to occur on weekend days (Friday, Saturday, Sunday) than on weekdays. In 2003, 49.4% of all unsafe speed related injury collisions occurred on a weekend. As for all unsafe speed related fatal collisions, 56.2% happened on a weekend.

There is a peak occurrence for unsafe speed related injury collisions between 4pm and 5pm, similar to the pattern for total casualty collisions. For fatal collisions, the peaks were between 11pm and 3am.



SECTION 11 – Unsafe Speed Related Collisions in 2003

Table 11.01 – Unsafe speed related collisions and victims by month

Month	Collisions			Victims			Total
	Injury	Fatal	Total	Injured	Killed		
January	315	15	330	518	16		534
February	210	6	216	311	8		319
March	304	7	311	496	10		506
April	217	8	225	354	13		367
May	251	12	263	407	13		420
June	274	13	287	467	13		480
July	305	14	319	493	15		508
August	276	15	291	465	16		481
September	283	11	294	447	14		461
October	354	10	364	581	10		591
November	425	14	439	651	19		670
December	425	12	437	649	15		664
Total	3,639	137	3,776	5,839	162		6,001

Figure 11.01 – Unsafe speed related collisions and victims by month

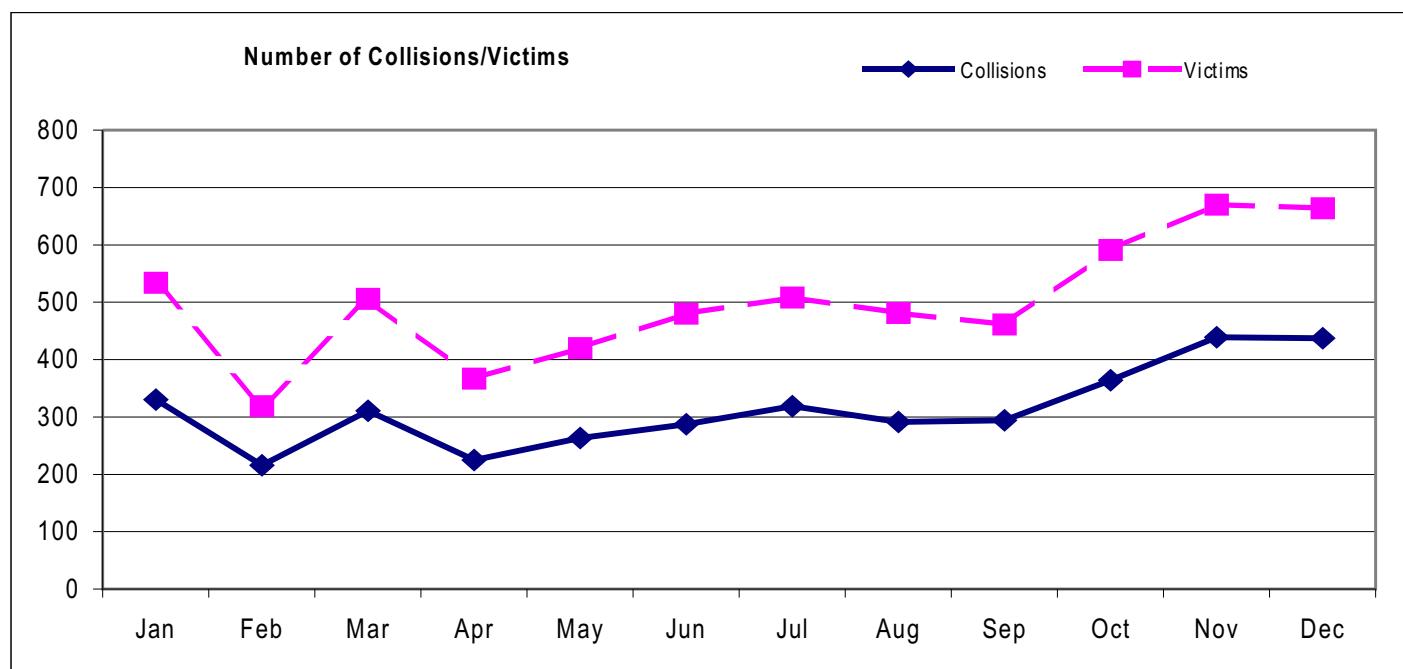
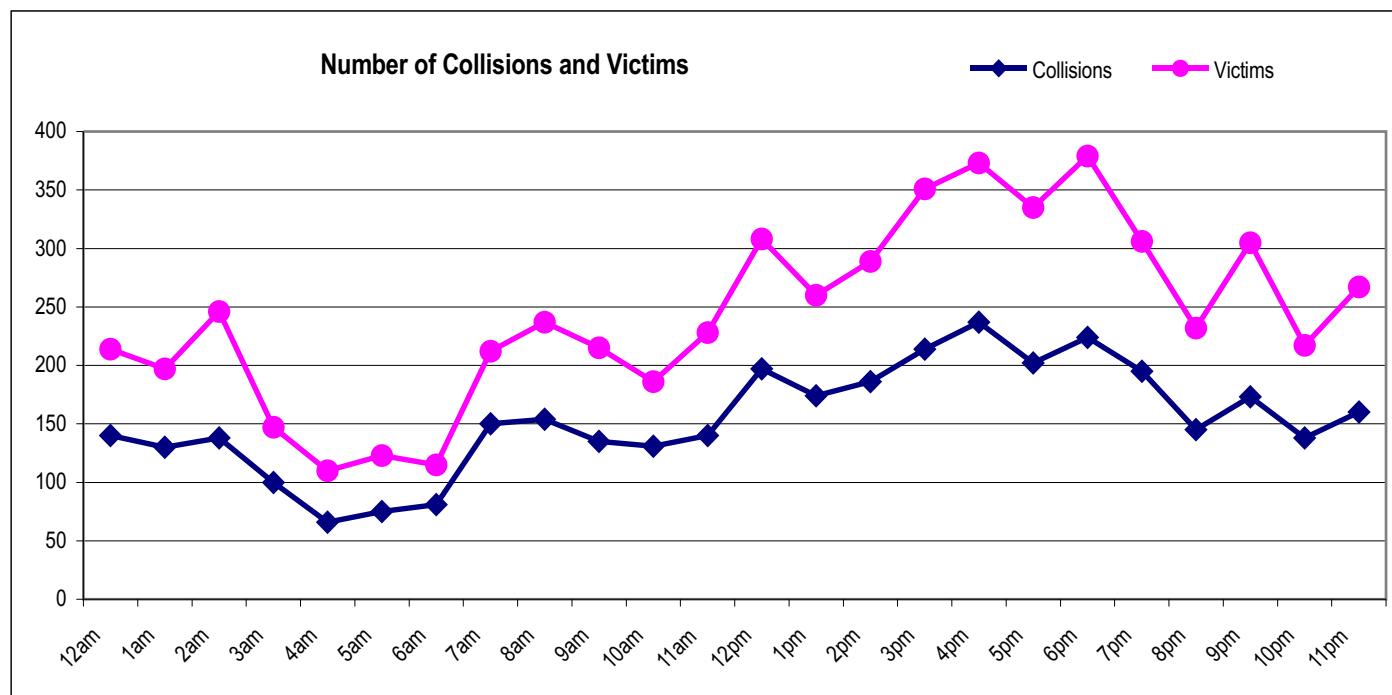


Table 11.02 – Unsafe speed related injury collisions by day of week and hour of collision

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total Collisions	% of Total
0000-0059	40	11	10	13	15	19	24	132	3.63
0100-0159	25	14	7	13	23	12	28	122	3.35
0200-0259	31	9	10	11	10	14	44	129	3.55
0300-0359	20	10	10	10	10	10	26	96	2.64
0400-0459	12	7	8	7	6	6	16	62	1.70
0500-0559	13	13	8	6	10	4	14	68	1.87
0600-0659	11	12	8	9	13	16	9	78	2.14
0700-0759	19	25	15	23	27	22	16	147	4.04
0800-0859	11	21	24	25	22	23	24	150	4.12
0900-0959	21	14	15	23	19	19	22	133	3.66
1000-1059	21	17	17	21	13	12	27	128	3.52
1100-1159	22	18	24	16	22	14	19	135	3.71
1200-1259	34	18	26	34	18	30	33	193	5.31
1300-1359	28	14	26	28	23	26	22	167	4.59
1400-1459	33	30	23	31	26	15	22	180	4.95
1500-1559	31	21	33	23	21	38	41	208	5.72
1600-1659	35	36	24	22	28	47	40	232	6.38
1700-1759	25	22	24	40	26	23	35	195	5.36
1800-1859	35	16	29	44	20	34	40	218	5.99
1900-1959	28	14	27	28	17	44	31	189	5.20
2000-2059	24	16	13	18	20	28	25	144	3.96
2100-2159	23	24	18	26	26	23	25	165	4.54
2200-2259	24	15	14	18	18	21	24	134	3.68
2300-2359	23	19	7	22	19	33	27	150	4.12
Unknown	15	12	13	5	13	16	9	83	2.28
Total	604	428	433	516	465	549	643	3,638	100%

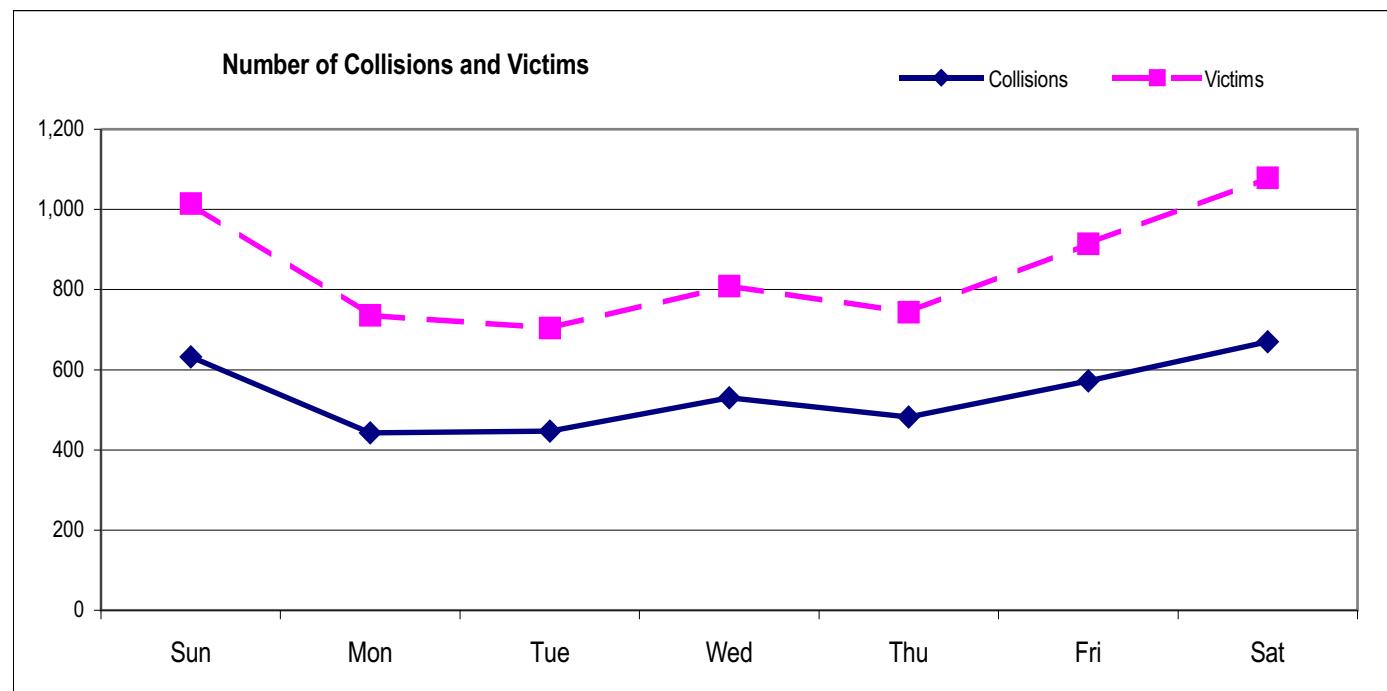
SECTION 11 – Unsafe Speed Related Collisions in 2003

Figure 11.02 – Unsafe speed related collisions and victims by collision hour



Note: Includes both injury and fatal collisions and both injured and killed victims and excludes time unknown.

Figure 11.03 – Unsafe speed related collisions and victims by day of week



Note: Includes both injury and fatal collisions and both injured and killed victims.

Table 11.03 – Unsafe speed related fatal collisions by day of week and by hour of collision

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total Collisions	% of Total
0000-0059	1	3	1	1	1	1	0	8	5.84
0100-0159	2	0	1	0	3	0	2	8	5.84
0200-0259	2	0	1	1	1	2	2	9	6.57
0300-0359	1	0	1	0	0	1	1	4	2.92
0400-0459	1	0	0	0	0	1	2	4	2.92
0500-0559	3	2	0	0	1	1	0	7	5.11
0600-0659	0	0	0	1	1	1	0	3	2.19
0700-0759	0	1	1	0	0	0	1	3	2.19
0800-0859	0	1	0	0	2	0	1	4	2.92
0900-0959	1	0	1	0	0	0	0	2	1.46
1000-1059	1	0	1	0	0	0	1	3	2.19
1100-1159	2	0	1	0	0	1	1	5	3.65
1200-1259	1	1	1	0	1	0	0	4	2.92
1300-1359	2	1	0	2	0	1	1	7	5.11
1400-1459	1	0	0	1	2	1	1	6	4.38
1500-1559	1	1	2	0	0	1	1	6	4.38
1600-1659	1	1	0	0	1	1	0	4	2.92
1700-1759	0	3	0	1	0	1	2	7	5.11
1800-1859	1	0	0	1	1	2	1	6	4.38
1900-1959	2	0	1	1	0	2	0	6	4.38
2000-2059	2	1	0	2	0	1	3	9	6.57
2100-2159	1	0	2	2	0	2	1	8	5.84
2200-2259	1	0	0	1	1	0	1	4	2.92
2300-2359	1	0	0	0	2	2	5	10	7.30
Total	28	15	14	14	17	22	27	137	100%

SECTION 11 – Unsafe Speed Related Collisions in 2003

Table 11.04 – Age and gender of speeding drivers involved in unsafe speed collisions

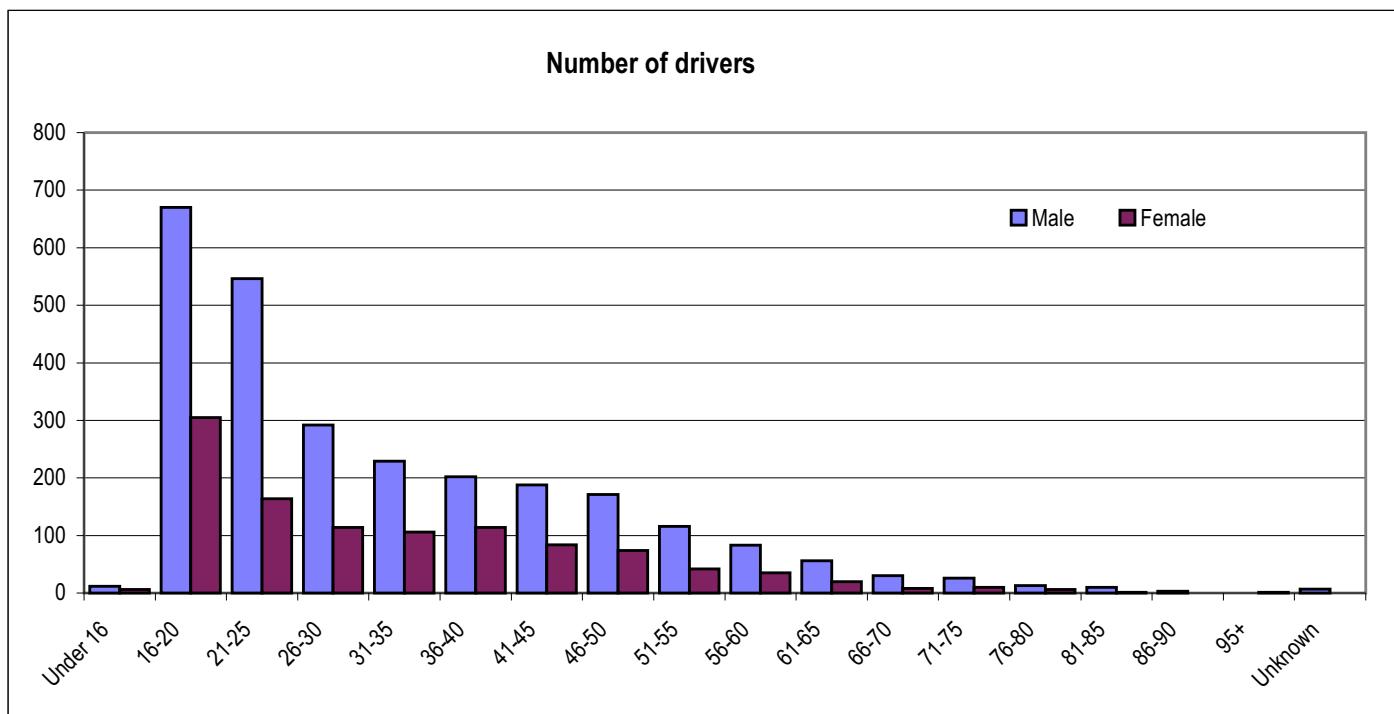
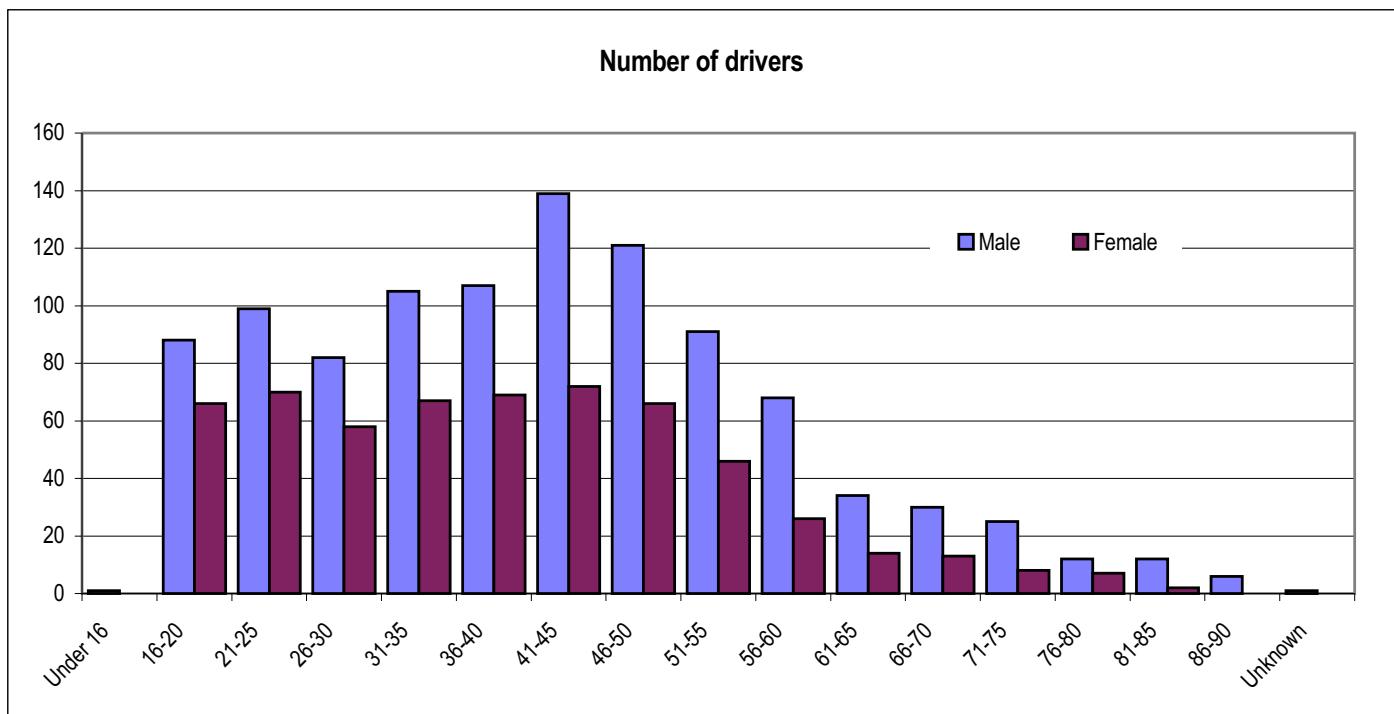
Driver Age	Injury			Fatal		
	Male	Female	Total	Male	Female	Total
12	1	0	1	0	0	0
13	0	0	0	2	0	2
14	5	2	7	1	0	1
15	3	3	6	0	1	1
16	73	48	121	2	0	2
17	114	73	187	6	2	8
18	148	62	210	7	2	9
19	160	64	224	10	1	11
20	146	53	199	4	0	4
21	133	44	177	4	1	5
22	103	37	140	4	2	6
23	107	29	136	4	1	5
24	102	19	121	7	0	7
25	79	31	110	3	0	3
26-30	277	111	388	15	3	18
31-35	222	106	328	7	0	7
36-40	191	110	301	11	4	15
41-45	179	81	260	9	3	12
46-50	162	73	235	9	1	10
51-55	109	41	150	7	1	8
56-60	83	34	117	0	1	1
61-65	55	20	75	1	0	1
66-70	30	8	38	0	0	0
71-75	26	9	35	0	1	1
76-80	13	6	19	0	0	0
81-85	10	1	11	0	0	0
86-90	3	0	3	0	0	0
95+	0	1	1	0	0	0
Unknown	6	0	6	1	0	1
Total	2,540	1,066	3,606	114	24	138

Note: Exclude drivers with gender unknown.

Table 11.05 – Age and gender of nonspeeding drivers involved in unsafe speed collisions

Driver Age	Injury			Fatal		
	Male	Female	Total	Male	Female	Total
15	1	0	1	0	0	0
16	13	7	20	0	0	0
17	16	11	27	0	0	0
18	21	17	38	0	1	1
19	21	14	35	0	0	0
20	17	16	33	0	0	0
21	25	13	38	0	0	0
22	23	17	40	0	0	0
23	18	10	28	0	0	0
24	22	15	37	1	2	3
25	10	12	22	0	1	1
26-30	75	57	132	7	1	8
31-35	101	66	167	4	1	5
36-40	102	68	170	5	1	6
41-45	136	71	207	3	1	4
46-50	116	65	181	5	1	6
51-55	87	46	133	4	0	4
56-60	64	26	90	4	0	4
61-65	32	14	46	2	0	2
66-70	30	13	43	0	0	0
71-75	25	8	33	0	0	0
76-80	12	6	18	0	1	1
81-85	11	2	13	1	0	1
86-90	5	0	5	1	0	1
Unknown	1	0	1	0	0	0
Total	984	574	1,558	37	10	47

Note: Exclude drivers with gender unknown.

Figure 11.04 – Drivers travelling at unsafe speed involved in collisions**Figure 11.05 – Drivers not in speeding vehicles involved in collisions resulting from unsafe speed**

SECTION 11 – Unsafe Speed Related Collisions in 2003

Table 11.06 – Licensed drivers and drivers involved in unsafe speed related collisions (drivers travelling at unsafe speed only) by age

	Licensed Drivers	% of Total Driver Population	# of Drivers	% of Total
			Involved in Unsafe Speed Collisions	Drivers Involved in Unsafe Speed Collisions ²
Under 16 ¹	2	0	18	0.48
16	26,380	0.93	123	3.29
17	35,299	1.24	195	5.22
18	39,757	1.40	219	5.86
19	42,853	1.51	235	6.29
20	43,517	1.53	203	5.43
16-20	187,806	6.62	975	26.09
21	44,805	1.58	182	4.87
22	46,026	1.62	146	3.91
23	44,725	1.58	141	3.77
24	44,612	1.57	128	3.43
25	44,504	1.57	113	3.02
21-25	224,672	7.92	710	19.00
26-30	230,634	8.13	406	10.86
31-35	266,167	9.38	335	8.96
36-40	294,558	10.38	316	8.46
41-45	323,965	11.42	272	7.28
46-50	308,814	10.88	245	6.56
51-55	271,512	9.57	158	4.23
56-60	218,406	7.70	118	3.16
61-65	157,849	5.56	76	2.03
66-70	123,854	4.37	38	1.02
71-75	104,450	3.68	36	0.96
76-80	73,590	2.59	19	0.51
80+	51,017	1.80	15	0.40
Total	2,837,296	100%	3,737	100

Note:

- 1) Includes unlicensed drivers.
- 2) Total number of collision involved drivers in the age group as a percentage of the total number of drivers involved in unsafe speed collisions.
- 3) Data source for active licensed drivers is Business Information Warehouse. The total number of active licensed drivers is 2,837,650 in 2003.

The number in this table does not include drivers whose age is unknown (354).

Table 11.07 – Victims injured by victim age and road user class in collisions resulting from unsafe speed

Victim Age	Driver	Passenger	Hanging on	Pedestrian	Bicycle Driver	Motorcycle Driver	Motorcycle Passenger	Other	Unknown	Total
1	0	10	0	0	0	0	0	0	0	10
2	0	8	0	0	0	0	0	0	0	8
3	0	9	0	1	0	0	0	0	0	10
4	0	11	0	0	0	0	0	0	0	11
5	0	13	0	1	0	0	0	0	0	14
6	0	8	0	1	0	0	0	0	1	10
7	0	10	0	2	0	0	0	0	0	12
8	0	23	0	0	0	0	0	0	1	24
9	0	20	0	0	3	0	0	0	0	23
10	0	22	0	1	1	0	0	0	0	24
11	0	14	0	0	1	0	0	0	0	15
12	1	26	0	3	2	0	1	0	0	33
13	0	26	0	0	1	0	0	0	1	28
14	5	45	0	1	2	3	1	0	1	58
15	7	78	0	2	2	0	0	0	1	90
16	91	130	0	2	1	1	0	1	1	227
17	142	177	0	0	1	1	0	0	0	321
18	175	150	0	3	0	3	0	0	2	333
19	176	123	0	1	0	8	3	0	0	311
20	143	102	1	1	0	6	3	0	2	258
21	142	89	0	2	0	8	2	0	0	243
22	109	84	0	1	0	16	1	0	1	212
23	113	51	1	1	0	9	2	0	0	177
24	97	48	0	0	2	8	0	0	0	155
25	83	53	0	2	0	5	0	0	0	143
26-30	361	140	0	3	4	13	1	1	3	526
31-35	318	107	0	4	5	28	1	0	0	463
36-40	302	97	0	3	3	19	1	1	3	429
41-45	297	95	1	4	4	13	0	0	2	416
46-50	248	63	0	1	0	18	0	0	1	331
51-55	162	58	0	1	3	14	1	0	1	240
56-60	122	40	1	0	0	3	1	0	1	168
61-65	69	31	0	0	0	1	0	0	0	101
66-70	54	38	0	2	2	1	0	0	0	97
71-75	39	24	0	2	0	2	0	1	0	68
76-80	25	9	0	0	0	0	0	0	0	34
81-85	13	7	0	0	1	1	0	0	0	22
86-90	7	3	0	0	0	0	0	0	0	10
91-95	0	1	0	0	0	0	0	0	0	1
Unknown	16	154	1	1	2	1	2	1	5	183
Total	3,317	2,197	5	46	40	182	20	5	27	5,839

SECTION 11 – Unsafe Speed Related Collisions in 2003
Table 11.08 – Victims killed by victim age and road user class in collisions resulting from unsafe speed

Victim Age	Motorcycle			Motorcycle				Total
	Driver	Passenger	Pedestrian	Driver	Passenger	Other	Unknown	
1	0	1	0	0	0	0	0	1
8	0	1	0	0	0	0	0	1
12	0	2	0	0	0	0	0	2
13	1	4	0	1	0	0	0	6
15	0	5	0	0	0	0	0	5
16	2	0	0	0	0	0	0	2
17	3	6	0	0	0	0	0	9
18	1	1	0	1	0	0	0	3
19	4	5	0	0	0	0	0	9
20	3	3	0	0	0	0	0	6
21	2	3	1	0	1	0	0	7
22	5	1	0	0	0	0	0	6
23	2	2	0	0	0	0	0	4
24	5	2	0	1	0	0	0	8
25	1	0	0	1	0	0	0	2
26-30	10	8	0	3	0	0	0	21
31-35	2	1	0	2	0	0	0	5
36-40	12	1	0	2	1	1	1	18
41-45	7	3	1	3	0	0	0	14
46-50	4	2	1	2	0	0	0	9
51-55	7	0	1	0	0	0	0	8
56-60	2	0	0	0	0	0	0	2
61-65	1	1	0	0	0	0	0	2
66-70	0	2	0	0	0	0	0	2
71-75	0	3	0	0	0	0	0	3
76-80	1	1	1	0	0	0	0	3
81-85	1	1	0	0	0	0	0	2
Unknown	0	2	0	0	0	0	0	2
Total	76	61	5	16	2	1	1	162

Table 11.09 – Victims injured in vehicles travelling at unsafe speed by victim age and road user class

Victim Age	Driver	Passenger	Hanging on	Bicycle Driver	Motorcycle Driver	Motorcycle Passenger	Other	Unknown	Total
1	0	4	0	0	0	0	0	0	4
2	0	5	0	0	0	0	0	0	5
3	0	7	0	0	0	0	0	0	7
4	0	8	0	0	0	0	0	0	8
5	0	9	0	0	0	0	0	0	9
6	0	6	0	0	0	0	0	1	7
7	0	6	0	0	0	0	0	0	6
8	0	15	0	0	0	0	0	1	16
9	0	10	0	1	0	0	0	0	11
10	0	8	0	0	0	0	0	0	8
11	0	9	0	1	0	0	0	0	10
12	1	14	0	2	0	1	0	0	18
13	0	17	0	1	0	0	0	1	19
14	5	39	0	2	3	1	0	1	51
15	6	68	0	2	0	0	0	1	77
16	79	118	0	0	1	0	1	1	200
17	127	163	0	1	1	0	0	0	292
18	157	133	0	0	3	0	0	2	295
19	160	113	0	0	8	3	0	0	284
20	128	89	1	0	6	3	0	2	229
21	120	76	0	0	8	2	0	0	206
22	94	76	0	0	14	1	0	0	185
23	91	44	0	0	8	2	0	0	145
24	75	41	0	2	8	0	0	0	126
25	71	47	0	0	5	0	0	0	123
26-30	284	112	0	4	13	1	1	2	417
31-35	233	79	0	3	27	1	0	0	343
36-40	210	72	0	2	18	1	0	3	306
41-45	194	64	1	4	11	0	0	1	275
46-50	153	38	0	0	17	0	0	0	208
51-55	97	41	0	2	12	1	0	0	153
56-60	76	32	1	0	3	1	0	0	113
61-65	53	20	0	0	1	0	0	0	74
66-70	26	20	0	0	1	0	0	0	47
71-75	23	14	0	0	2	0	0	0	39
76-80	14	2	0	0	0	0	0	0	16
81-85	8	2	0	0	0	0	0	0	10
86-90	2	2	0	0	0	0	0	0	4
91-95	0	1	0	0	0	0	0	0	1
Unknown	6	115	0	2	1	1	0	3	128
Total	2,493	1,739	3	29	171	19	2	19	4,475

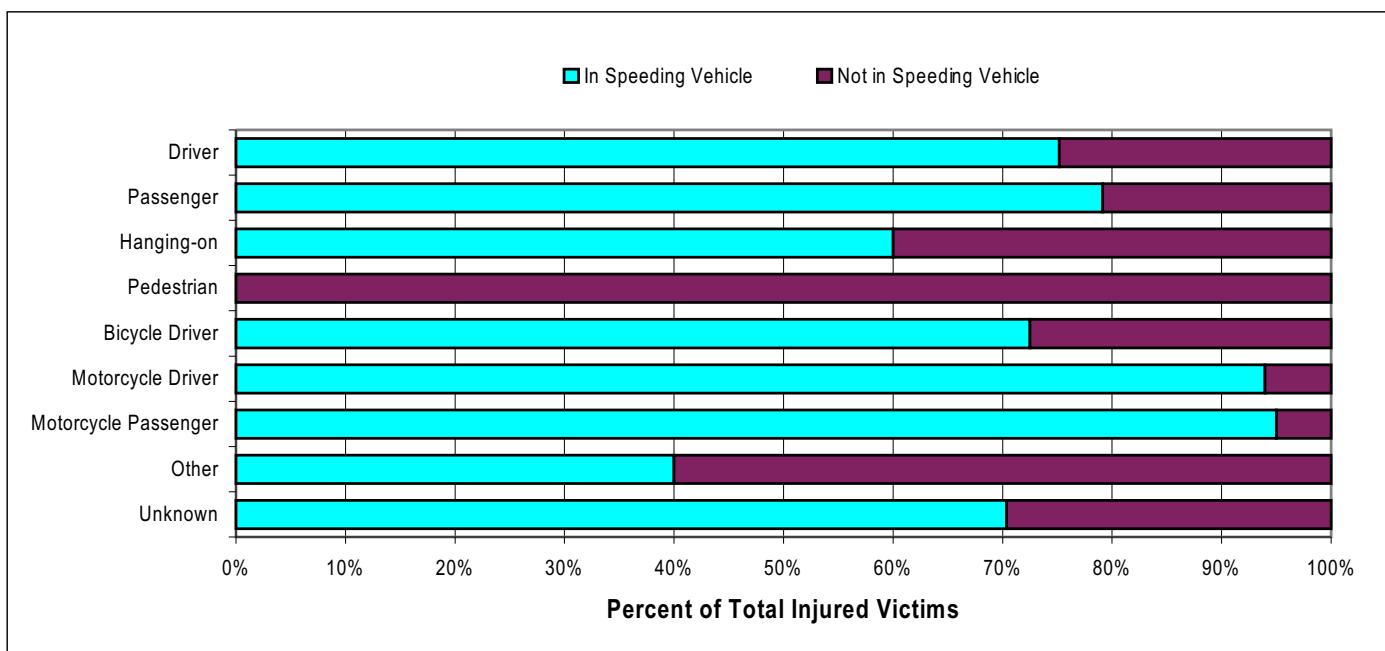
SECTION 11 – Unsafe Speed Related Collisions in 2003

Table 11.10 – Victims killed in vehicles travelling at unsafe speed by victim age and road user class

Victim Age	Bicycle		Motorcycle		Other	Unknown	Total
	Driver	Passenger	Driver	Driver			
1	0	1	0	0	0	0	1
8	0	1	0	0	0	0	1
12	0	2	0	0	0	0	2
13	1	4	1	0	0	0	6
15	0	5	0	0	0	0	5
16	2	0	0	0	0	0	2
17	3	6	0	0	0	0	9
18	1	1	1	0	0	0	3
19	4	5	0	0	0	0	9
20	3	3	0	0	0	0	6
21	2	3	0	1	0	0	6
22	5	1	0	0	0	0	6
23	2	2	0	0	0	0	4
24	3	2	1	0	0	0	6
25	1	0	1	0	0	0	2
26-30	8	8	3	0	0	0	19
31-35	2	1	2	0	0	0	5
36-40	10	1	2	1	1	1	16
41-45	6	2	3	0	0	0	11
46-50	3	1	2	0	0	0	6
51-55	7	0	0	0	0	0	7
56-60	1	0	0	0	0	0	1
61-65	1	0	0	0	0	0	1
66-70	0	2	0	0	0	0	2
71-75	0	3	0	0	0	0	3
76-80	0	1	0	0	0	0	1
Unknown	0	2	0	0	0	0	2
Total	65	57	16	2	1	1	142

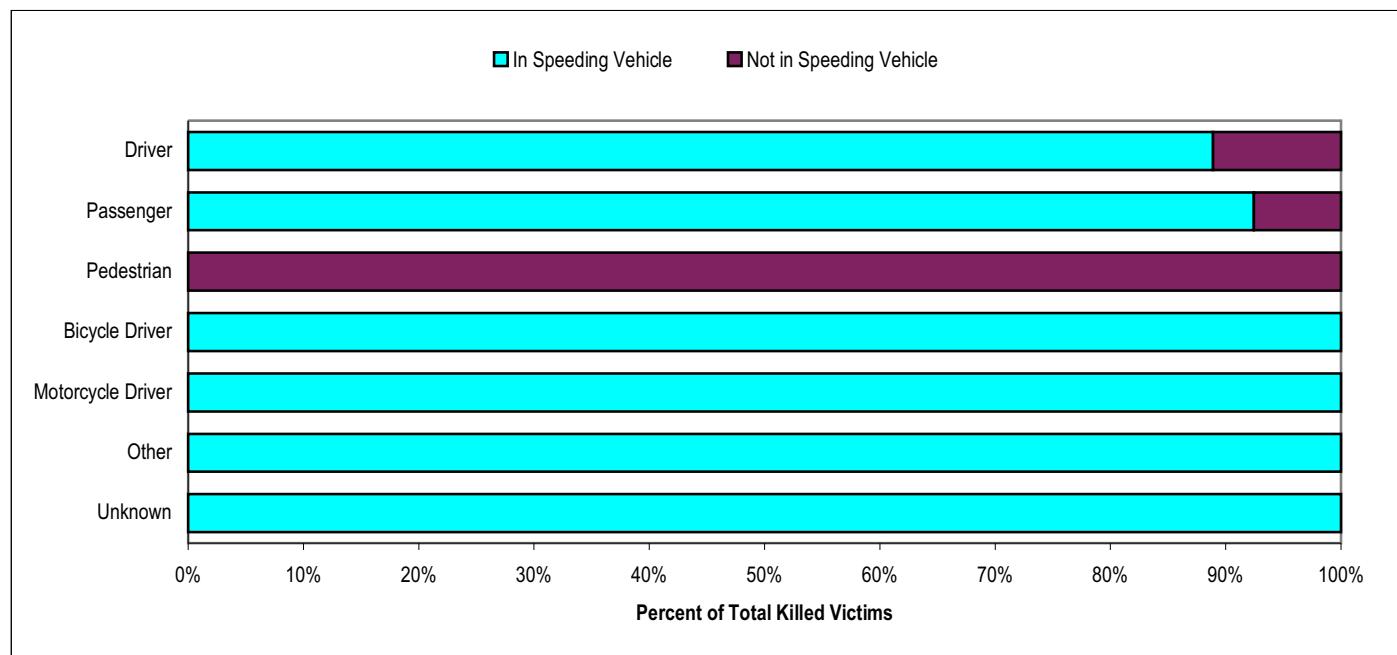
SECTION 11 – Unsafe Speed Related Collisions in 2003

Figure 11.06 – Victims injured in unsafe speed related collisions in/not in vehicle travelling at unsafe speed*



* See Table 11.07 for total victims injured in each road user class.

Figure 11.07 – Victims killed in unsafe speed related collisions in/not in vehicle travelling at unsafe speed*



* See Table 11.08 for total victims in each road user class.

Table 11.11 – Victims injured in unsafe speed collisions by victim age and road user class not in vehicles travelling at unsafe speed

Victim Age	Driver	Passenger	Hanging on	Pedestrian	Bicycle	Motorcycle	Motorcycle	Other	Unknown	Total
					Driver	Driver	Passenger			
1	0	6	0	0	0	0	0	0	0	6
2	0	3	0	0	0	0	0	0	0	3
3	0	2	0	1	0	0	0	0	0	3
4	0	3	0	0	0	0	0	0	0	3
5	0	4	0	1	0	0	0	0	0	5
6	0	2	0	1	0	0	0	0	0	3
7	0	4	0	2	0	0	0	0	0	6
8	0	8	0	0	0	0	0	0	0	8
9	0	10	0	0	2	0	0	0	0	12
10	0	14	0	1	1	0	0	0	0	16
11	0	5	0	0	0	0	0	0	0	5
12	0	12	0	3	0	0	0	0	0	15
13	0	9	0	0	0	0	0	0	0	9
14	0	6	0	1	0	0	0	0	0	7
15	1	10	0	2	0	0	0	0	0	13
16	12	12	0	2	1	0	0	0	0	27
17	15	14	0	0	0	0	0	0	0	29
18	18	17	0	3	0	0	0	0	0	38
19	16	10	0	1	0	0	0	0	0	27
20	15	13	0	1	0	0	0	0	0	29
21	22	13	0	2	0	0	0	0	0	37
22	15	8	0	1	0	2	0	0	1	27
23	22	7	1	1	0	1	0	0	0	32
24	22	7	0	0	0	0	0	0	0	29
25	12	6	0	2	0	0	0	0	0	20
26-30	77	28	0	3	0	0	0	0	1	109
31-35	85	28	0	4	2	1	0	0	0	120
36-40	92	25	0	3	1	1	0	1	0	123
41-45	103	31	0	4	0	2	0	0	1	141
46-50	95	25	0	1	0	1	0	0	1	123
51-55	65	17	0	1	1	2	0	0	1	87
56-60	46	8	0	0	0	0	0	0	1	55
61-65	16	11	0	0	0	0	0	0	0	27
66-70	28	18	0	2	2	0	0	0	0	50
71-75	16	10	0	2	0	0	0	1	0	29
76-80	11	7	0	0	0	0	0	0	0	18
81-85	5	5	0	0	1	1	0	0	0	12
86-90	5	1	0	0	0	0	0	0	0	6
Unknown	10	39	1	1	0	0	1	1	2	55
Total	824	458	2	46	11	11	1	3	8	1,364

SECTION 11 – Unsafe Speed Related Collisions in 2003

Table 11.12 – Victims killed in unsafe speed collisions by victim age and road user class not in vehicles travelling at unsafe speed

Victim				
Age	Driver	Passenger	Pedestrian	Total
21	0	0	1	1
24	2	0	0	2
26-30	2	0	0	2
36-40	2	0	0	2
41-45	1	1	1	3
46-50	1	1	1	3
51-55	0	0	1	1
56-60	1	0	0	1
61-65	0	1	0	1
76-80	1	0	1	2
81-85	1	1	0	2
Total	11	4	5	20

Table 11.13 – Unsafe speed related collisions by speed limit and road jurisdiction – City/Municipal street

Speed			
Limit	Injury	Fatal	Total
Posted at 10 km/hr	7	0	7
Posted at 20 km/hr	4	0	4
Posted at 30 km/hr	48	1	49
Posted at 40 km/hr	17	0	17
Posted at 50 km/hr	1,110	28	1,138
Posted at 60 km/hr	234	11	245
Posted at 70 km/hr	31	2	33
Posted at 80 km/hr	41	2	43
Posted at 90 km/hr	14	0	14
Posted at 100 km/hr	4	0	4
Posted at 110 km/hr	1	0	1
Advisory - 10 km/hr	3	1	4
Advisory - 20 km/hr	7	0	7
Advisory - 30 km/hr	38	0	38
Advisory - 40 km/hr	8	0	8
Advisory - 50 km/hr	104	4	108
Advisory - 60 km/hr	8	0	8
Advisory - 80 km/hr	1	0	1
Special - 30 km/hr	3	0	3
Special - 50 km/hr	3	1	4
Special - 70 km/hr	1	0	1
Other	13	1	14
Unknown	63	2	65
Total	1,763	53	1,816

Table 11.14 – Unsafe speed related collisions by speed limit and road jurisdiction – Provincial highway

Speed Limit	Injury	Fatal	Total
Posted at 10 km/hr	10	0	10
Posted at 20 km/hr	1	0	1
Posted at 30 km/hr	4	0	4
Posted at 40 km/hr	4	0	4
Posted at 50 km/hr	134	3	137
Posted at 60 km/hr	114	4	118
Posted at 70 km/hr	56	0	56
Posted at 80 km/hr	257	14	271
Posted at 90 km/hr	266	16	282
Posted at 100 km/hr	249	16	265
Posted at 110 km/hr	109	3	112
Advisory - 10 km/hr	1	0	1
Advisory - 20 km/hr	3	0	3
Advisory - 30 km/hr	13	0	13
Advisory - 40 km/hr	26	1	27
Advisory - 50 km/hr	24	2	26
Advisory - 60 km/hr	42	1	43
Advisory - 70 km/hr	11	2	13
Advisory - 80 km/hr	14	0	14
Special - 20 km/hr	1	0	1
Special - 30 km/hr	1	0	1
Special - 50 km/hr	1	0	1
Special - 60 km/hr	4	0	4
Special - 70 km/hr	1	0	1
Other	6	0	6
Unknown	47	1	48
Total	1,399	63	1,462

Table 11.15 – Unsafe speed related collisions by speed limit and road jurisdiction – Rural road

Speed Limit	Injury	Fatal	Total
Posted at 10 km/hr	1	0	1
Posted at 20 km/hr	1	0	1
Posted at 30 km/hr	9	0	9
Posted at 40 km/hr	5	0	5
Posted at 50 km/hr	134	5	139
Posted at 60 km/hr	110	1	111
Posted at 70 km/hr	17	4	21
Posted at 80 km/hr	93	3	96
Posted at 90 km/hr	9	0	9
Posted at 100 km/hr	3	0	3
Posted at 110 km/hr	2	0	2
Advisory - 20 km/hr	4	1	5
Advisory - 30 km/hr	13	0	13
Advisory - 40 km/hr	5	0	5
Advisory - 50 km/hr	9	1	10
Advisory - 60 km/hr	7	1	8
Advisory - 70 km/hr	1	0	1
Advisory - 80 km/hr	7	1	8
Advisory - 90 km/hr	1	1	2
Special - 30 km/hr	1	0	1
Special - 60 km/hr	4	0	4
Special - 80 km/hr	2	0	2
Other	7	1	8
Unknown	32	2	34
Total	477	21	498

Motorcycles in 2003 Collisions

SECTION 12

There were 73,258 motorcycles licensed in British Columbia in 2003. The number of motorcycles licensed showed an increase of 6.0% from 2002.

In 2003, drivers licensed to operate motorcycles totaled 213,995, a 2.3% increase from the previous year.

There were 34 fatal collisions and 870 injury collisions involving motorcycles in 2003. The number of motorcycle drivers killed was 31. Four motorcycle passengers were killed during the year. Among the victims wearing helmets at the time of crash, 19 out of 681 (2.8%) were killed. Among those without helmets 5 out of 31 (16.1%) were killed. The difference in the magnitude of this ratio argues for the effectiveness of motorcycle helmets in protecting against fatal injury. Among motorcyclists with non-fatal injuries, 45.8% of those not wearing a helmet suffered injuries to the head or entire body. Among those wearing a helmet, 13.4% suffered head injuries or injuries to the entire body.

The top five contributing factors assigned to motorcycle drivers (as a percentage of total motorcycle collisions) were, in order of magnitude:

1. Unsafe speed (21.2%);
2. Driving without due care (17.0%);
3. Driver inexperience (13.7%);
4. Alcohol involvement (6.2%);
5. Obstruction/Debris on Road (4.8%).

The top five contributing factors assigned to other drivers colliding with motorcycles(as a percentage of total motorcycle collisions) were, in order of magnitude:

1. Failing to yield to right of way (17.5%);
2. Driving without due care (7.7%);
3. Improper Turning (5.1%);
4. Driver Inexperience (2.9%);
5. Following too closely (2.8%).

The ‘primary collision occurrence’ is the action taken by the vehicles at the time of the collision. The most common occurrences for motorcycle collisions were off-road right (21.0%) followed by intersection – right angle (11.2%), and left turn across oncoming traffic (11.1%). In about 68% of all casualty collisions, the motorcyclist was going straight ahead.



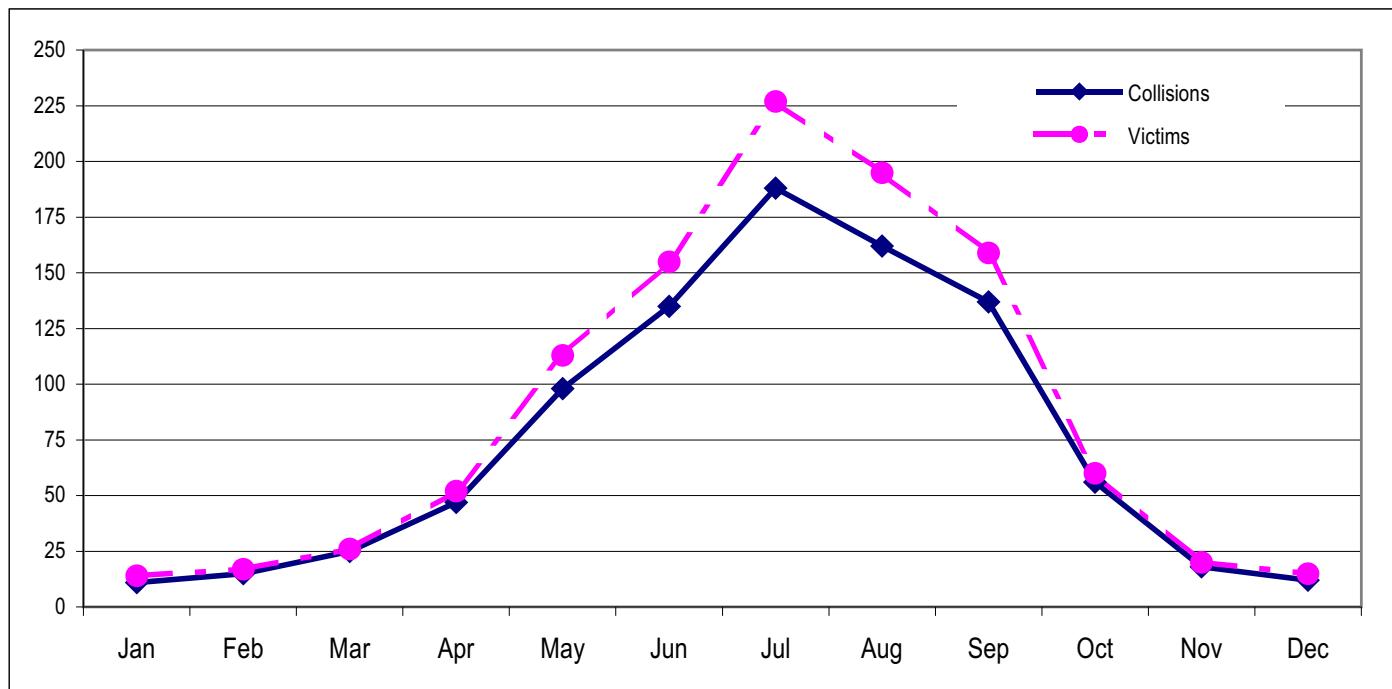
SECTION 12 – Motorcycles in 2003 Collisions

Table 12.01 – Motorcycle collisions and victims by month

Month	Collisions			Victims		
	Injury	Fatal	Total	Injured	Killed	Total
January	11	0	11	14	0	14
February	15	0	15	17	0	17
March	24	1	25	25	1	26
April	47	0	47	52	0	52
May	93	5	98	108	5	113
June	129	6	135	149	6	155
July	180	8	188	219	8	227
August	157	5	162	190	5	195
September	131	6	137	152	7	159
October	54	2	56	58	2	60
November	17	1	18	19	1	20
December	12	0	12	15	0	15
Total	870	34	904	1,018	35	1,053

Note: Victims include both motorcyclists and occupants of involved motor vehicles and pedestrians.

Figure 12.01 – Motorcycle collisions and victims by month



**Table 12.02 – Contributing factors in motorcycle collisions
– Motorcycle driver factors only: By number of Collisions**

Contributing Factors				% of Total Motorcycle Collisions
	Injury	Fatal	Total	
Unsafe Speed	175	17	192	21.24
Driving Without Due Care	147	7	154	17.04
Driver Inexperience	118	6	124	13.72
Alcohol Involvement	49	7	56	6.19
Obstruction/Debris on Road	43	0	43	4.76
Following too Closely	39	0	39	4.31
Improper Passing	36	3	39	4.31
Failing to Yield Right of Way	31	1	32	3.54
Avoiding Veh/Ped/Cycle	30	2	32	3.54
Wild Animal	32	0	32	3.54
Weather Condition	20	1	21	2.32
Improper Turning	16	2	18	1.99
Driving on Wrong Side of Road	14	1	15	1.66
Ignoring Traffic Control Device	12	1	13	1.44
Pavement Condition	12	0	12	1.33
Other	401	11	412	45.58
Unknown	45	4	49	5.42

Note:

- 1) The figures shown above represent the contributing factors assigned to the motorcycle drivers involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in the data presented in this table. For example, a collision attributed to alcohol involvement and careless driving would be counted above as both an alcohol related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the occurrence of the collisions as a percentage of total motorcycle casualty collisions recorded in British Columbia in 2003.
- 2) "Other" includes specified factors with less than 10 occurrences plus unspecified other.

**Table 12.03 – Contributing factors in motorcycle collisions
– Other driver factors only: By number of Collisions**

Contributing Factors				% of Total Motorcycle Collisions
	Injury	Fatal	Total	
Failing to Yield Right of Way	157	1	158	17.48
Driving Without Due Care	68	2	70	7.74
Improper Turning	46	0	46	5.09
Driver Inexperience	26	0	26	2.88
Following too Closely	23	2	25	2.77
Ignoring Traffic Control Device	17	0	17	1.88
Alcohol Involvement	13	1	14	1.55
Cutting In	14	0	14	1.55
Sunlight Glare	11	0	11	1.22
Other	192	3	195	21.57
Unknown	33	1	34	3.76

Note:

- 1) The figures shown above represent the contributing factors assigned to the drivers, other than motorcycle drivers, involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in the data presented in this table. For example, a collision attributed to driving without due care and improper turning would be counted above as both a careless related collision, and a collision involving 'Improper turning'. "Percent of Total" represents the occurrence of the collisions as a percentage of total motorcycle casualty collisions recorded in British Columbia in 2003.
- 2) "Other" includes specified factors with less than 10 occurrences plus unspecified other.

SECTION 12 – Motorcycles in 2003 Collisions

Table 12.04 – Motorcycle collisions by primary collision occurrence

Primary Collision Occurrence	Injury	Fatal	Total	% of Total
Off Road Right	177	13	190	21.02
Intersection - Right Angle	99	2	101	11.17
Left Turn-Across Oncoming Traffic	98	2	100	11.06
Rear End	89	1	90	9.96
Off Road Left	61	4	65	7.19
Overtaking	43	1	44	4.87
Left Turn - Head On	28	1	29	3.21
Head On	23	4	27	2.99
Side Swipe-Opposite Direction	17	0	17	1.88
Right Turn - Rear End	7	0	7	0.77
One Way Street	5	0	5	0.55
Left Turn - One Way	4	0	4	0.44
Right Turn - Head On	3	0	3	0.33
Right Turn - Same Direction	2	0	2	0.22
Other	185	6	191	21.13
Unknown	29	0	29	3.21
Total	870	34	904	100%

Table 12.06 – Pre-collision action by collision type in motorcycle collisions: Other drivers

Pre-Collision Action	Injury	Fatal	Total	% of Total
Making Left Turn	178	5	183	37.58
Going Straight Ahead	142	8	150	30.80
Slowing or Stopping	29	0	29	5.95
Stopped in Traffic	24	2	26	5.34
Changing Lanes	22	0	22	4.52
Making Right Turn	18	0	18	3.70
Making U Turn	11	0	11	2.26
Starting in Traffic	11	0	11	2.26
Starting from Parked position	9	0	9	1.85
Overtaking	4	0	4	0.82
Merging	3	0	3	0.62
Skidding	3	0	3	0.62
Backing	2	0	2	0.41
Swerving	1	0	1	0.21
Other	7	0	7	1.44
Unknown	8	0	8	1.64
Total	472	15	487	100%

Table 12.05 – Pre-collision action by collision type in motorcycle collisions: Motorcycle drivers

Pre-Collision Action	Injury	Fatal	Total	% of Total
Going Straight Ahead	596	26	622	67.76
Making Left Turn	61	2	63	6.86
Skidding	50	0	50	5.45
Slowing or Stopping	46	0	46	5.01
Overtaking	26	3	29	3.16
Making Right Turn	21	1	22	2.40
Swerving	18	0	18	1.96
Changing Lanes	12	2	14	1.53
Stopped in Traffic	11	0	11	1.20
Avoiding Object on Road	7	0	7	0.76
Merging	6	0	6	0.65
Making U Turn	4	0	4	0.44
Starting in Traffic	2	0	2	0.22
Yaw	1	1	2	0.22
Starting from Parked position	1	0	1	0.11
Spinning	1	0	1	0.11
Other	12	0	12	1.31
Unknown	8	0	8	0.87
Total	883	35	918	100%

Table 12.07 – Collision location by collision type in motorcycle collisions

Collision Location	Injury	Fatal	Total	% of Total
At intersection	299	8	307	33.96
Between Intersection:Exchanges	405	23	428	47.35
Intersection of Road & Driveway or Alley	68	1	69	7.63
Bridge	12	0	12	1.33
Ferry or Dock	1	0	1	0.11
Tunnel	1	0	1	0.11
Exit Deceleration lane	3	0	3	0.33
Exit Ramp	7	0	7	0.77
Exit Intersection	3	0	3	0.33
Entrance Acceleration Lane	4	0	4	0.44
Entrance Ramp	5	0	5	0.55
Entrance Intersection	2	0	2	0.22
Off Highway	20	1	21	2.32
Parking Lot:Single/Multilevel	11	0	11	1.22
Railroad crossing	2	0	2	0.22
Industrial Road	1	0	1	0.11
Other	12	0	12	1.33
Unknown	14	1	15	1.66
Total	870	34	904	100%

Table 12.08 – Motorcycle collisions by roadway surface condition

Roadway Surface Condition	Injury	Fatal	Total	% of Total
Dry	770	30	800	88.50
Wet	84	3	87	9.62
Ice	3	0	3	0.33
Muddy	1	0	1	0.11
Other	4	1	5	0.55
Unknown	8	0	8	0.88
Total	870	34	904	100%

Table 12.11 – Motorcycle collisions by time of day

Time	Injury	Fatal	Total	% of Total
0000-0059	10	1	11	1.22
0100-0159	9	1	10	1.11
0200-0259	7	1	8	0.88
0300-0359	5	1	6	0.66
0400-0459	2	0	2	0.22
0500-0559	4	1	5	0.55
0600-0659	7	0	7	0.77
0700-0759	22	0	22	2.43
0800-0859	20	0	20	2.21
0900-0959	22	0	22	2.43
1000-1059	35	0	35	3.87
1100-1159	46	1	47	5.20
1200-1259	60	3	63	6.97
1300-1359	50	2	52	5.75
1400-1459	57	2	59	6.53
1500-1559	72	2	74	8.19
1600-1659	78	5	83	9.18
1700-1759	91	1	92	10.18
1800-1859	63	1	64	7.08
1900-1959	57	3	60	6.64
2001-2059	52	2	54	5.97
2100-2159	35	1	36	3.98
2200-2259	23	2	25	2.77
2300-2359	14	4	18	1.99
Unknown	29	0	29	3.21
Total	870	34	904	100%

Table 12.09 – Motorcycle collisions by lighting condition

Lighting Condition	Injury	Fatal	Total	% of Total
Daylight	687	20	707	78.21
Dark/Some Illumination	59	4	63	6.97
Dark/Full Illumination	41	2	43	4.76
Dark/No Illumination	34	5	39	4.31
Dusk	34	3	37	4.09
Dawn	3	0	3	0.33
Unknown	12	0	12	1.33
Total	870	34	904	100%

Table 12.10 – Motorcycle collisions by weather condition

Weather condition	Injury	Fatal	Total	% of Total
Clear	658	23	681	75.33
Cloudy	151	8	159	17.59
Raining	43	3	46	5.09
Fog	7	0	7	0.77
Smog/Smoke	1	0	1	0.11
Other	1	0	1	0.11
Unknown	9	0	9	1.00
Total	870	34	904	100%

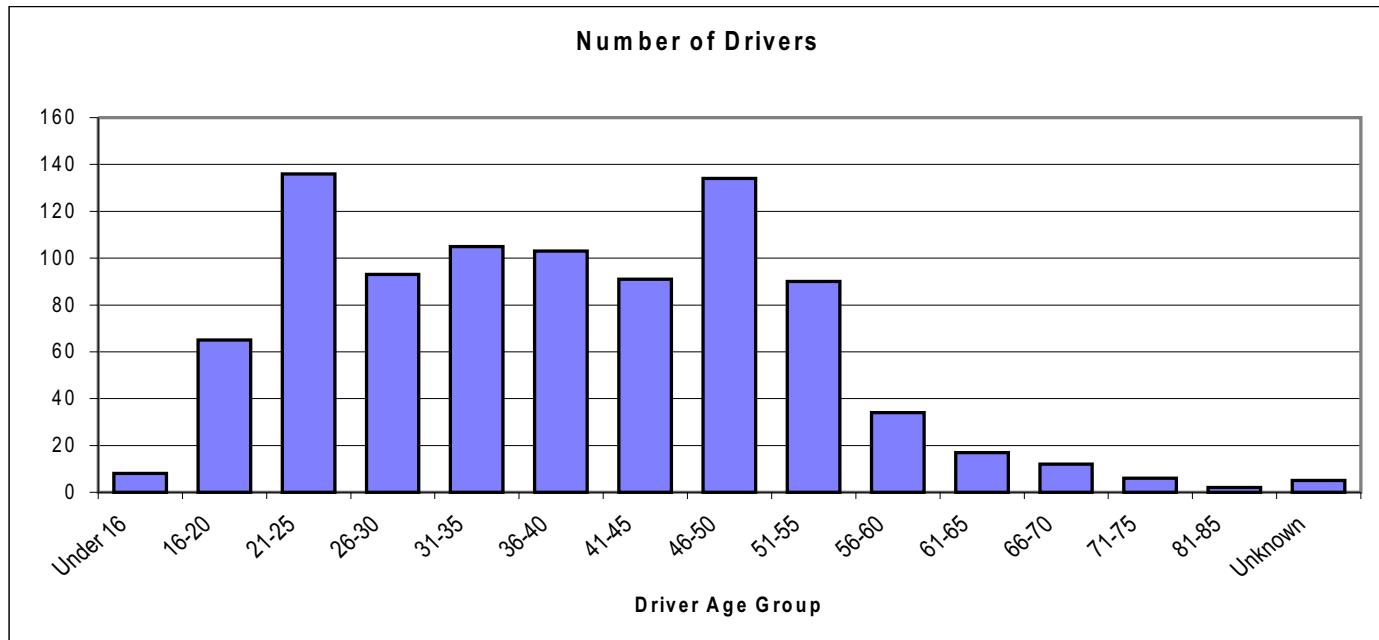
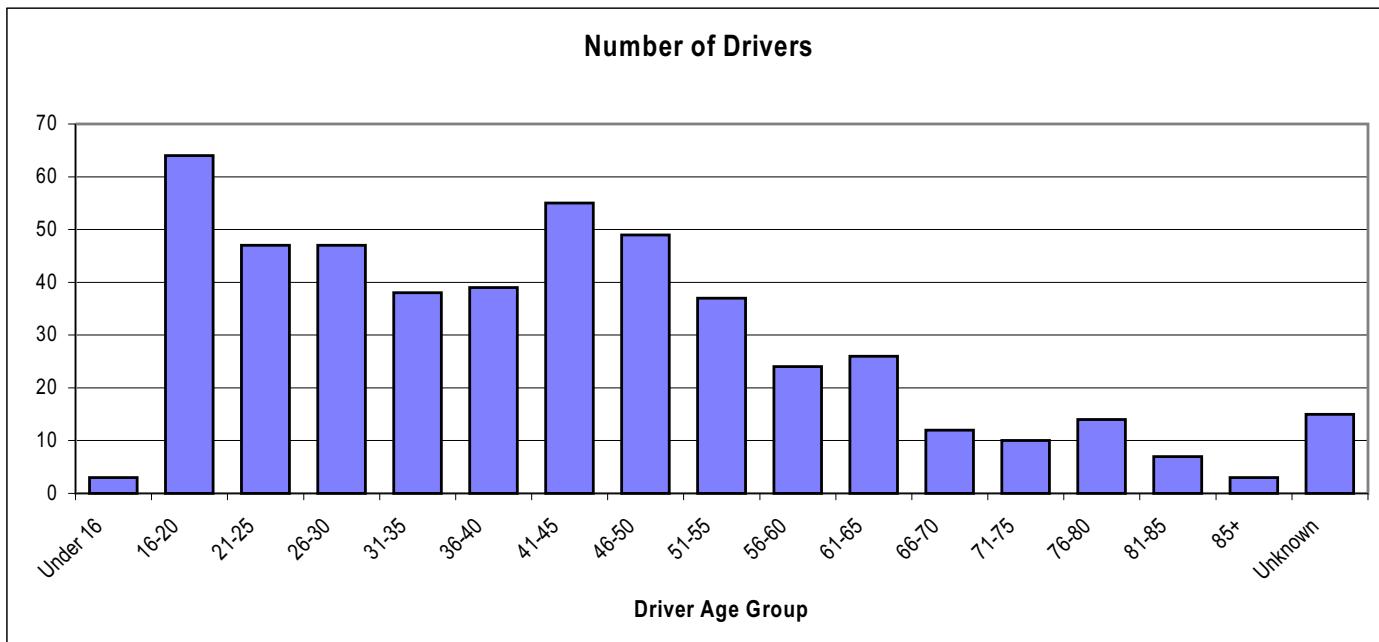
SECTION 12 – Motorcycles in 2003 Collisions
**Table 12.12 – Motorcycle collisions by driver age
– Motorcycle drivers only**

Age	Injury	Fatal	Total	% of
				Total
13	1	1	2	0.22
14	5	0	5	0.55
15	1	0	1	0.11
16	4	0	4	0.44
17	6	1	7	0.78
18	10	1	11	1.22
19	18	1	19	2.11
20	22	2	24	2.66
21	24	0	24	2.66
22	34	2	36	4.00
23	27	1	28	3.11
24	26	1	27	3.00
25	19	2	21	2.33
26-30	90	3	93	10.32
31-35	101	4	105	11.65
36-40	99	4	103	11.43
41-45	86	5	91	10.10
46-50	131	3	134	14.87
51-55	89	1	90	9.99
56-60	34	0	34	3.77
61-65	17	0	17	1.89
66-70	10	2	12	1.33
71-75	6	0	6	0.67
81-85	2	0	2	0.22
Unknown	5	0	5	0.55
Total	867	34	901	100%

**Table 12.13 – Motorcycle collisions by driver age
– Other driver involved**

Age	Injury	Fatal	Total	% of
				Total
11		1	0	1
12		1	0	1
15		1	0	1
16		6	0	6
17		14	0	14
18		10	1	11
19		19	0	19
20		14	0	14
21		11	0	11
22		11	0	11
23		6	0	6
24		10	1	11
25		8	0	8
26-30		44	3	47
31-35		38	0	38
36-40		39	0	39
41-45		52	3	55
46-50		49	0	49
51-55		33	4	37
56-60		22	2	24
61-65		25	1	26
66-70		12	0	12
71-75		10	0	10
76-80		14	0	14
81-85		7	0	7
86-90		2	0	2
91-95		1	0	1
Unknown		15	0	15
Total	475	15	490	100%

Note: Includes bicycle drivers.

Figure 12.02 – Drivers involved in motorcycle collisions by age group – Motorcycle drivers only**Figure 12.03 – Drivers involved in Motorcycle collisions by age group – Other drivers involved**

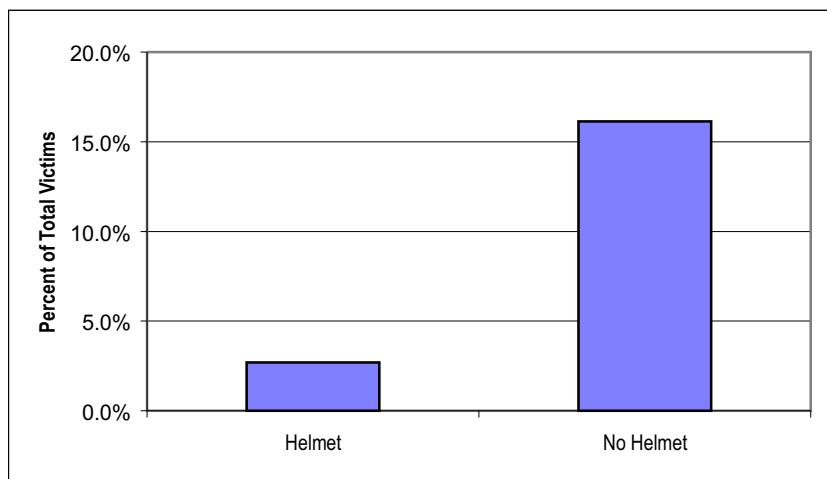
SECTION 12 – Motorcycles in 2003 Collisions

Table 12.14 – Helmet usage by motorcycle drivers and passengers

Safety Equipment	Not Injured			Injured			Killed			Total Involved	% of Total Involved
	Drivers	Passengers	Total	Drivers	Passengers	Total	Drivers	Passengers	Total		
Helmet	21	3	24	597	65	662	19	0	19	705	68.78
No Helmet	0	0	0	24	2	26	3	2	5	31	3.02
Unknown	13	3	16	233	29	262	9	2	11	289	28.20
Total	34	6	40	854	96	950	31	4	35	1,025	100%

Note: This report does not include occupants of other vehicles in motorcycle collisions.

Figure 12.04 – Killed victims as a proportion of total casualties by helmet usage



Note: Includes motorcycle riders and passengers only

Table 12.15 – Motorcycle drivers and passengers injured and killed by helmet use and location of injury

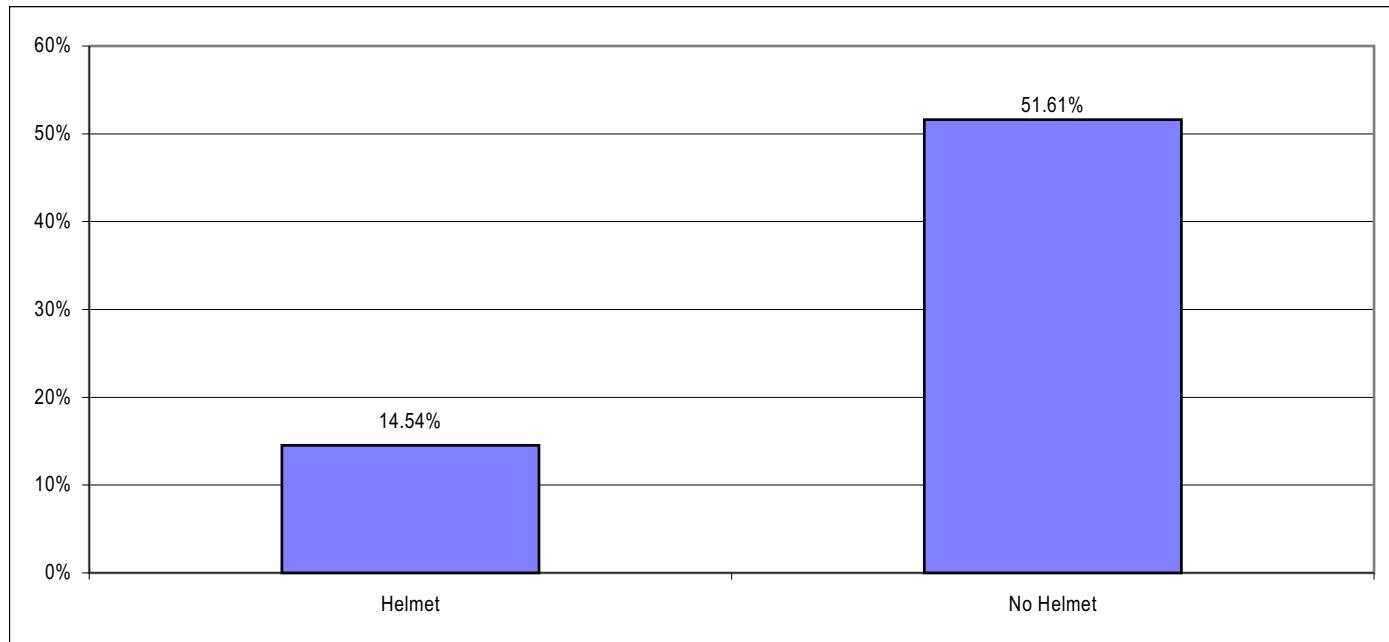
Safety Equipment	Injury Location	Injured			Killed		
		Drivers	Passengers	Total Injured	Drivers	Passengers	
Helmet	Head	46	4	50	7	0	7
	Face/Nose	15	4	19	0	0	0
	Neck	27	3	30	2	0	2
	Chest	26	3	29	4	0	4
	Back	36	10	46	1	0	1
	Shoulder/Upper Arm	71	2	73	0	0	0
	Elbow/Lower Arm/Hand	83	8	91	0	0	0
	Abdomen/Pelvis	28	4	32	0	0	0
	Hip/Upper Leg	46	4	50	0	0	0
	Knee/Lower Leg/Foot	158	19	177	0	0	0
	Entire Body	34	3	37	5	0	5
	Unknown	27	1	28	0	0	0
Total		597	65	662	19	0	19
No Helmet	Head	9	0	9	3	1	4
	Face/Nose	1	0	1	0	0	0
	Eye	1	0	1	0	0	0
	Neck	2	0	2	0	0	0
	Shoulder/Upper Arm	1	0	1	0	0	0
	Elbow/Lower Arm/Hand	3	0	3	0	0	0
	Abdomen/Pelvis	1	0	1	0	0	0
	Hip/Upper Leg	2	0	2	0	0	0
	Knee/Lower Leg/Foot	2	2	4	0	0	0
	Entire Body	2	0	2	0	1	1
Total		24	2	26	3	2	5
Unknown	Head	17	4	21	4	1	5
	Face/Nose	7	1	8	0	0	0
	Neck	12	1	13	1	0	1
	Chest	10	1	11	0	1	1
	Back	25	2	27	0	0	0
	Shoulder/Upper Arm	32	0	32	0	0	0
	Elbow/Lower Arm/Hand	24	5	29	0	0	0
	Abdomen/Pelvis	8	1	9	1	0	1
	Hip/Upper Leg	19	1	20	0	0	0
	Knee/Lower Leg/Foot	56	6	62	1	0	1
	Entire Body	9	4	13	2	0	2
	Unknown	14	3	17	0	0	0
Total		233	29	262	9	2	11

Note: Includes occupants on parked motorcycle.

SECTION 12 – Motorcycles in 2003 Collisions
Table 12.16 – Motorcycle drivers and passengers injured and killed by helmet use and injury type

Safety Equipment	Injury Type	Injured			Killed			Total Killed
		Drivers	Passengers	Total Injured	Drivers	Passengers		
Helmet	Abrasions	141	17	158	1	0		1
	Bruises	127	10	137	0	0		0
	Lacerations	55	4	59	1	0		1
	Bleeding	24	4	28	9	0		9
	Fracture	128	16	144	6	0		6
	Dislocation	24	2	26	0	0		0
	Amputations	3	0	3	1	0		1
	Concussion	21	2	23	0	0		0
	Whiplash	20	4	24	0	0		0
	Other	7	1	8	1	0		1
	Unknown	47	5	52	0	0		0
	Total	597	65	662	19	0		19
No Helmet	Abrasions	4	0	4	0	0		0
	Bruises	4	0	4	0	0		0
	Lacerations	5	0	5	0	0		0
	Bleeding	1	0	1	1	1		2
	Fracture	4	2	6	2	0		2
	Dislocation	1	0	1	0	0		0
	Concussion	2	0	2	0	0		0
	Whiplash	2	0	2	0	0		0
	Other	0	0	0	0	1		1
	Unknown	1	0	1	0	0		0
	Total	24	2	26	3	2		5
Unknown	Abrasions	52	9	61	0	0		0
	Bruises	45	4	49	0	0		0
	Lacerations	27	3	30	0	0		0
	Bleeding	14	0	14	2	2		4
	Fracture	53	5	58	3	0		3
	Dislocation	4	0	4	0	0		0
	Amputations	0	0	0	1	0		1
	Concussion	9	2	11	1	0		1
	Whiplash	9	1	10	0	0		0
	Other	0	1	1	1	0		1
	Unknown	20	4	24	1	0		1
	Total	233	29	262	9	2		11
Grand Total		854	96	950	31	4		35

Note: Includes occupants on parked motorcycle.

Figure 12.05 – Percent of victims with head injury among helmeted and nonhelmeted motorcycle drivers and passenger victims

Note: Location of injury includes both head and entire body.

SECTION 12 – Motorcycles in 2003 Collisions

Pedestrians in 2003 Collisions

SECTION 13

There were 1,754 reported traffic collisions that involved pedestrians in 2003. There were 1,913 persons (including occupants of motor vehicles) injured or killed in collisions involving pedestrians, with pedestrians accounting for 96.7% of the casualties.

There were 1,775 pedestrians reported injured in traffic collisions during 2003. The number of pedestrians killed was 74.

Of the 74 pedestrians killed, 38 (51.4%) were over the age of 60, 8 (10.8%) were between 21 and 30 and 3 (4.1%) were aged under 16. Of the 1,759 injured, 290 (16.5%) were aged 61 and over, 294 (16.7%) were between 21 and 30 and 265 (15.1%) were under age 16.

Of all pedestrian collisions in 2003, approximately 54.4% occurred at intersections. Notably, 59.5% of all fatal pedestrian collisions occurred at non-intersection locations. Of these fatal collisions, 38.6% of the pedestrians were crossing with no signal and no crosswalk.

The top five contributing factors assigned to pedestrians (as a percentage of total pedestrian collisions) were, in order of magnitude:

1. Pedestrian error/confusion (13.6%);
2. Alcohol involvement (4.4%);
3. Failing to yield to right of way (2.7%);
4. Ignoring traffic control device (1.5%);
5. Illegal drugs (0.8%).

The top five contributing factors assigned to involved drivers (as a percentage of total pedestrian collisions) were, in order of magnitude:

1. Failing to yield to right of way (23.7%);
2. Driving without due care (20.1%);
3. Weather condition (8.3%);
4. Pedestrian Error/confusion (5.6%);
5. Backing unsafely (4.9%).

Table 13.01 – Pedestrian collisions and victims by month

Month	Collisions			Victims		
	Injury	Fatal	Total	Injured	Killed	Total
January	173	11	184	182	11	193
February	128	6	134	136	6	142
March	131	8	139	138	8	146
April	123	5	128	128	5	133
May	112	3	115	131	3	134
June	121	5	126	138	5	143
July	116	2	118	130	2	132
August	114	5	119	129	5	134
September	116	4	120	123	4	127
October	172	8	180	190	8	198
November	176	8	184	198	8	206
December	198	9	207	216	9	225
Total	1,680	74	1,754	1,839	74	1,913

Note: Victims include both pedestrians and occupants of involved motor vehicles.

SECTION 13 – Pedestrians in 2003 Collisions

Figure 13.01 – Pedestrian collisions and victims by month (includes both pedestrians and occupants of involved motor vehicles)

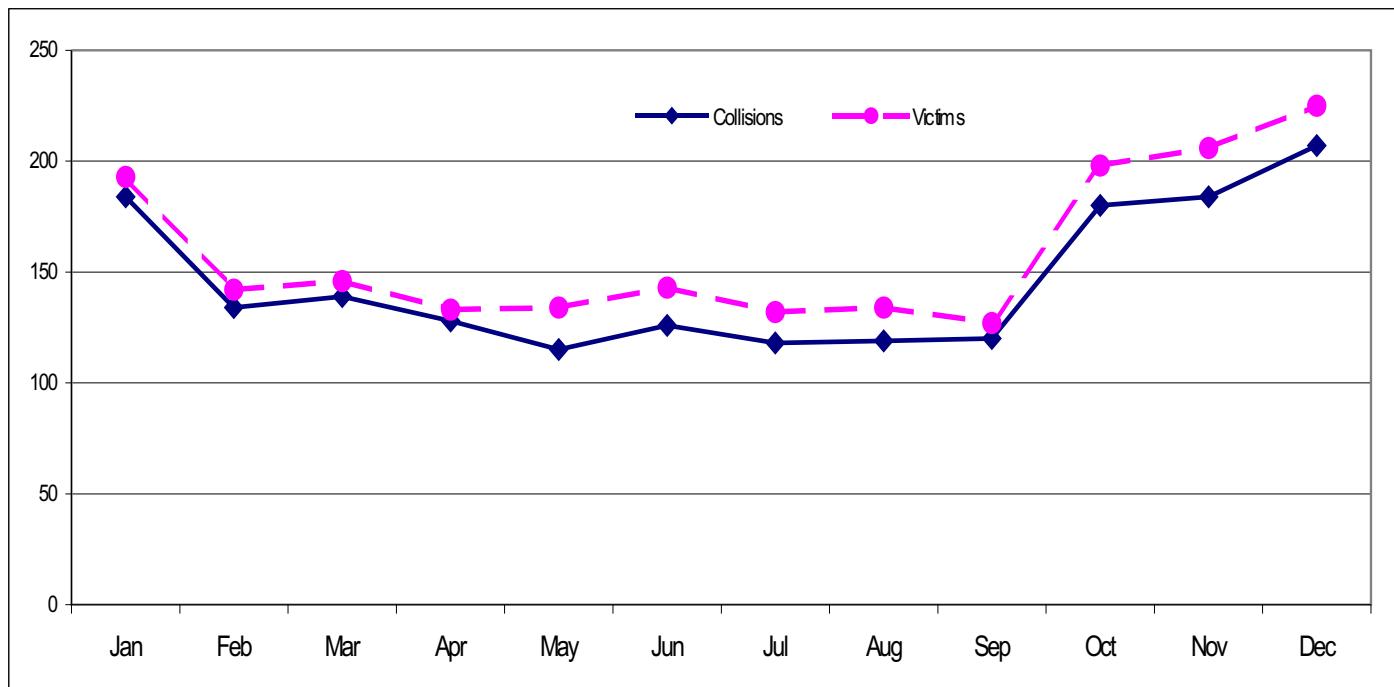
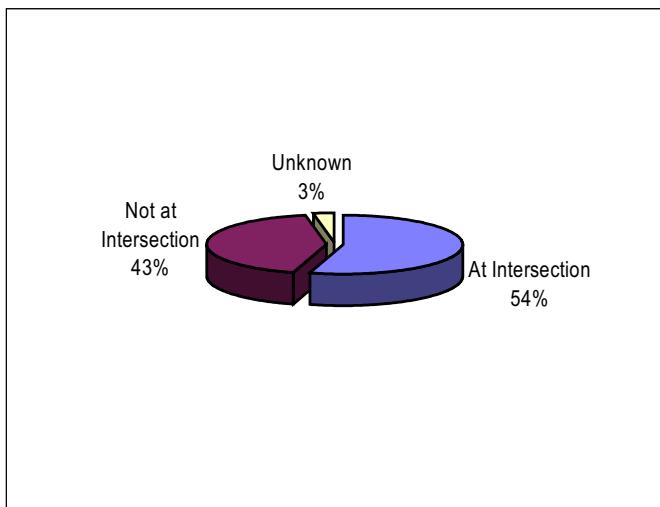
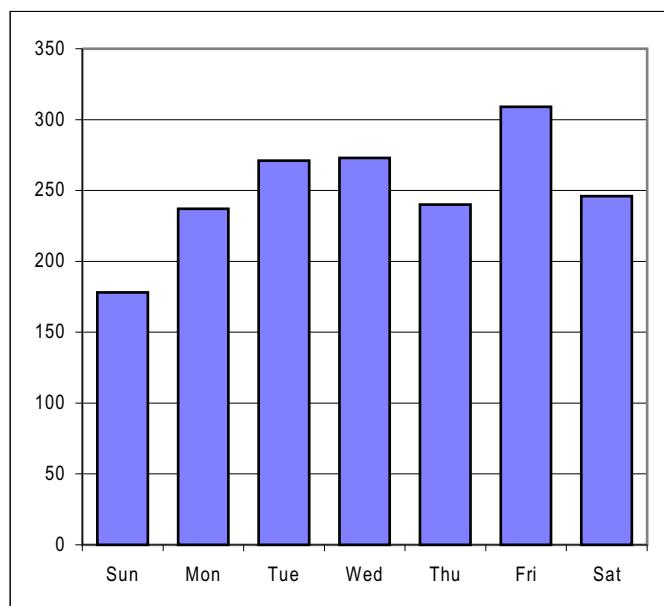


Table 13.02 – Pedestrian collisions by pedestrian action and pedestrian location

Pedestrian Action	At Intersection			Not at Intersection			Unknown			Total Collisions
	Injury	Fatal	Total	Injury	Fatal	Total	Injury	Fatal	Total	
Crossing with Signal	322	7	329	3	0	3	1	0	1	333
Crossing Against Signal	103	2	105	11	0	11	0	0	0	116
Crossing - No Signal- Marked Crosswalk	216	4	220	22	4	26	1	0	1	247
Crossing-No Signal No Crosswalk	143	9	152	257	17	274	0	0	0	426
Walking along Highway-with Traffic	8	0	8	48	6	54	2	0	2	64
Walking along Highway - Against Traffic	3	1	4	22	2	24	0	0	0	28
Emerging from from/behind parked vehicle	4	0	4	89	3	92	2	0	2	98
Child Getting on/Off School Bus	0	0	0	1	0	1	0	0	0	1
Adult Getting on/Off Vehicle	1	0	1	7	1	8	1	0	1	10
Pushing/Working on a Car	1	0	1	8	0	8	1	0	1	10
Working in Roadway	5	0	5	20	2	22	2	0	2	29
Playing in Roadway	5	0	5	21	0	21	1	0	1	27
Standing on Sidewalk	23	1	24	36	1	37	0	0	0	61
Other	65	5	70	153	7	160	20	0	20	250
Unknown	26	1	27	10	1	11	16	0	16	54
Total	925	30	955	708	44	752	47	0	47	1,754

Figure 13.02 – Pedestrian collisions by collision location**Figure 13.03 – Pedestrian collisions by day of week**

Note: Includes both injury and fatal collisions.

Table 13.03 – Pedestrian collisions: Collision hour by day of week – Injury collisions only

Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total	% of Total
0000-0059	10	1	2	4	5	2	14	38	2.26
0100-0159	10	2	1	4	3	1	4	25	1.49
0200-0259	9	1	4	0	2	4	9	29	1.73
0300-0359	2	1	1	0	1	0	3	8	0.48
0400-0459	4	0	2	0	0	0	4	10	0.60
0500-0559	0	2	0	0	1	2	3	8	0.48
0600-0659	0	3	1	7	3	4	1	19	1.13
0700-0759	4	4	9	14	10	7	2	50	2.98
0800-0859	0	10	17	15	11	11	5	69	4.11
0900-0959	7	10	16	10	11	9	6	69	4.11
1000-1059	7	16	9	10	7	14	8	71	4.23
1100-1159	7	13	17	10	10	12	7	76	4.52
1200-1259	10	9	18	15	14	9	18	93	5.54
1300-1359	8	15	12	13	15	12	12	87	5.18
1400-1459	8	15	12	21	16	23	13	108	6.43
1500-1559	8	22	23	14	19	27	12	125	7.44
1600-1659	11	21	25	18	12	30	19	136	8.10
1700-1759	9	33	37	29	16	32	14	170	10.12
1800-1859	21	11	22	21	22	27	24	148	8.81
1900-1959	14	10	10	20	17	14	19	104	6.19
2000-2059	7	6	9	11	3	17	7	60	3.57
2100-2159	5	8	6	7	11	14	10	61	3.63
2200-2259	5	4	4	5	9	8	9	44	2.62
2300-2359	2	6	3	8	4	13	8	44	2.62
Unknown	3	4	1	6	4	4	6	28	1.67
Total	171	227	261	262	226	296	237	1,680	100%

SECTION 13 – Pedestrians in 2003 Collisions

Table 13.04 – Pedestrian involved collisions: Collision hour by day of week – Fatal collisions only

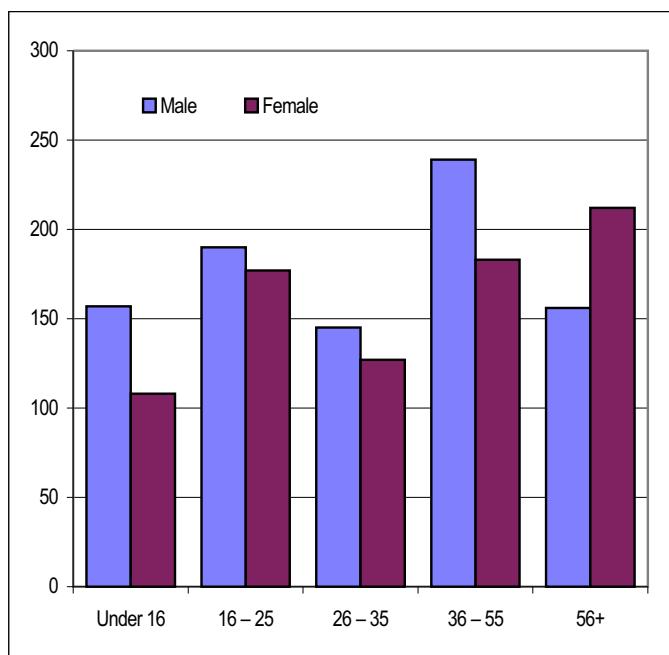
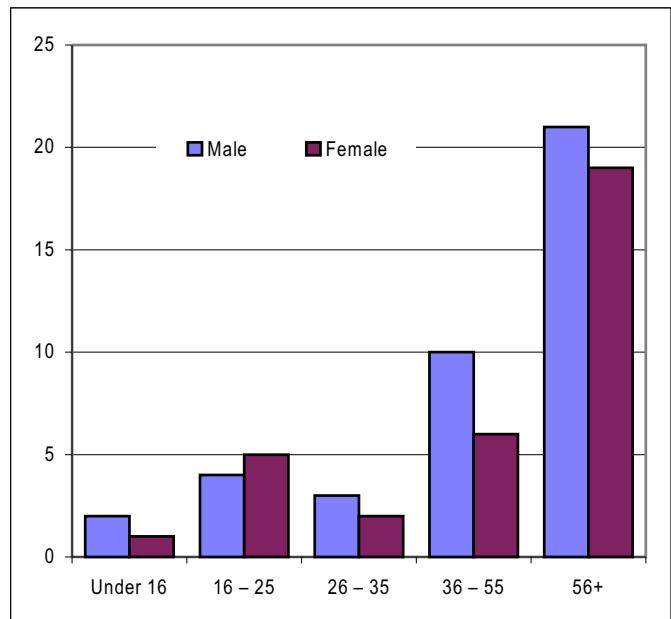
Time	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total	% of Total
0000-0059	0	0	0	0	1	0	0	1	1.35
0200-0259	2	0	0	1	0	1	0	4	5.41
0300-0359	0	0	0	0	0	0	1	1	1.35
0500-0559	0	0	1	0	0	0	0	1	1.35
0600-0659	0	0	0	1	0	2	0	3	4.05
0700-0759	0	1	0	1	0	0	1	3	4.05
0900-0959	0	1	0	1	2	0	1	5	6.76
1000-1059	0	0	0	0	0	0	1	1	1.35
1100-1159	0	1	1	0	0	0	0	2	2.70
1200-1259	1	1	0	0	1	1	1	5	6.76
1300-1359	0	1	0	0	1	1	0	3	4.05
1400-1459	0	2	0	0	0	1	0	3	4.05
1500-1559	0	0	0	1	0	1	0	2	2.70
1600-1659	0	0	2	0	0	1	1	4	5.41
1700-1759	2	2	0	1	2	2	1	10	13.51
1800-1859	2	0	1	2	1	0	0	6	8.11
1900-1959	0	0	2	2	5	1	0	10	13.51
2000-2059	0	1	0	0	0	1	0	2	2.70
2100-2159	0	0	1	1	0	1	0	3	4.05
2200-2259	0	0	1	0	0	0	1	2	2.70
2300-2359	0	0	1	0	0	0	1	2	2.70
Unknown	0	0	0	0	1	0	0	1	1.35
Total	7	10	10	11	14	13	9	74	100%



Table 13.05 – Pedestrian victims injured by age and gender

Age	Male	Female	Total	% of Total
1	0	1	1	0.06
2	6	3	9	0.51
3	3	6	9	0.51
4	6	2	8	0.45
5	5	1	6	0.34
6	6	2	8	0.45
7	8	5	13	0.74
8	5	4	9	0.51
9	7	7	14	0.80
10	6	7	13	0.74
11	16	4	20	1.14
12	19	13	32	1.82
13	21	13	34	1.93
14	19	17	36	2.05
15	30	23	53	3.01
16	19	21	40	2.27
17	19	22	41	2.33
18	19	16	35	1.99
19	25	16	41	2.33
20	25	34	59	3.35
21	21	11	32	1.82
22	11	23	34	1.93
23	14	7	21	1.19
24	18	16	34	1.93
25	19	11	30	1.71
26-30	76	67	143	8.13
31-35	69	60	129	7.33
36-40	64	49	113	6.42
41-45	73	49	122	6.94
46-50	59	40	99	5.63
51-55	43	45	88	5.00
56-60	37	41	78	4.43
61-65	31	22	53	3.01
66-70	19	28	47	2.67
71-75	24	31	55	3.13
76-80	26	37	63	3.58
81-85	7	33	40	2.27
86-90	7	14	21	1.19
91-95	5	4	9	0.51
95+	0	2	2	0.11
Unknown	33	32	65	3.70
Total	920	839	1,759	100%

Note: Does not include 16 pedestrians whose gender was unknown.

Figure 13.04 – Pedestrians injured by gender and age group**Figure 13.05. – Pedestrians killed by gender and age group**

SECTION 13 – Pedestrians in 2003 Collisions

Table 13.06 – Pedestrian victims killed by age and gender

Age	Male	Female	Total	% of Total
				Total
5	2	0	2	2.70
14	0	1	1	1.35
19	1	0	1	1.35
20	1	0	1	1.35
21	2	3	5	6.76
23	0	1	1	1.35
24	0	1	1	1.35
26-30	1	0	1	1.35
31-35	2	2	4	5.41
36-40	4	2	6	8.11
41-45	3	0	3	4.05
46-50	2	1	3	4.05
51-55	1	3	4	5.41
56-60	0	2	2	2.70
61-65	5	1	6	8.11
66-70	3	3	6	8.11
71-75	3	3	6	8.11
76-80	5	1	6	8.11
81-85	3	7	10	13.51
86-90	1	1	2	2.70
91-95	0	1	1	1.35
95+	1	0	1	1.35
Unknown	0	1	1	1.35
Total	40	34	74	100%

Table 13.08 – Contributing factors in pedestrian involved collisions – Other driver factors only: By number of collisions

Contributing Factors	Injury	Fatal	Total	% of Total
Failing to Yield Right of Way	403	13	416	23.72
Driving Without Due Care	341	16	357	20.35
Weather Condition	141	5	146	8.32
Pedestrian Error/Confusion	87	11	98	5.59
Backing Unsafely	83	3	86	4.90
Visibility Impaired	77	3	80	4.56
Alcohol Involvement	49	6	55	3.14
Driver Inexperience	53	2	55	3.14
Sunlight Glare	53	2	55	3.14
Unsafe Speed	44	5	49	2.79
Ignoring Traffic Control Device	45	0	45	2.57
Improper Turning	42	2	44	2.51
No Driver	18	1	19	1.08
Avoiding Veh/Ped/Cycle	18	0	18	1.03
Ignoring Officer/Flagman/Guard	11	0	11	0.63
Road/Intersection Design	10	0	10	0.57
Other	651	20	671	38.26
Unknown	142	13	155	8.84

Note:

1) The figures shown above represent the contributing factors assigned to drivers, other than pedestrians, involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions will occur in the data presented in this table. For example, a collision attributed to alcohol involvement and careless driving will be counted above as both an alcohol related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the occurrence of the collisions as a percentage of total pedestrian casualty collisions recorded in British Columbia in 2003.

2) "Other" includes specified factors with less than 10 occurrences plus unspecified other.

Table 13.07 – Contributing factors in pedestrian collisions – Pedestrian factors only: By number of collisions

Contributing Factors	Injury	Fatal	Total	% of Total
Pedestrian Error/Confusion	228	10	238	13.57
Alcohol Involvement	69	8	77	4.39
Failing to Yield Right of Way	45	3	48	2.74
Ignoring Traffic Control Device	25	1	26	1.48
Drugs (Illegal)	14	0	14	0.80
Weather Condition	14	0	14	0.80
Suicide Attempt	9	2	11	0.63
Visibility Impaired	8	0	8	0.46
Physical Disability	5	0	5	0.29
Insufficient Traffic Control	4	1	5	0.29
Other	467	10	477	27.19
Unknown	97	4	101	5.76

Note:

1) The figures shown above represent the contributing factors assigned to the pedestrians involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions will occur in the data presented in this table. For example, a collision attributed to both alcohol involvement and weather condition will be counted twice above, once under "alcohol involvement" and again under "weather condition". "Percent of Total" represents the occurrence of the collisions as a percentage of total pedestrian casualty collisions recorded in British Columbia in 2003.

2) "Other" includes specified factors with less than 4 occurrences plus unspecified other.

Table 13.09 – Pedestrians injured and killed by age and pedestrian action

Age	Child																Stand				
	Cross -ing with		Cross -ing		Wlkng along Hwy		Wlkng along Hwy		Emrg from/ behind vehicle		Adult Getting on/off School Bus		Push/ Work on Car		Work in Rdway	Play in Rdway	on Side-walk	Other	Unknown	Total	
	Signal	Agnst	Signal	Mrked	No Signl	No Signl	No Traffic	Traffic	Agnst	Traffic	behind vehicle	School Bus	Vehicle	on Car	Rdway	Rdway					
1	0	0			1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	2	0			1	1		0	0	0	0	0	0	0	0	0	4	0	1	0	9
3	0	0			0	1		0	0	2	0	0	0	0	0	3	0	3	0	0	9
4	2	0			2	0		0	0	1	1	0	0	0	0	0	0	1	1	1	8
5	2	0			1	0		0	0	3	0	0	0	0	0	0	2	0	0	0	8
6	0	0			1	4		0	0	1	0	0	0	0	0	0	0	1	0	1	8
7	4	0			2	2		0	0	2	0	0	0	0	0	0	1	2	0	0	13
8	3	0			1	3		0	0	1	0	0	0	0	0	1	0	0	0	0	9
9	2	1			1	5		0	0	2	0	0	0	0	0	2	0	1	1	1	15
10	1	1			2	2		0	0	2	0	0	0	0	0	2	0	2	1	1	13
11	5	0			2	7		0	0	3	0	0	0	0	0	3	0	0	0	0	20
12	2	1			6	12		2	0	4	0	0	0	0	0	1	1	2	1	1	32
13	4	2			6	12		0	1	3	0	0	0	0	0	3	0	3	0	0	34
14	4	0			11	16		1	0	0	0	0	0	0	0	1	0	3	1	1	37
15	5	7			7	23		1	1	0	0	0	0	0	0	0	1	7	1	1	53
16	5	4			6	9		4	2	2	0	0	0	0	0	1	1	6	0	0	40
17	5	1			9	11		5	1	2	0	0	0	0	0	0	0	6	1	1	41
18	8	1			4	7		2	1	3	0	0	0	0	2	1	1	4	1	1	35
19	8	4			6	10		2	0	3	0	0	1	0	1	1	4	3	0	0	42
20	14	8			6	13		0	0	4	0	0	0	0	1	1	2	10	1	1	60
21	4	1			7	10		4	0	2	0	1	0	1	0	1	4	2	2	37	
22	11	2			4	2		0	1	2	0	1	1	0	1	2	5	2	2	34	
23	3	2			4	5		1	0	1	0	0	0	1	0	1	3	1	1	22	
24	4	2			5	11		1	1	2	0	0	0	0	0	0	0	6	3	35	
25	6	2			4	7		0	1	1	0	0	0	0	0	3	6	0	0	30	
26-30	29	6			24	26		9	2	8	0	0	0	0	3	1	6	28	2	144	
31-35	26	13			13	26		4	3	5	0	0	0	0	5	1	6	25	6	133	
36-40	25	11			11	33		5	1	6	0	1	0	3	0	2	19	2	119		
41-45	26	11			11	27		8	3	3	0	2	3	5	1	3	16	6	125		
46-50	13	8			19	29		4	0	4	0	0	2	1	0	2	18	3	103		
51-55	22	4			9	21		2	2	6	0	1	1	1	1	4	14	4	92		
56-60	20	4			9	12		1	3	2	0	0	1	1	0	5	14	8	80		
61-65	23	7			4	13		0	2	1	0	0	0	0	0	3	4	2	59		
66-70	7	2			11	12		2	2	5	0	1	0	0	0	2	8	1	53		
71-75	10	4			11	19		3	0	1	0	1	0	1	0	2	8	1	61		
76-80	18	5			11	17		3	0	5	0	1	0	0	0	3	6	0	69		
81-85	13	2			8	10		1	0	3	0	1	0	0	0	5	7	0	50		
86-90	4	2			6	7		1	1	1	0	0	0	0	0	0	1	0	0	23	
91-95	1	0			3	2		0	0	0	0	0	0	0	0	0	4	0	0	10	
95+	0	0			1	1		0	0	0	0	0	0	0	0	0	1	0	0	3	
Unknown	8	4			16	11		2	3	5	0	0	0	4	0	7	18	2	80		
Total	349	122			266	439		68	31	101	1	10	9	29	29	71	269	55	1,849		

SECTION 13 – Pedestrians in 2003 Collisions

Table 13.10 – Pedestrians injured and killed by location of injury

Injury Location	Injured	Killed	Total
Head	292	40	332
Face/Nose	61	0	61
Eye	2	0	2
Neck	30	0	30
Chest	27	4	31
Back	97	0	97
Shoulder/Upper Arm	95	0	95
Elbow/Lower Arm/Hand	146	0	146
Abdomen/Pelvis	62	1	63
Hip/Upper Leg	219	4	223
Knee/Lower Leg/Foot	516	1	517
Entire Body	61	20	81
Unknown	167	4	171
Total	1,775	74	1,849

Table 13.11 – Pedestrians injured and killed by type of injury

Injury Type	Injured	Killed	Total
Abrasions	256	1	257
Bruises	670	0	670
Lacerations	117	3	120
Bleeding	101	17	118
Fracture	257	34	291
Dislocation	34	0	34
Burns	1	0	1
Amputations	2	2	4
Concussion	45	3	48
Whiplash	38	0	38
Other	17	3	20
Unknown	237	11	248
Total	1,775	74	1,849

Bicycles in 2003 Collisions

SECTION 14

A bicycle collision is reportable in British Columbia if it results in injury or death and involves at least one motor vehicle.

There were 933 bicycle collisions reported in 2003. These collisions resulted in 963 casualties (including occupants of motor vehicles). Of these 963 victims, 926 were injured bicycle drivers, and 6 were bicycle drivers killed.

Four of the 6 bicycle drivers killed during 2003 were not wearing a bicycle helmet. All six bicycle drivers killed were male. Males represented approximately 75.5% of the bicycle drivers injured. One of the 6 fatalities was aged 9. There were 204 (21.8%) bicyclists injured or killed under age 16, and 47 (5.0%) over 60.

Of all injured victims, about 40.2% (372) of them were wearing helmets, 42.0% (389) were not wearing and 17.8% (165) were unknown as to helmet use. BC requires cyclists of all ages to wear a helmet.

Among non-helmeted injury victims, 21.9% suffered head injuries or injuries to entire body, while 13.4% of the helmeted injury victims had head injuries or injuries to entire body.

The five top contributing factors assigned to bicycle drivers (as a percentage of total bicycle collisions) were, in order of magnitude:

1. Driving without due care (15.3%);
2. Failing to yield to right of way (12.9%);
3. Driving on the wrong side of the road (11.0%);
4. Ignoring traffic control device (5.9%);
5. Alcohol involvement (3.9%).

The five top contributing factors assigned to other drivers (as a percentage of total bicycle collisions) were, in order of magnitude:

1. Failing to yield to right of way (20.8%);
2. Driving without due care (13.0%);
3. Improper turning and weather condition (3.6%);
4. Sunlight Glare and visibility impaired (3.0%);
5. Ignoring traffic control device (2.9%).

More than half (56.0%) of all bicycle collisions took place at intersections. The most common configuration was intersection – right angle, which accounted for 34.6% of bicycle collisions. The road surface condition was dry for 80.9% of bicycle collisions and 74.4% occurred in daylight. The highest frequency collision time period for bicycle collisions is 3:00 pm to 6:00 pm. Close to 31% (288) of bicycle collisions took place between these hours.



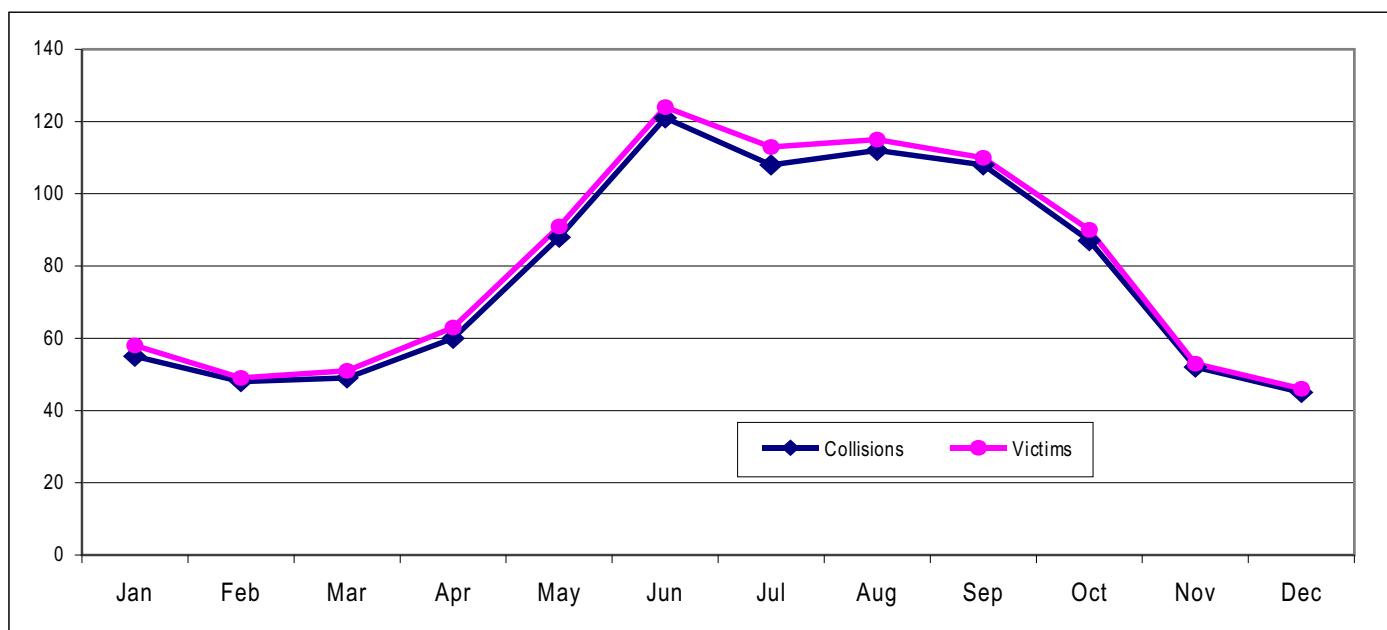
SECTION 14 – Bicycles in 2003 Collisions

Table 14.01 – Bicycle collisions and victims by month

Month	Collisions			Victims		
	Injury	Fatal	Total	Injured	Killed	Total
January	54	1	55	57	1	58
February	48	0	48	49	0	49
March	49	0	49	51	0	51
April	60	0	60	63	0	63
May	88	0	88	91	0	91
June	120	1	121	123	1	124
July	107	1	108	112	1	113
August	112	0	112	115	0	115
September	108	0	108	110	0	110
October	85	2	87	88	2	90
November	51	1	52	52	1	53
December	44	1	45	45	1	46
Total	926	7	933	956	7	963

Note: Victims include both cyclists and occupants of involved motor vehicles.

Figure 14.01 – Bicycle Collisions and victims by month



**Table 14.02 – Contributing factors in bicycle collisions
– Bicycle driver factors only**

Contributing Factors				% of Total Bicycle Collisions
	Injury	Fatal	Total	
Driving Without Due Care	143	0	143	15.33
Failing to Yield Right of Way	120	0	120	12.86
Driving on Wrong Side of Road	102	1	103	11.04
Ignoring Traffic Control Device	55	0	55	5.89
Alcohol Involvement	35	1	36	3.86
Unsafe Speed	29	0	29	3.11
Cutting In	28	0	28	3.00
Driver Inexperience	22	0	22	2.36
Pedestrian Error/Confusion	20	1	21	2.25
Defective Headlights	19	0	19	2.04
Improper Turning	16	0	16	1.71
Weather Condition	15	0	15	1.61
Avoiding Veh/Ped/Cycle	14	0	14	1.50
Improper Passing	13	0	13	1.39
Defective Brakes	13	0	13	1.39
Failing to Signal	11	0	11	1.18
Other	397	2	399	42.77
Unknown	51	0	51	5.47

Note:

- 1) The figures shown above represent the contributing factors assigned to the bicycle drivers involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in this table. For example, a collision attributed to alcohol involvement and careless driving would be counted above as both an alcohol related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the occurrence of collisions involving the factor as a percentage of total bicycle casualty collisions recorded in British Columbia in 2003.
- 2) "Other" includes specified factors with less than 10 occurrences plus unspecified other.

**Table 14.03 – Contributing factors in bicycle collisions
– Other driver factors only**

Contributing Factors				% of Total Bicycle Collisions
	Injury	Fatal	Total	
Failing to Yield Right of Way	194	0	194	20.79
Driving Without Due Care	120	1	121	12.97
Improper Turning	34	0	34	3.64
Weather Condition	34	0	34	3.64
Sunlight Glare	28	0	28	3.00
Visibility Impaired	28	0	28	3.00
Ignoring Traffic Control Device	27	0	27	2.89
Driver Inexperience	23	0	23	2.47
Alcohol Involvement	21	0	21	2.25
Avoiding Veh/Ped/Cycle	19	0	19	2.04
Cutting In	14	0	14	1.50
Unsafe Speed	11	0	11	1.18
Improper Passing	10	0	10	1.07
Other	347	2	349	37.41
Unknown	60	2	62	6.65

Note:

- 1) The figures shown above represent the contributing factors assigned to drivers, other than bicycle drivers, involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in this table. For example, a collision attributed to alcohol involvement and careless driving would be counted above as both an alcohol related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the collisions involving the factor as a percentage of total bicycle casualty collisions recorded in British Columbia in 2003.
- 2) "Other" includes specified factors with less than 10 occurrences plus unspecified other.

SECTION 14 – Bicycles in 2003 Collisions

Table 14.04 – Bicycle collisions by primary collision occurrence

Primary Collision Occurrence	Injury	Fatal	Total	% of Total
Intersection - Right Angle	322	1	323	34.62
Left Turn-Across Oncoming Traffic	87	0	87	9.32
Right Turn - Head On	48	0	48	5.14
Overtaking	45	0	45	4.82
Rear End	40	1	41	4.39
Side Swipe-Opposite Direction	30	0	30	3.22
Left Turn - Head On	18	0	18	1.93
Head On	15	1	16	1.71
Right Turn - Rear End	15	0	15	1.61
Right Turn-Opposite Direction	11	0	11	1.18
Backing Up	9	1	10	1.07
Right Turn - Same Direction	8	0	8	0.86
Left Turn - One Way	6	0	6	0.64
Off Road Right	4	0	4	0.43
One Way Street	4	0	4	0.43
Off Road Left	2	0	2	0.21
Other	219	2	221	23.69
Unknown	43	1	44	4.72
Total	926	7	933	100%

Table 14.05 – Pre-collision action in bicycle collisions – Bicycles only

Pre-Collision Action	Injury	Fatal	Total	% of Total
Going Straight Ahead	702	5	707	74.97
Making Left Turn	43	0	43	4.56
Making Right Turn	15	0	15	1.59
Swerving	10	0	10	1.06
Changing Lanes	9	0	9	0.95
Stopped in Traffic	7	0	7	0.74
Starting in Traffic	6	0	6	0.64
Slowing or Stopping	5	0	5	0.53
Overtaking	5	0	5	0.53
Starting from Parked position	4	0	4	0.42
Merging	3	0	3	0.32
Skidding	2	0	2	0.21
Entering Parked Position	1	0	1	0.11
Parked legally	1	0	1	0.11
Other	63	0	63	6.68
Unknown	59	3	62	6.57
Total	935	8	943	100%

**Table 14.06 – Pre-collision action in bicycle collisions
– Other Vehicles**

Pre-Collision Action	Injury	Fatal	Total	% of Total
Going Straight Ahead	360	6	366	38.13
Making Right Turn	235	0	235	24.48
Making Left Turn	170	1	171	17.81
Parked legally	39	0	39	4.06
Stopped in Traffic	18	0	18	1.88
Slowing or Stopping	15	0	15	1.56
Starting in Traffic	14	0	14	1.46
Backing	12	1	13	1.35
Starting from Parked position	8	0	8	0.83
Merging	8	0	8	0.83
Changing Lanes	7	0	7	0.73
Overtaking	7	0	7	0.73
Swerving	6	0	6	0.63
Entering Parked Position	5	0	5	0.52
Making U Turn	4	0	4	0.42
Parked Illegally	3	0	3	0.31
Avoiding Object on Road	3	0	3	0.31
Skidding	2	0	2	0.21
Not applicable	2	1	3	0.31
Other	10	0	10	1.04
Unknown	23	0	23	2.40
Total	951	9	960	100%

Table 14.07 – Collision location of bicycle collisions

Collision Location	Injury	Fatal	Total	% of Total
At intersection	521	1	522	55.95
Between Intersection:Exchanges	236	5	241	25.83
Intersection of Road & Driveway or Alley	106	0	106	11.36
Parking Lot:Single/Multilevel	20	1	21	2.25
Exit Ramp	5	0	5	0.54
Entrance Intersection	5	0	5	0.54
Entrance Ramp	4	0	4	0.43
Bridge	3	0	3	0.32
Off Highway	3	0	3	0.32
Entrance Acceleration Lane	2	0	2	0.21
Exit Deceleration lane	1	0	1	0.11
Exit Intersection	1	0	1	0.11
Other	2	0	2	0.21
Unknown	17	0	17	1.82
Total	926	7	933	100%

Table 14.08 – Bicycle collisions by roadway surface condition

Roadway Surface Condition	Injury	Fatal	Total	% of Total
Dry	751	4	755	80.92
Wet	164	3	167	17.90
Ice	4	0	4	0.43
Unknown	7	0	7	0.75
Total	926	7	933	100%

SECTION 14 – Bicycles in 2003 Collisions

Table 14.09 – Bicycle collisions by lighting condition

Lighting Condition	Injury	Fatal	Total	% of Total
Daylight	691	3	694	74.38
Dark/Some Illumination	105	3	108	11.58
Dark/Full Illumination	55	0	55	5.89
Dusk	41	0	41	4.39
Dark/No illumination	14	1	15	1.61
Dawn	14	0	14	1.50
Unknown	6	0	6	0.64
Total	926	7	933	100%

Table 14.10 – Bicycle collisions by weather condition

Weather Condition	Injury	Fatal	Total	% of Total
Clear	593	2	595	63.77
Cloudy	219	5	224	24.01
Raining	95	0	95	10.18
Fog	4	0	4	0.43
Snowing	2	0	2	0.21
Smog/Smoke	2	0	2	0.21
Hail	1	0	1	0.11
Strong Wind	1	0	1	0.11
Unknown	9	0	9	0.96
Total	926	7	933	100%

Table 14.11 – Bicycle collisions by time of day

Time	Injury	Fatal	Total	% of Total
0000-0059	10	0	10	1.07
0100-0159	6	0	6	0.64
0200-0259	4	1	5	0.54
0300-0359	2	0	2	0.21
0400-0459	1	0	1	0.11
0500-0559	8	0	8	0.86
0600-0659	10	0	10	1.07
0700-0759	39	0	39	4.18
0800-0859	39	0	39	4.18
0900-0959	34	0	34	3.64
1000-1059	35	0	35	3.75
1100-1159	50	1	51	5.47
1200-1259	47	0	47	5.04
1300-1359	57	1	58	6.22
1400-1459	60	0	60	6.43
1500-1559	85	1	86	9.22
1600-1659	98	1	99	10.61
1700-1759	102	1	103	11.04
1800-1859	56	0	56	6.00
1900-1959	55	0	55	5.89
2000-2059	37	0	37	3.97
2100-2159	28	0	28	3.00
2200-2259	27	1	28	3.00
2300-2359	13	0	13	1.39
Unknown	23	0	23	2.47
Total	926	7	933	100%

Table 14.12 – Bicycle drivers involved in collision by accident type

Age	Injury	Fatal	Total	% of Total
4	1	0	1	0.11
5	6	0	6	0.64
6	4	0	4	0.43
7	7	0	7	0.74
8	7	0	7	0.74
9	15	1	16	1.70
10	14	1	15	1.59
11	21	0	21	2.23
12	32	0	32	3.40
13	36	0	36	3.83
14	31	0	31	3.29
15	29	0	29	3.08
16	23	0	23	2.44
17	16	0	16	1.70
18	26	0	26	2.76
19	14	0	14	1.49
20	22	0	22	2.34
21	16	0	16	1.70
22	18	0	18	1.91
23	21	1	22	2.34
24	16	0	16	1.70
25	13	0	13	1.38
26-30	73	0	73	7.76
31-35	94	0	94	9.99
36-40	89	1	90	9.56
41-45	85	1	86	9.14
46-50	81	0	81	8.61
51-55	36	1	37	3.93
56-60	28	0	28	2.98
61-65	16	0	16	1.70
66-70	11	0	11	1.17
71-75	6	0	6	0.64
76-80	7	0	7	0.74
81-85	3	1	4	0.43
86-90	1	0	1	0.11
Unknown	15	1	16	1.70
Total	933	8	941	100%

Note: Includes all bicycle drivers involved in collisions, regardless of injury status.

Table 14.13 – Cyclists injured by age and gender in collisions

Age	Male	Female	Total
4	0	1	1
5	4	2	6
6	4	0	4
7	5	2	7
8	4	3	7
9	8	7	15
10	12	3	15
11	17	4	21
12	27	4	31
13	29	7	36
14	27	4	31
15	25	4	29
16	17	6	23
17	12	4	16
18	18	8	26
19	13	1	14
20	15	7	22
21	8	8	16
22	13	5	18
23	11	9	20
24	10	6	16
25	7	6	13
26-30	52	21	73
31-35	67	27	94
36-40	69	20	89
41-45	66	19	85
46-50	64	15	79
51-55	26	8	34
56-60	23	5	28
61-65	11	6	17
66-70	10	2	12
71-75	6	0	6
76-80	6	1	7
81-85	3	0	3
86-90	1	0	1
Unknown	11	2	13
Total	701	227	928

Note:

1) Includes both bicycle drivers and passengers.

2) Excludes those whose gender was unknown.

SECTION 14 – Bicycles in 2003 Collisions

Figure 14.02 – Bicycle drivers injured in bicycle collisions by age and gender

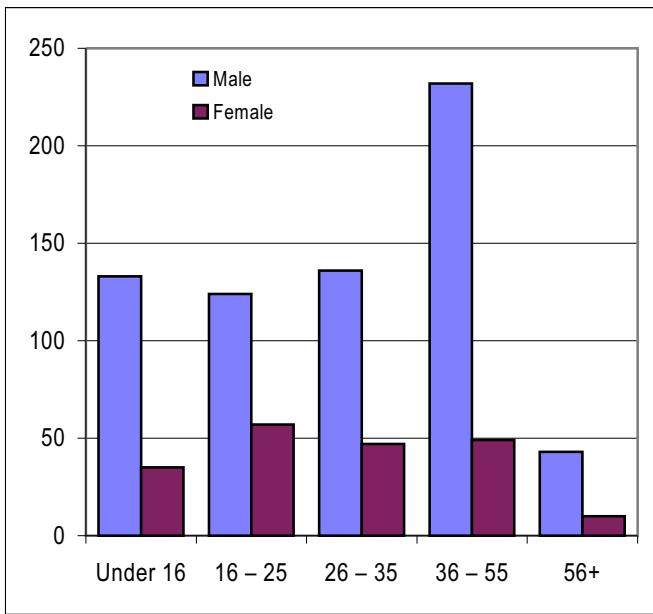
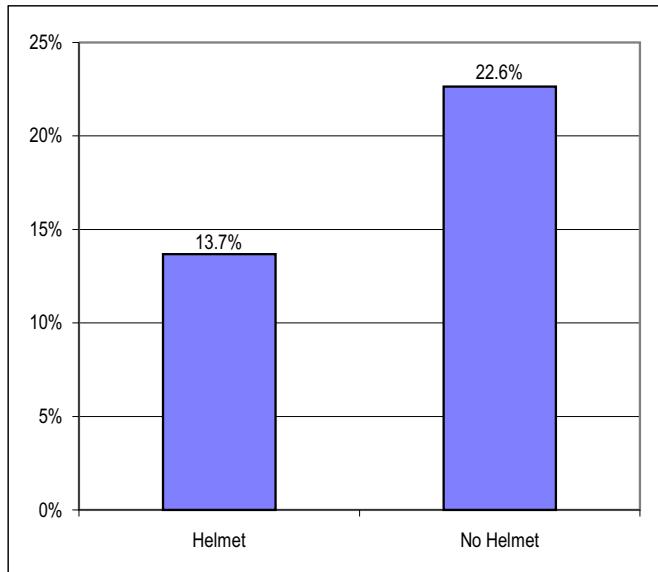


Table 14.14 – Bicycle drivers killed by age and gender in bicycle collisions

Age	Male	Female	Total
9	1	0	1
23	1	0	1
36-40	1	0	1
41-45	1	0	1
51-55	1	0	1
81-85	1	0	1
Total	6	0	6

Figure 14.03 – Percent of victims with head injury among helmeted and nonhelmeted bicyclists in collisions



Note: Location of injury includes both head and entire body.

Table 14.15 – Bicycle drivers injured and killed by helmet use and location of injury

Helmet	Injured	Killed
Head	29	1
Face/Nose	20	0
Neck	15	0
Chest	12	0
Back	19	0
Shoulder/Upper Arm	41	0
Elbow/Lower Arm/Hand	53	0
Abdomen/Pelvis	8	0
Hip/Upper Leg	37	0
Knee/Lower Leg/Foot	96	0
Entire Body	21	0
Unknown	21	0
Total Helmet	372	1
No Helmet		
Head	69	2
Face/Nose	19	0
Neck	7	0
Chest	4	0
Back	17	0
Shoulder/Upper Arm	34	0
Elbow/Lower Arm/Hand	41	0
Abdomen/Pelvis	10	0
Hip/Upper Leg	27	0
Knee/Lower Leg/Foot	128	0
Entire Body	16	2
Unknown	17	0
Total No Helmet	389	4
Unknown		
Head	17	0
Face/Nose	2	0
Neck	5	0
Chest	3	0
Back	7	0
Shoulder/Upper Arm	18	0
Elbow/Lower Arm/Hand	19	0
Abdomen/Pelvis	2	0
Hip/Upper Leg	16	0
Knee/Lower Leg/Foot	45	0
Entire Body	6	1
Unknown	25	0
Total Unknown	165	1

Definition of Commercial Vehicle

Commercial vehicles in this section include vehicles under 10,900 kilograms: single unit trucks/light, combination unit trucks/light, tow and vehicles equal or over 10,900 kilograms: single unit trucks/heavy; combination unit trucks/heavy, combination unit tractors or trailers, combination unit tractors or trailers and pups, log trucks and pole trailers, local transit bus, intercity bus. The current definition of commercial vehicles includes a greater number of vehicles than the definition used in the 1998 report. It also differs from the definition used in earlier reports. **Therefore, commercial vehicle collisions reported in 2003 can not be compared with those reported in previous versions (1998 and earlier).**

Summary Statistics

There were 1,953 reported casualty collisions involving commercial vehicles during 2003. Of these collisions, 1,862 were personal injury collisions and 91 were fatal collisions.

The five top contributing factors assigned to commercial vehicle drivers (as a percentage of total commercial vehicle collisions) were, in order of magnitude:

1. Driving without due care (20.0%);
2. Unsafe speed (14.5%);
3. Failing to yield to right of way (10.4%);
4. Following too closely (10.2%);
5. Weather condition (9.7%);

The five top contributing factors assigned to other drivers (as a percentage of total commercial vehicle collisions) were, in order of magnitude:

1. Driving without due care (25.3%);
2. Failing to yield to right of way (16.9%);
3. Unsafe speed (14.1%);
4. Following too Closely (11.6%);
5. Weather condition (9.6%);

Emergency Vehicle, Taxi and School Bus Collisions

An emergency vehicle is defined, in this report, as any vehicle used to carry rescue or first aid equipment, whether or not actually responding to an emergency. It includes ambulance, police car, fire truck.

In 2003, there were 140 emergency vehicle collisions. These collisions resulted in 241 victims. There were 3 fatal emergency vehicle collisions in 2003.

The top three contributing factors assigned to emergency vehicle drivers were, in order of magnitude:

1. Weather condition (8.6%);
2. Failing to yield to right of way (7.1%);
3. Driving without due care (4.3%).

In 2003, 3,102 taxis were licensed at least once for service. There were 246 casualty collisions involving taxis in the same year. These collisions resulted in 383 victims (including 5 killed).

The top three contributing factors assigned to taxi drivers were, in order of magnitude:

1. Driving without due care (15.5%);
2. Failing to yield right of way (13.8%);
3. Following too closely (6.1%).

A school bus is defined, for the purpose of this report, as a motor vehicle licensed to convey children to or from school.

A total of 43 injury collisions involving school buses occurred during 2003. These collisions resulted in 82 people being injured. Thirty six of 82 injured were in the school bus, 42 were in other vehicles and 4 were pedestrians. There were no fatal collisions involving school buses during 2003.

The top three contributing factors assigned to school bus drivers were, in order of magnitude:

1. Failing to yield right of way (16.3%);
2. Driving without due care (14.0%);
3. Following too closely (7.0%).

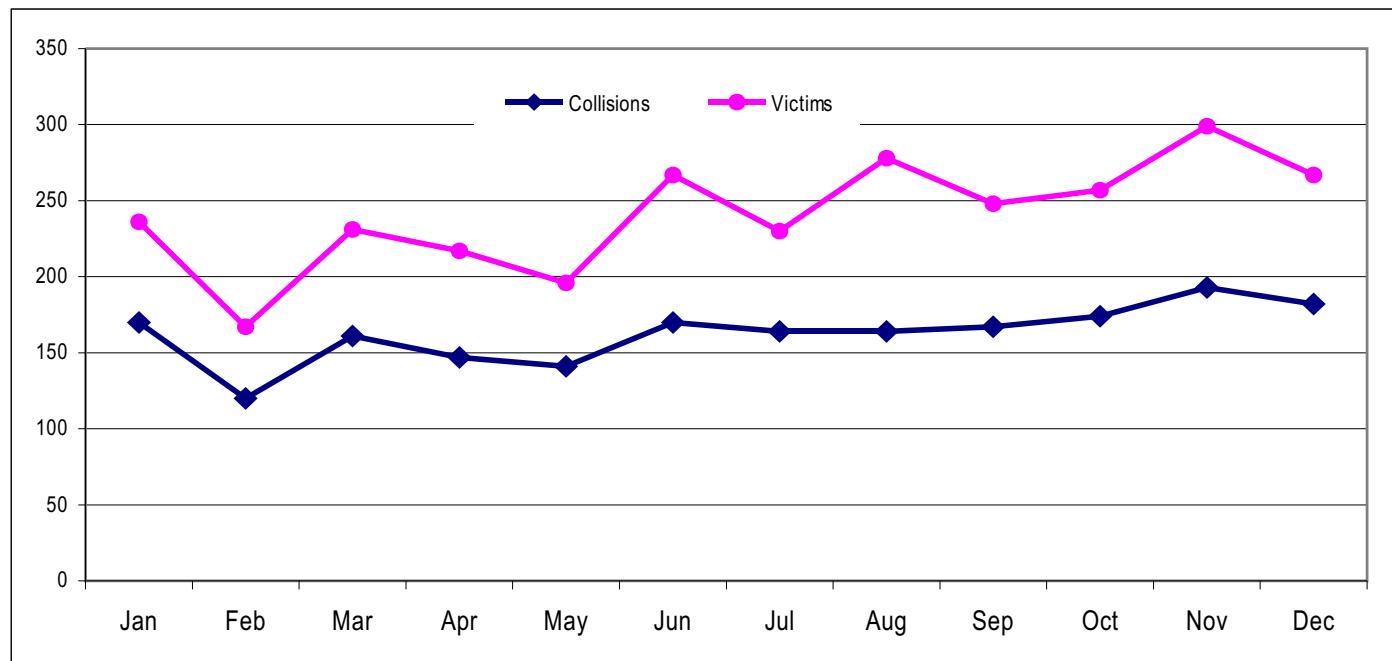


SECTION 15 – Commercial Vehicles in 2003 Collisions

Table 15.01 – Commercial vehicle collisions and victims by month

Month	Collisions			Victims			Total
	Injury	Fatal	Total	Injured	Killed		
January	158	12	170	222	14		236
February	112	8	120	157	10		167
March	157	4	161	227	4		231
April	141	6	147	211	6		217
May	137	4	141	192	4		196
June	165	5	170	261	6		267
July	157	7	164	223	7		230
August	155	9	164	269	9		278
September	162	5	167	243	5		248
October	165	9	174	248	9		257
November	183	10	193	285	14		299
December	170	12	182	253	14		267
Total	1,862	91	1,953	2,791	102		2,893

Figure 15.01 – Commercial vehicle collisions and victims by month



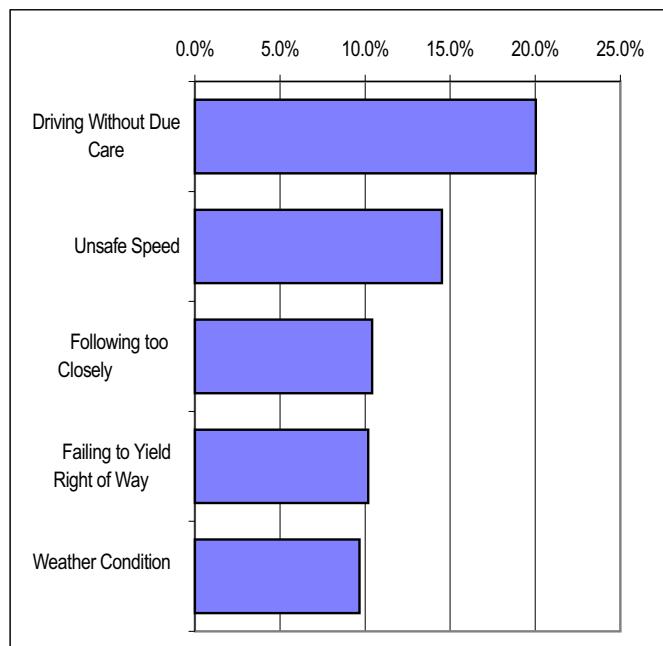
**Table 15.02 – Contributing factors in commercial vehicle collisions – Commercial vehicle driver factors only:
By number of collisions**

Contributing Factors	Injury	Fatal	Total	% of Total Commercial Vehicle Collisions
Driving Without Due Care	347	5	352	20.03
Unsafe Speed	244	11	255	14.51
Following too Closely	182	1	183	10.42
Failing to Yield Right of Way	178	1	179	10.19
Weather Condition	164	6	170	9.68
Alcohol Involvement	62	3	65	3.70
Improper Turning	61	1	62	3.53
Ignoring Traffic Control Device	61	1	62	3.53
Driver Inexperience	59	1	60	3.41
Road Maintenance/Construction	45	2	47	2.68
Avoiding Veh/Ped/Cycle	40	1	41	2.33
Visibility Impaired	36	3	39	2.22
Fell Asleep	36	1	37	2.11
Wild Animal	28	0	28	1.59
Driving on Wrong Side of Road	24	4	28	1.59
Improper Passing	22	0	22	1.25
Defective Brakes	19	2	21	1.20
Extreme Fatigue	16	2	18	1.02
Cutting In	16	0	16	0.91
Road/Intersection Design	14	0	14	0.80
Insecure Load	14	0	14	0.80
Sunlight Glare	12	1	13	0.74
Previous Traffic Collision	13	0	13	0.74
Defective Tires	12	0	12	0.68
Backing Unsafely	10	2	12	0.68
Other	654	19	673	38.30
Unknown	98	6	104	5.92

Note:

- 1) The figures shown above represent the contributing factors assigned to the commercial vehicle drivers involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in this table. For example, a collision attributed to alcohol involvement and careless driving would be counted above as both an alcohol related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the collisions involving the factor as a percentage of total commercial vehicle casualty collisions recorded in British Columbia in 2003.
- 2) "Other" includes total collisions less than 10 occurrences.

Figure 15.02 – Top five contributing factors in commercial vehicle collisions (commercial vehicle driver factors only) as a percentage of total commercial vehicle collisions



SECTION 15 – Commercial Vehicles in 2003 Collisions

Table 15.03 – Contributing factors in commercial vehicle collisions – Other driver factors only: By number of collisions

Contributing Factors	Injury	Fatal	Total	% of Total Commercial Vehicle Collisions
Driving Without Due Care	428	17	445	25.33
Failing to Yield Right of Way	283	13	296	16.85
Unsafe Speed	227	21	248	14.11
Following too Closely	203	0	203	11.55
Weather Condition	164	5	169	9.62
Ignoring Traffic Control Device	121	3	124	7.06
Alcohol Involvement	109	11	120	6.83
Driver Inexperience	114	3	117	6.66
Improper Turning	74	2	76	4.33
Driving on Wrong Side of Road	55	13	68	3.87
Road Maintenance/Construction	39	3	42	2.39
Avoiding Veh/Ped/Cycle	41	0	41	2.33
Visibility Impaired	36	3	39	2.22
Cutting In	38	0	38	2.16
Improper Passing	34	0	34	1.94
Pedestrian Error/Confusion	21	6	27	1.54
Sunlight Glare	23	0	23	1.31
Wild Animal	22	1	23	1.31
Fell Asleep	19	1	20	1.14
Previous Traffic Collision	18	1	19	1.08
Extreme Fatigue	14	2	16	0.91
Defective Brakes	12	1	13	0.74
Drugs (Illegal)	10	2	12	0.68
Defective Tires	10	2	12	0.68
Obstruction/Debris on Road	12	0	12	0.68
Failing to Signal	11	0	11	0.63
Backing Unsafely	9	1	10	0.57
Other	626	23	649	36.94
Unknown	135	2	137	7.80

Note:

1) The figures shown above represent the contributing factors assigned to drivers, other than commercial vehicle drivers, involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in this table. For example, a collision attributed to alcohol involvement and careless driving would be counted above as both an alcohol related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the collisions involving the factor as a percentage of total commercial vehicle casualty collisions recorded in British Columbia in 2003.

2) "Other" includes total collisions less than 10 occurrences

Figure 15.03 – Top five contributing factors in commercial vehicle collisions (other driver factors only) as a percentage of total commercial vehicle collisions

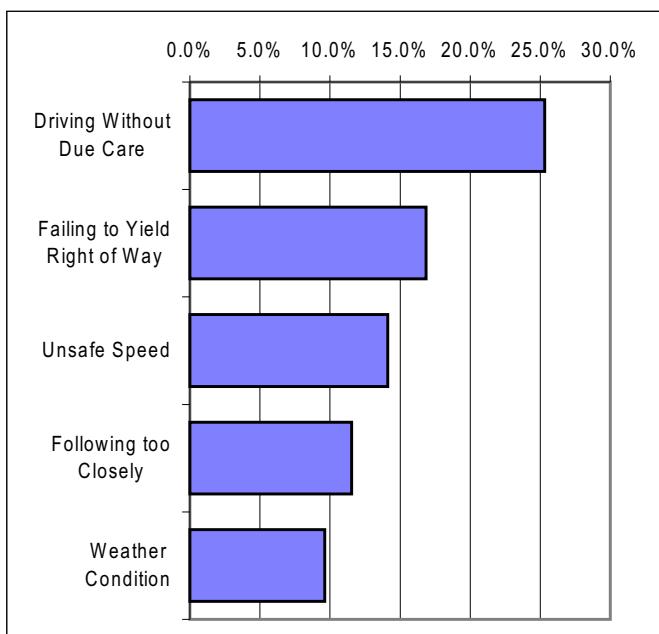


Table 15.04 – Vehicle contributing factors in commercial vehicle collisions: Commercial vehicle factors only

Vehicle Factors	Injury	Fatal	Total
Defective Brakes	19	2	21
Insecure Load	14	0	14
Defective Tires	12	0	12
Oversize Vehicle	9	0	9
Defective Engine	5	0	5
Defective Steering	4	0	4
Defective Suspension	4	0	4
Defective Tow Hitch	3	0	3
No Driver	3	0	3
Defective Turn Signals	2	0	2
Vehicle Modification	0	2	2
Defective Headlights	1	0	1
Defective Windshield	1	0	1
Restraint System	1	0	1
Total	78	4	82

Table 15.05 – Number of commercial vehicles involved in collisions by vehicle type

Vehicle Type	Injury	Fatal	Total	% of Total
Single Unit Truck/ Light	783	23	806	38.68
Single Unit Truck/ Heavy	337	12	349	16.75
Tractor Trailer & Pup	239	26	265	12.72
Tractor Trailer	198	16	214	10.27
Local Transit Bus	130	4	134	6.43
Heavy Truck/Trailer	112	12	124	5.95
Logging Truck & Pole Trailer	82	9	91	4.37
Light Truck/Trailer	44	0	44	2.11
Intercity Bus	28	1	29	1.39
Tow Truck	28	0	28	1.34
Total	1,981	103	2,084	100%

Note: This report includes parked commercial vehicles.

Table 15.07 – Collision location by collision type in commercial vehicle collisions

Collision Location	Injury	Fatal	Total	% of Total
Between Intersection:Exchanges	857	57	914	46.80
At intersection	717	24	741	37.94
Intersection of Road & Driveway or Alley	81	3	84	4.30
Bridge	51	0	51	2.61
Off Highway	28	1	29	1.48
Parking Lot:Single/Multilevel	18	0	18	0.92
Exit Ramp	14	0	14	0.72
Industrial Road	9	2	11	0.56
Entrance Ramp	9	0	9	0.46
Entrance Intersection	9	0	9	0.46
Tunnel	4	0	4	0.20
Entrance Acceleration Lane	3	1	4	0.20
Railroad crossing	4	0	4	0.20
Exit Intersection	2	0	2	0.10
Ferry or Dock	1	0	1	0.05
Transit -Express Lane	1	0	1	0.05
Other	27	2	29	1.48
Unknown	27	1	28	1.43
Total	1,862	91	1,953	100%

Table 15.06 – Commercial vehicle collisions by primary collision occurrence

Primary Collision Occurrence	Injury	Fatal	Total	% of Total
Rear End	472	5	477	24.42
Intersection - Right Angle	266	9	275	14.08
Off Road Right	201	3	204	10.45
Off Road Left	162	4	166	8.50
Head On	104	32	136	6.96
Left Turn-Across Oncoming Traffic	125	5	130	6.66
Side Swipe-Opposite Direction	86	5	91	4.66
Overtaking	57	0	57	2.92
Left Turn - Head On	39	1	40	2.05
Left Turn - One Way	20	0	20	1.02
Backing Up	11	2	13	0.67
Right Turn - Rear End	11	0	11	0.56
Right Turn - Head On	8	1	9	0.46
Right Turn - Same Direction	7	2	9	0.46
One Way Street	9	0	9	0.46
Right Turn-Opposite Direction	6	0	6	0.31
Other	226	19	245	12.54
Unknown	52	3	55	2.82
Total	1,862	91	1,953	100%

SECTION 15 – Commercial Vehicles in 2003 Collisions

Table 15.08 – BC driver license class of commercial vehicle driver by vehicle type: Injury collisions

Vehicle Type	Driver License Class															Total	
	100	160	200	230	260	300	340	346	360	400	460	500	560	700	000	Other	
Single Unit Truck/ Light	55	19	0	0	1	17	2	3	8	20	7	461	76	49	7	58	783
Single Unit Truck/ Heavy	80	20	0	0	0	28	3	3	11	12	5	114	12	10	0	39	337
Tractor Trailer & Pup	142	41	0	0	0	0	0	0	0	0	0	2	0	0	0	54	239
Tractor Trailer	107	32	0	0	0	2	1	0	0	1	0	6	0	0	0	49	198
Local Transit Bus	20	11	34	13	12	0	0	0	0	5	0	1	0	0	0	34	130
Heavy Truck/Trailer	47	15	0	0	0	7	0	1	4	1	0	8	0	3	0	26	112
Logging Truck & Pole Trailer	52	23	0	0	0	0	0	0	1	0	0	1	0	0	0	5	82
Light Truck/Trailer	12	5	0	0	0	1	0	0	1	0	0	14	3	1	0	7	44
Tow Truck	7	0	0	0	0	3	0	0	0	0	1	14	3	0	0	0	28
Intercity Bus	3	1	3	2	1	0	0	0	0	7	0	0	0	0	0	11	28
Total	525	167	37	15	14	58	6	7	25	46	13	621	94	63	7	283	1,981

Note:

- 1) This table lists all combinations of valid B.C. license classes. Out-of-province drivers are all grouped under "Other".
- 2) "100" to "800" refers to driver licence classes 1 to 8. "340", for example, is a combination of class 3 and class 4.

Table 15.09 – BC driver license class of commercial vehicle drivers by vehicle type: Fatal collisions

Vehicle Type	Driver License Class															Total	
	100	160	200	300	346	360	400	500	560	700	Other						
Tractor Trailer & Pup	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	7	26
Single Unit Truck/ Light	2	0	0	1	1	0	1	11	1	2	4						23
Tractor Trailer	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	16
Single Unit Truck/ Heavy	5	1	0	1	1	1	0	1	0	0	2						12
Heavy Truck/Trailer	6	2	0	1	0	0	0	1	0	0	2						12
Logging Truck & Pole Trailer	4	4	0	0	0	0	0	0	0	0	1						9
Local Transit Bus	0	0	3	0	0	0	0	0	0	0	1						4
Intercity Bus	0	0	0	0	0	0	0	0	0	0	1						1
Total	43	13	3	3	2	1	1	13	1	2	21	103					

Note:

- 1) This table lists all combinations of valid B.C. license classes. Out-of-province drivers are all grouped under "Other".
- 2) "100" to "800" refers to driver licence classes 1 to 8. "340", for example, is a combination of class 3 and class 4.

Table 15.10 – Emergency vehicle, taxi and school bus collisions by month

Month	Emergency Vehicle			Taxi			School Bus		
	Injury	Fatal	Total	Injury	Fatal	Total	Injury	Fatal	Total
January	11	0	11	28	0	28	9	0	9
February	9	1	10	19	1	20	1	0	1
March	13	0	13	18	1	19	4	0	4
April	6	1	7	21	0	21	4	0	4
May	19	0	19	15	0	15	4	0	4
June	10	1	11	16	0	16	0	0	0
July	9	0	9	17	1	18	3	0	3
August	6	0	6	30	0	30	4	0	4
September	9	0	9	24	1	25	4	0	4
October	13	0	13	26	1	27	3	0	3
November	16	0	16	11	0	11	4	0	4
December	16	0	16	16	0	16	3	0	3
Total	137	3	140	241	5	246	43	0	43

Table 15.11 – Victims in emergency vehicle, taxi and school bus collisions by month

Month	Emergency Vehicle				Taxi				School Bus			
	In Vehicle	Other Vehicle	Pedestrian	Total	In Vehicle	Other Vehicle	Pedestrian	Total	In Vehicle	Other Vehicle	Pedestrian	Total
January	9	8	0	17	23	16	6	45	5	8	2	15
February	8	14	0	22	18	17	4	39	0	1	0	1
March	6	9	1	16	9	10	2	21	8	7	0	15
April	3	9	0	12	11	11	5	27	2	3	0	5
May	15	15	2	32	9	15	1	25	0	8	0	8
June	10	7	0	17	7	9	2	18	2	3	0	5
July	8	5	0	13	12	11	2	25	1	1	2	4
August	11	6	1	18	15	24	4	43	1	3	0	4
September	11	2	0	13	23	21	4	48	11	4	0	15
October	14	10	0	24	24	14	2	40	0	0	0	0
November	13	14	0	27	12	8	0	20	5	1	0	6
December	16	14	0	30	16	14	2	32	1	3	0	4
Total	124	113	4	241	179	170	34	383	36	42	4	82

SECTION 15 – Commercial Vehicles in 2003 Collisions

Table 15.12 – Contributing factors in emergency vehicle collisions – Emergency vehicle driver factors only:

By number of collisions¹

Contributing factors				% of Total Emergency Vehicle Collisions
	Injury	Fatal	Total	
Weather Condition	12	0	12	8.57
Failing to Yield Right of Way	10	0	10	7.14
Driving Without Due Care	8	0	8	5.71
Following too Closely	4	0	4	2.86
Unsafe Speed	4	0	4	2.86
Driving on Wrong Side of Road	3	0	3	2.14
Ignoring Traffic Control Device	3	0	3	2.14
Backing Unsafely	2	0	2	1.43
Improper Turning	2	0	2	1.43
Wild Animal	2	0	2	1.43
Alcohol Involvement	1	0	1	0.71
Fell Asleep	1	0	1	0.71
Improper Passing	1	0	1	0.71
Pedestrian Error/Confusion	1	0	1	0.71
Physical Disability	1	0	1	0.71
Ignoring Officer/Flagman/Guard	1	0	1	0.71
Defective Brakelights	1	0	1	0.71
Sunlight Glare	1	0	1	0.71
Obstruction/Debris on Road	1	0	1	0.71
Pavement Condition	1	0	1	0.71
Visibility Impaired	1	0	1	0.71
Previous Traffic Collision	1	0	1	0.71
Other	52	3	55	39.29
Unknown	10	0	10	7.14

Note:

- 1) The figures shown above represent the contributing factors assigned to the emergency vehicle drivers involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in this table. For example, a collision attributed to weather condition and careless driving would be counted above as both weather related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the collisions with the factor as a percentage of total emergency vehicle casualty collisions recorded in British Columbia during 2003.

Table 15.13 – Contributing factors in emergency vehicle collisions – Other vehicle driver factors only:

By number of collisions¹

Contributing factors				% of Total Emergency Vehicle Collisions
	Injury	Fatal	Total	
Driving Without Due Care	26	1	27	19.29
Failing to Yield Right of Way	12	2	14	10.00
Following too Closely	10	0	10	7.14
Alcohol Involvement	7	0	7	5.00
Driver Inexperience	7	0	7	5.00
Improper Turning	7	0	7	5.00
Weather Condition	7	0	7	5.00
Ignoring Traffic Control Device	5	0	5	3.57
Unsafe Speed	5	0	5	3.57
Ignoring Officer/Flagman/Guard	5	0	5	3.57
Backing Unsafely	2	0	2	1.43
Drugs (Illegal)	2	0	2	1.43
Driving on Wrong Side of Road	2	0	2	1.43
Extreme Fatigue	1	0	1	0.71
Failing to Signal	1	0	1	0.71
Improper Passing	1	0	1	0.71
Illness	1	0	1	0.71
Defective Suspension	1	0	1	0.71
Sunlight Glare	1	0	1	0.71
Obstruction/Debris on Road	1	0	1	0.71
Previous Traffic Collision	1	0	1	0.71
Road/Intersection Design	1	0	1	0.71
Other	56	2	58	41.43
Unknown	10	0	10	7.14

Note:

- 1) The figures shown above represent the contributing factors assigned to drivers, other than emergency vehicle drivers, involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collision occurs in this table. For example, a collision attributed to alcohol involvement and careless driving would be counted above as both an alcohol related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the collisions with the factor as a percentage of total emergency vehicle casualty collisions recorded in British Columbia during 2003.

**Table 15.14 – Contributing factors in taxi collisions
– Taxi driver factors only: By number of collisions¹**

Contributing factors	% of Total Taxi Collisions			
	Injury	Fatal	Total	
Driving Without Due Care	38	0	38	15.45
Failing to Yield Right of Way	34	0	34	13.82
Following too Closely	15	0	15	6.10
Unsafe Speed	14	1	15	6.10
Weather Condition	13	0	13	5.28
Ignoring Traffic Control Device	12	0	12	4.88
Avoiding Veh/Ped/Cycle	6	0	6	2.44
Improper Turning	4	0	4	1.63
Driver Inexperience	3	0	3	1.22
Pedestrian Error/Confusion	3	0	3	1.22
Visibility Impaired	3	0	3	1.22
Cutting In	2	0	2	0.81
Failing to Signal	2	0	2	0.81
Backing Unsafely	1	0	1	0.41
Improper Passing	1	0	1	0.41
Driving on Wrong Side of Road	1	0	1	0.41
Defective Alternator	1	0	1	0.41
No Driver	1	0	1	0.41
Sunlight Glare	1	0	1	0.41
Obstruction/Debris on Road	1	0	1	0.41
Wild Animal	1	0	1	0.41
Insufficient Traffic Control	1	0	1	0.41
Other	86	0	86	34.96
Unknown	21	0	21	8.54

Note:

1) The figures shown above represent the contributing factors assigned to the taxi drivers involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in the data presented in this table. For example, a collision attributed to weather conditions and careless driving would be counted above as both weather related collision, and a collision involving 'driving without due care'.

"Percent of Total" represents the collisions involving the factor as a percentage of total taxi casualty collisions recorded in British Columbia during 2003.

**Table 15.15 – Contributing factors in taxi collisions
– Other vehicle driver factors only: By number of collisions¹**

Contributing factors	% of Total Taxi Collisions			
	Injury	Fatal	Total	
Driving Without Due Care	36	2	38	15.45
Failing to Yield Right of Way	33	0	33	13.41
Alcohol Involvement	20	2	22	8.94
Following too Closely	20	0	20	8.13
Ignoring Traffic Control Device	15	0	15	6.10
Driver Inexperience	11	1	12	4.88
Unsafe Speed	6	1	7	2.85
Weather Condition	6	0	6	2.44
Visibility Impaired	5	0	5	2.03
Pedestrian Error/Confusion	4	0	4	1.63
Improper Turning	4	0	4	1.63
Avoiding Veh/Ped/Cycle	4	0	4	1.63
Driving on Wrong Side of Road	2	1	3	1.22
Cutting In	2	0	2	0.81
Drugs (illegal)	2	0	2	0.81
Improper Passing	2	0	2	0.81
Defective Headlights	2	0	2	0.81
Extreme Fatigue	1	0	1	0.41
Physical Disability	1	0	1	0.41
Defective Alternator	1	0	1	0.41
Sunlight Glare	1	0	1	0.41
Obstruction/Debris on Road	1	0	1	0.41
Road Maintenance/Construction	1	0	1	0.41
Insufficient Traffic Control	1	0	1	0.41
Other	78	1	79	32.11
Unknown	25	1	26	10.57

Note:

1) The figures shown above represent the contributing factors assigned to drivers, other than taxi drivers, involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in the data presented in this table. For example, a collision attributed to weather conditions and careless driving would be counted above as a both weather related collision, and a collision involving 'driving without due care'.

"Percent of Total" represents the collisions involving the factor as a percentage of total taxi casualty collisions recorded in British Columbia during 2003.

SECTION 15 – Commercial Vehicles in 2003 Collisions

**Table 15.16 – Contributing factors in school bus collisions
– School bus driver factors only: By number of collisions¹**

Contributing factors	% of Total			
	Injury	Fatal	Total	School Bus Collisions
Failing to Yield Right of Way	7	0	7	16.28
Driving Without Due Care	6	0	6	13.95
Following too Closely	3	0	3	6.98
Unsafe Speed	3	0	3	6.98
Backing Unsafely	2	0	2	4.65
Fell Asleep	2	0	2	4.65
Improper Turning	2	0	2	4.65
Driver Inexperience	1	0	1	2.33
Extreme Fatigue	1	0	1	2.33
Improper Passing	1	0	1	2.33
Oversize Vehicle	1	0	1	2.33
Defective Tires	1	0	1	2.33
Sunlight Glare	1	0	1	2.33
Visibility Impaired	1	0	1	2.33
Weather Condition	3	0	3	6.98
Other	11	0	11	25.58
Unknown	3	0	0	0.00

Note:

1) The figures shown above represent the contributing factors assigned to the school bus drivers involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in the data presented in this table. For example, a collision attributed to weather condition and careless driving would be counted above as both a weather related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the collisions with the factor as a percentage of total school bus casualty collisions recorded in British Columbia during 2003.

**Table 15.17 – Contributing factors in school bus collisions
– Other vehicle driver factors only: By number of collisions¹**

Contributing factors	% of Total			
	Injury	Fatal	Total	School Bus Collisions
Driving Without Due Care	7	0	7	16.28
Weather Condition	5	0	5	11.63
Alcohol Involvement	4	0	4	9.30
Failing to Yield Right of Way	4	0	4	9.30
Ignoring Traffic Control Device	4	0	4	9.30
Following too Closely	3	0	0	0.00
Driver Inexperience	2	0	2	4.65
Driving on Wrong Side of Road	2	0	2	4.65
Pedestrian Error/Confusion	2	0	0	0.00
Improper Turning	2	0	2	4.65
Unsafe Speed	2	0	2	4.65
Visibility Impaired	2	0	0	0.00
Backing Unsafely	1	0	1	2.33
Cutting In	1	0	1	2.33
Improper Passing	1	0	1	2.33
Illness	1	0	1	2.33
Unconscious	1	0	1	2.33
Defective Brakes	1	0	1	2.33
Other	12	0	12	27.91
Unknown	2	0	2	4.65

Note:

1) The figures shown above represent the contributing factors assigned to drivers, other than school bus drivers, involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in this table. For example, a collision attributed to weather condition and careless driving will be counted above as both a weather related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the occurrence of collisions involving the factor as a percentage of total school bus casualty collisions recorded in British Columbia during 2003.

Table 15.18 – Emergency vehicle, taxi and school bus collisions by primary collision occurrence

Primary collision occurrence	Emergency Vehicle			Taxi			School Bus		
	Injury	Fatal	Total	Injury	Fatal	Total	Injury	Fatal	Total
Rear End	43	0	43	63	0	63	7	0	7
Intersection - Right Angle	31	2	33	63	0	63	8	0	8
Left Turn-Across Oncoming Traffic	6	0	6	33	1	34	5	0	5
Head On	6	0	6	4	2	6	5	0	5
Overtaking	5	0	5	6	0	6	3	0	3
Off Road Left	6	0	6	2	0	2	3	0	3
Off Road Right	3	0	3	6	0	6	0	0	0
Side Swipe-Opposite Direction	5	0	5	2	0	2	2	0	2
Backing Up	3	0	3	2	0	2	1	0	1
Left Turn - Head On	1	0	1	4	0	4	1	0	1
Left Turn - One Way	2	0	2	1	0	1	2	0	2
Right Turn - Same Direction	3	0	3	0	0	0	0	0	0
Right Turn - Head On	0	0	0	3	0	3	0	0	0
Right Turn-Opposite Direction	0	0	0	1	1	2	1	0	1
One Way Street	0	0	0	1	0	1	0	0	0
Right Turn - Rear End	0	0	0	0	0	0	1	0	1
Other	20	1	21	34	1	35	4	0	4
Unknown	3	0	3	16	0	16	0	0	0
Total	137	3	140	241	5	246	43	0	43

Heavy Commercial Vehicles in 2003 Collisions

SECTION 16

Definition of Heavy Commercial Vehicle

As of 1998, the definition of heavy commercial vehicle was revised by adding local transit bus and intercity bus. Therefore, the current definition of a heavy commercial vehicle is: any single or combination truck unit over 10,900 kilograms GVW (gross vehicle weight) as well as local transit bus and intercity bus. Vehicles in this category include:

- Single unit truck/heavy;
- Tractor-trailer;
- Tractor-trailer and pup;
- Combination unit truck/heavy;
- Logging truck and pole trailer;
- Local transit bus;
- Intercity bus.

Summary Statistics

There were a total of 1,153 reported casualty collisions involving heavy commercial vehicles in 2003. There were 1,614 injured victims resulting from 1,078 injury collisions and 85 victims killed from 75 fatal heavy commercial vehicle

collisions in 2003. These heavy commercial vehicle collisions accounted for 19.2% of the 443 fatalities that occurred in the province in 2003.

The top five contributing factors assigned to heavy commercial vehicle drivers (as a percentage of total heavy commercial vehicle collisions) were, in order of magnitude:

1. Driving without due care (15.9%);
2. Unsafe speed (13.9%);
3. Weather condition (8.9%);
4. Following too closely (7.2%);
5. Failing to yield to the right of way (6.9%).

The top five contributing factors assigned to other drivers (as a percentage of total heavy commercial vehicle collisions) were, in order of magnitude:

1. Driving without due care (15.3%);
2. Unsafe speed (9.5%);
3. Failing to yield to right of way (9.2%);
4. Weather condition (7.4%);
5. Ignoring traffic control device (4.4%).

Table 16.01 – Heavy Commercial vehicle collisions and victims by month

Month	Collisions			Victims in Heavy Commercial Vehicles			All Other Victims			Total Victims
	Injury	Fatal	Total	Injured	Killed	Total	Injured	Killed	Total	
January	99	12	111	54	2	56	89	12	101	157
February	70	7	77	33	1	34	63	8	71	105
March	86	3	89	50	0	50	83	3	86	136
April	80	5	85	41	0	41	72	5	77	118
May	79	3	82	36	1	37	65	2	67	104
June	90	3	93	48	1	49	102	3	105	154
July	91	5	96	42	1	43	80	4	84	127
August	83	7	90	86	1	87	81	6	87	174
September	100	4	104	53	2	55	92	2	94	149
October	86	7	93	54	0	54	79	7	86	140
November	112	9	121	53	2	55	116	11	127	182
December	102	10	112	49	1	50	93	10	103	153
Total	1,078	75	1,153	599	12	611	1,015	73	1,088	1,699

Note: Includes both heavy commercial vehicle occupants and the occupants of other involved motor vehicles plus pedestrians and cyclists.

SECTION 16 – Heavy Commercial Vehicles in 2003 Collisions

Table 16.02 – Contributing factors in heavy commercial vehicle collisions – Heavy Commercial vehicle driver factors only: By number of collisions

Contributing Factors	Injury	Fatal	Total	% of Total Heavy Commercial Vehicle Collisions
				Collisions
Driving Without Due Care	179	4	183	15.87
Unsafe Speed	154	6	160	13.88
Weather Condition	98	4	102	8.85
Following too Closely	82	1	83	7.20
Failing to Yield Right of Way	79	1	80	6.94
Improper Turning	36	1	37	3.21
Ignoring Traffic Control Device	30	1	31	2.69
Road Maintenance/Construction	29	2	31	2.69
Avoiding Veh/Ped/Cycle	28	1	29	2.52
Fell Asleep	24	1	25	2.17
Alcohol Involvement	22	0	22	1.91
Driver Inexperience	22	0	22	1.91
Visibility Impaired	19	3	22	1.91
Wild Animal	17	0	17	1.47
Improper Passing	15	0	15	1.30
Driving on Wrong Side of Road	12	3	15	1.30
Defective Brakes	13	1	14	1.21
Cutting In	11	0	11	0.95
Extreme Fatigue	9	2	11	0.95
Road/Intersection Design	11	0	11	0.95
Insecure Load	10	0	10	0.87
Other	391	18	409	35.47
Unknown	54	5	59	5.12

Note:

- 1) The figures shown above represent the contributing factors assigned to the heavy commercial vehicle drivers involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in this table. For example, a collision attributed to alcohol involvement and careless driving would be counted above as both an alcohol related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the collisions involving the factor as a percentage of total heavy commercial vehicle casualty collisions recorded in British Columbia during 2003.

- 2) "Other" includes specified factors with less than 10 occurrences plus unspecified other.

Figure 16.01 – Heavy commercial vehicle collisions and victims by month

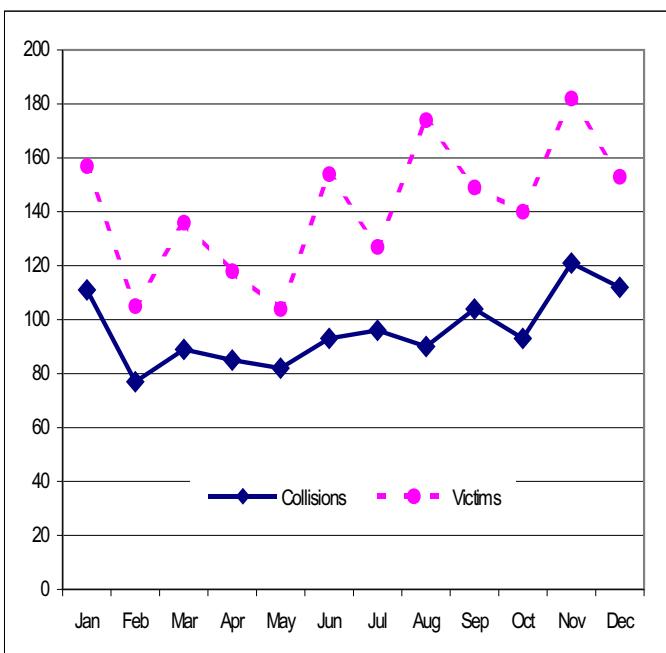
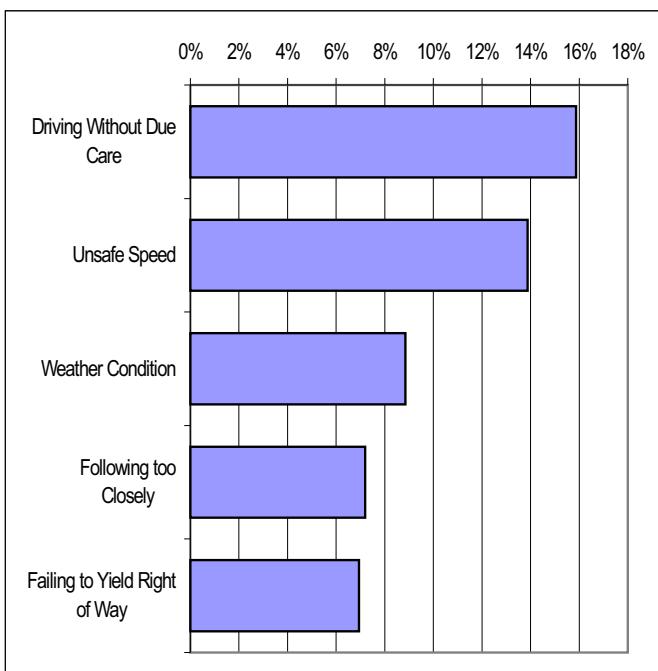


Figure 16.02 – Top five contributing factors in heavy commercial vehicle collisions: Heavy commercial vehicle driver factors only



**Table 16.03 – Contributing factors in heavy commercial vehicle collisions – Other driver factors only:
By number of collisions**

Contributing Factors	Injury	Fatal	Total	% of Total Heavy Commercial Vehicle Collisions
Driving Without Due Care	163	13	176	15.26
Unsafe Speed	95	14	109	9.45
Failing to Yield Right of Way	99	7	106	9.19
Weather Condition	81	4	85	7.37
Ignoring Traffic Control Device	49	2	51	4.42
Driver Inexperience	47	2	49	4.25
Following too Closely	48	0	48	4.16
Alcohol Involvement	38	7	45	3.90
Driving on Wrong Side of Road	34	11	45	3.90
Improper Turning	33	2	35	3.04
Cutting In	30	0	30	2.60
Road Maintenance/Construction	22	2	24	2.08
Improper Passing	23	0	23	1.99
Visibility Impaired	17	3	20	1.73
Avoiding Veh/Ped/Cyclist	18	0	18	1.56
Sunlight Glare	14	0	14	1.21
Other	274	21	295	25.59
Unknown	46	1	47	4.08

Note:

1) The figures shown above represent the contributing factors assigned to drivers, other than heavy commercial vehicle drivers, involved in these collisions. "Collisions" represents the number of collisions in which the contributing factor was present, not the total number of occurrences of the contributing factor. Some double counting of collisions occurs in the data presented in this table. For example, a collision attributed to alcohol involvement and careless driving would be counted above as both an alcohol related collision, and a collision involving 'driving without due care'. "Percent of Total" represents the collisions involving the factor as a percentage of total heavy commercial vehicle casualty collisions recorded in British Columbia during 2003.

2) "Other" includes specified factors with less than 10 occurrences plus unspecified other.

**Figure 16.03 – Top five contributing factors in heavy commercial vehicle collisions:
Other vehicle driver factors only**

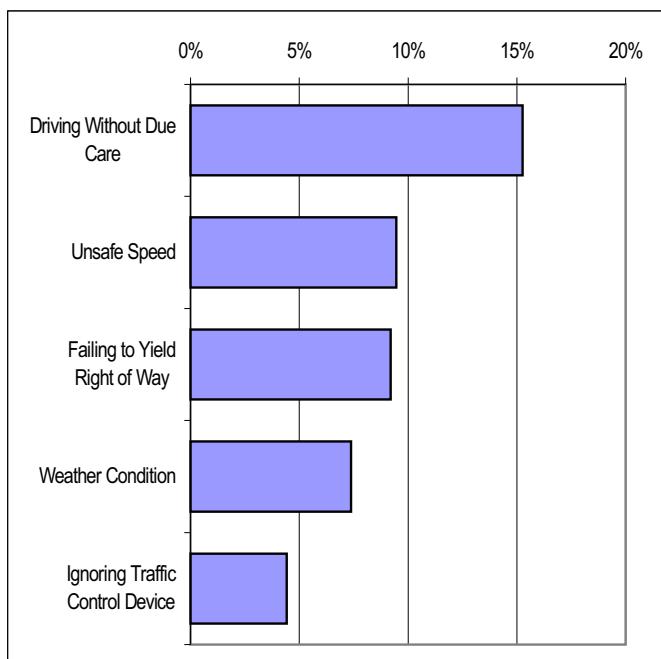


Table 16.04 – Vehicle factors in heavy commercial vehicle collisions: Heavy commercial vehicles only

Vehicle Factors	Injury	Fatal	Total
Defective Brakes	13	1	14
Insecure Load	10	0	10
Oversize Vehicle	8	0	8
Defective Tires	7	0	7
Defective Suspension	4	0	4
Defective Steering	2	0	2
Defective Headlights	1	0	1
Defective Tow Hitch	1	0	1
No Driver	1	0	1
Defective Engine	1	0	1
Restraint System	1	0	1
Vehicle Modification	0	1	1
Total	49	2	51

SECTION 16 – Heavy Commercial Vehicles in 2003 Collisions

Table 16.05 – Heavy commercial vehicle collisions by primary collision occurrence

Primary Collision Occurrence	Injury	Fatal	Total
Rear End	231	3	234
Off Road Right	142	3	145
Intersection - Right Angle	138	6	144
Off Road Left	99	2	101
Head On	70	29	99
Side Swipe-Opposite Direction	61	5	66
Left Turn-Across Oncoming Traffic	55	4	59
Overtaking	48	0	48
Left Turn - Head On	19	1	20
Left Turn - One Way	11	0	11
Right Turn - Rear End	8	0	8
Right Turn - Head On	6	1	7
Backing Up	4	2	6
Right Turn - Same Direction	4	2	6
One Way Street	6	0	6
Right Turn-Opposite Direction	2	0	2
Other	143	15	158
Unknown	31	2	33
Total	1,078	75	1,153

Table 16.06 – Collision location in heavy commercial vehicle collisions

Collision Location	Injury	Fatal	Total
Between Intersection:Exchanges	545	51	596
At intersection	360	18	378
Intersection of Road & Driveway or Alley	44	2	46
Bridge	28	0	28
Off Highway	18	0	18
Parking Lot:Single/Multilevel	11	0	11
Entrance Ramp	9	0	9
Industrial Road	8	1	9
Exit Ramp	8	0	8
Railroad crossing	4	0	4
Entrance Acceleration Lane	2	1	3
Entrance Intersection	3	0	3
Tunnel	2	0	2
Exit Intersection	1	0	1
Transit -Express Lane	1	0	1
Other	17	1	18
Unknown	17	1	18
Total	1,078	75	1,153



Table 16.07 – Heavy commercial vehicle collisions by roadway surface condition

Roadway Surface	Injury	Fatal	Total
Condition	Injury	Fatal	Total
Dry	646	36	682
Wet	255	20	275
Ice	81	7	88
Snow	58	4	62
Slush	27	8	35
Muddy	2	0	2
Other	1	0	1
Unknown	8	0	8
Total	1,078	75	1,153

Table 16.08 – Heavy commercial vehicle collisions by lighting condition

Lighting condition	Injury	Fatal	Total
Daylight	747	37	784
Dark/No Illumination	120	19	139
Dark/Some Illumination	96	13	109
Dark/Full Illumination	50	1	51
Dawn	31	5	36
Dusk	26	0	26
Unknown	8	0	8
Total	1,078	75	1,153

Table 16.10 – Driver age in heavy commercial vehicle collision Heavy commercial vehicle drivers only

Age	Injury	Fatal	Total
16	1	0	1
17	2	0	2
18	5	0	5
19	6	0	6
20	10	0	10
21	15	0	15
22	14	1	15
23	15	1	16
24	13	2	15
25	20	2	22
26-30	99	6	105
31-35	124	7	131
36-40	166	16	182
41-45	163	10	173
46-50	156	18	174
51-55	120	7	127
56-60	87	5	92
61-65	44	4	48
66-70	18	1	19
71-75	4	0	4
81-85	1	0	1
86-90	1	0	1
Unknown	42	0	42
Total	1,126	80	1,206

Table 16.09 – Heavy commercial vehicle collisions by weather condition

Weather	Injury	Fatal	Total
Clear	564	28	592
Cloudy	281	26	307
Raining	136	12	148
Snowing	80	6	86
Fog	9	2	11
Smog/Smoke	1	1	2
Strong Wind	2	0	2
Unknown	5	0	5
Total	1,078	75	1,153

SECTION 16 – Heavy Commercial Vehicles in 2003 Collisions

Table 16.11 – B.C. driver license class of heavy commercial vehicle drivers by vehicle type: Injury collisions

Vehicle Type	100	160	200	230	260	300	340	346	360	400	460	500	560	700	Other	Total
Single Unit Truck/ Heavy	80	20	0	0	0	28	3	3	11	12	5	114	12	10	39	311
Tractor Trailer & Pup	142	41	0	0	0	0	0	0	0	0	0	2	0	0	54	74
Tractor Trailer	107	32	0	0	0	2	1	0	0	1	0	6	0	0	49	94
Local Transit Bus	20	11	34	13	12	0	0	0	0	5	0	1	0	0	34	359
Heavy Truck/Trailer	47	15	0	0	0	7	0	1	4	1	0	8	0	3	26	52
Logging Truck & Pole Trailer	52	23	0	0	0	0	0	0	1	0	0	1	0	0	5	98
Intercity Bus	3	1	3	2	1	0	0	0	0	7	0	0	0	0	11	24
Total	403	134	32	5	14	33	2	2	5	12	2	119	14	7	226	1,012

Note:

1) This table lists all combinations of valid B.C. license classes. Out-of-province drivers are all grouped under "Other".

2) "100" to "700" refers to driver license classes 1 to 7. "340", for example, is a combination of class 3 and class 4

Table 16.12 – B.C. driver license class of heavy commercial vehicle drivers by vehicle type: Fatal collisions

Vehicle Type	100	160	200	300	346	360	500	Other	Total
Single Unit Truck/ Heavy	5	1	0	1	1	1	1	2	12
Heavy Truck/Trailer	6	2	0	1	0	0	1	2	12
Tractor Trailer	11	2	0	0	0	0	0	3	16
Tractor Trailer & Pup	15	4	0	0	0	0	0	7	26
Logging Truck & Pole Trailer	4	4	0	0	0	0	0	1	9
Local Transit Bus	0	0	3	0	0	0	0	1	4
Intercity Bus	0	0	0	0	0	0	0	1	1
Total	41	13	3	2	1	1	2	17	80

Note:

1) This table lists all combinations of valid B.C. license classes. Out-of-province drivers are all grouped under "Other".

2) "100" to "560" refers to driver licence classes 1 to 5. "360", for example, is a combination of class 3 and class 6.

Police Jurisdiction Report

SECTION 17

Southeast District

Kamloops
Kelowna
Nelson

Northern District

Prince George
Prince Rupert

Southwest District

Burnaby
Chilliwack
Coquitlam
North Vancouver
Richmond
Surrey
Vancouver

Island District

Courtenay
Victoria

Municipal Forces

Abbotsford
Central Saanich
Delta
Esquimalt
Nelson
New Westminster
Oak Bay
Saanich
Vancouver
Victoria
West Vancouver

This section is based on the former RCMP organization of 14 sub-divisions.

The current organization consists of 4 districts.

Table 17.01 – Traffic collisions by police jurisdiction – Kelowna subdivision RCMP

Jurisdiction	Injury	Fatal	Total	% of Total
			Collisions	Collisions in Subdivision
Armstrong	49	2	51	2.29
Coldstream Municipal	30	0	30	1.34
Enderby	54	0	54	2.42
Falkland	38	3	41	1.84
Kelowna Municipal	653	12	665	29.81
Kelowna Provincial	289	11	300	13.45
Keremeos	16	0	16	0.72
Lake Country	39	1	40	1.79
Lumby	42	3	45	2.02
Oliver	34	0	34	1.52
Osoyoos	62	1	63	2.82
Penticton Municipal	146	1	147	6.59
Penticton Provincial	88	2	90	4.03
Princeton	94	1	95	4.26
Revelstoke Municipal	16	1	17	0.76
Revelstoke Provincial	42	5	47	2.11
Salmon Arm Municipal	68	1	69	3.09
Salmon Arm Provincial	55	4	59	2.64
Sicamous	30	3	33	1.48
Summerland	18	2	20	0.90
Vernon Municipal	231	5	236	10.58
Vernon Provincial	77	2	79	3.54
Total	2,171	60	2,231	100%

Table 17.02 – Victims in traffic collisions by police jurisdiction – Kelowna subdivision

Jurisdiction	Injured	Killed	Total	% of Total
			Victims	Subdivision
Armstrong	74	2	76	2.28
Coldstream Municipal	37	0	37	1.11
Enderby	81	0	81	2.43
Falkland	59	3	62	1.86
Kelowna Municipal	949	12	961	28.79
Kelowna Provincial	462	12	474	14.20
Keremeos	25	0	25	0.75
Lake Country	64	1	65	1.95
Lumby	63	3	66	1.98
Oliver	56	0	56	1.68
Osoyoos	86	1	87	2.61
Penticton Municipal	213	1	214	6.41
Penticton Provincial	134	2	136	4.07
Princeton	135	1	136	4.07
Revelstoke Municipal	31	1	32	0.96
Revelstoke Provincial	83	5	88	2.64
Salmon Arm Municipal	94	1	95	2.85
Salmon Arm Provincial	89	4	93	2.79
Sicamous	57	4	61	1.83
Summerland	32	2	34	1.02
Vernon Municipal	341	5	346	10.37
Vernon Provincial	111	2	113	3.39
Total	3,276	62	3,338	100%

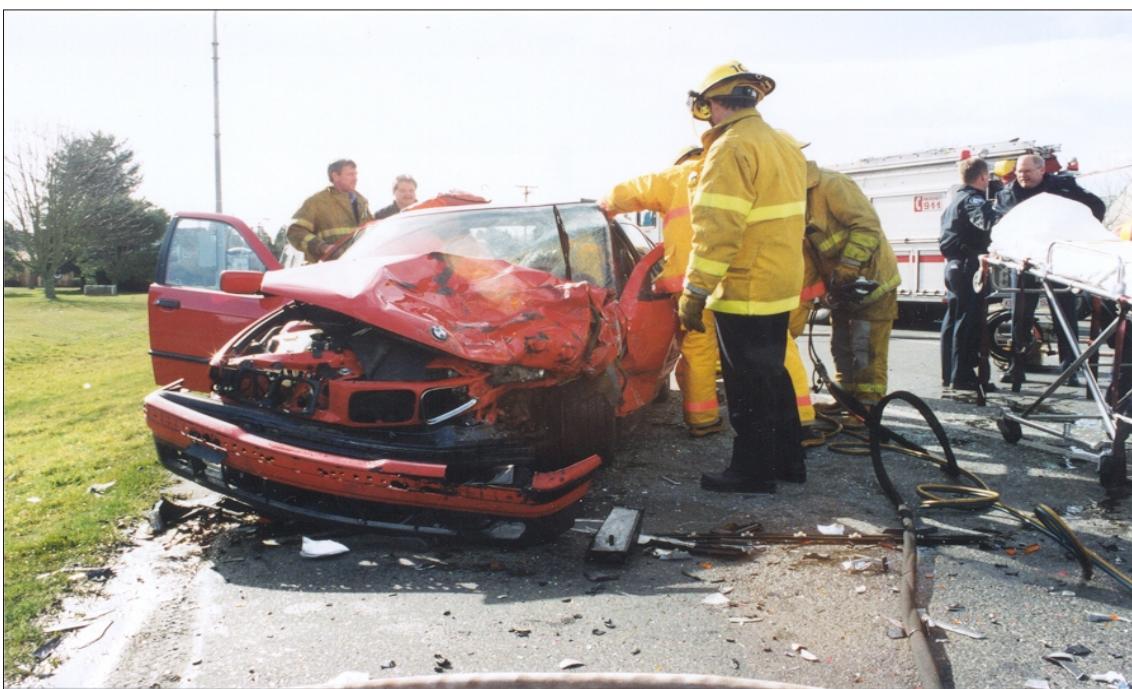
SECTION 17 – Police Jurisdiction Report

**Table 17.03 – Traffic collisions by police jurisdiction
– Kamloops subdivision RCMP**

Jurisdiction	Injury	Fatal	Total	% of Total
			Collisions	Collisions in Subdivision
100 Mile House	92	3	95	7.36
Alexis Creek	16	0	16	1.24
Anahim Lake	6	1	7	0.54
Ashcroft	27	2	29	2.25
Barriere	60	2	62	4.81
Chase	65	4	69	5.35
Clearwater	51	6	57	4.42
Clinton	58	3	61	4.73
Kamloops Municipal	406	0	406	31.47
Kamloops Provincial	100	6	106	8.22
Lillooet	7	0	7	0.54
Logan Lake	26	1	27	2.09
Lytton	27	3	30	2.33
Merritt Municipal	28	0	28	2.17
Merritt Provincial	125	2	127	9.84
Valemount	25	2	27	2.09
Williams Lake Municipal	49	4	53	4.11
Williams Lake Provincial	80	3	83	6.43
Total	1,248	42	1,290	100%

**Table 17.04 – Victims in traffic collisions by police jurisdiction
– Kamloops subdivision RCMP**

Jurisdiction	Injured	Killed	Total	% of Total
			Victims	Subdivision
100 Mile	142	4	146	7.62
Alexis Creek	21	0	21	1.10
Anahim Lake	14	1	15	0.78
Ashcroft	38	2	40	2.09
Barriere	89	3	92	4.80
Chase	108	6	114	5.95
Clearwater	75	7	82	4.28
Clinton	99	3	102	5.32
Kamloops (Mun)	567	0	567	29.58
Kamloops (Prov)	175	6	181	9.44
Lillooet	7	0	7	0.37
Logan Lake	35	1	36	1.88
Lytton	42	6	48	2.50
Merritt (Mun)	34	0	34	1.77
Merritt (Prov)	182	3	185	9.65
Valemount	32	2	34	1.77
Williams Lk (Mun)	72	4	76	3.96
Williams Lk (Prov)	133	4	137	7.15
Total	1,865	52	1,917	100%



**Table 17.05 – Traffic collisions by police jurisdiction
– Nelson subdivision RCMP**

Jurisdiction	Injury	Fatal	Collisions	% of Total Collisions	
				Total	In Subdivision
Castlegar Municipal	29	0	29	3.14	
Castlegar Provincial	48	1	49	5.31	
Cranbrook Municipal	68	0	68	7.37	
Cranbrook Provincial	63	1	64	6.93	
Creston	73	5	78	8.45	
Elkford	4	0	4	0.43	
Fernie Municipal	10	0	10	1.08	
Fernie Provincial	32	2	34	3.68	
Field	4	0	4	0.43	
Fruitvale	6	0	6	0.65	
Golden	112	3	115	12.46	
Grand Forks	39	3	42	4.55	
Invermere	68	6	74	8.02	
Kaslo	11	1	12	1.30	
Kimberley Municipal	18	0	18	1.95	
Kimberley Provincial	33	0	33	3.58	
Midway	36	0	36	3.90	
Nakusp	29	1	30	3.25	
Nelson Provincial	66	5	71	7.69	
New Denver	14	0	14	1.52	
Radium	1	0	1	0.11	
Rossland	4	0	4	0.43	
Salmo	24	0	24	2.60	
Sparwood	24	0			
Trail Municipal	28	0	28	3.03	
Trail Provincial	50	1	51	5.53	
Total	894	29	923	100%	

**Table 17.06 – Victims in traffic collisions by police jurisdiction
– Nelson subdivision RCMP**

Jurisdiction	Injured	Killed	Victims	% of Total Victims In Subdivision	
				Total	Subdivision
Castlegar Municipal	41	0	41	2.95	
Castlegar Provincial	72	1	73	5.25	
Cranbrook Municipal	100	0	100	7.19	
Cranbrook Provincial	96	1	97	6.97	
Creston	108	5	113	8.12	
Elkford	5	0	5	0.36	
Fernie Municipal	11	0	11	0.79	
Fernie Provincial	60	2	62	4.46	
Field	6	0	6	0.43	
Fruitvale	13	0	13	0.93	
Golden	170	5	175	12.58	
Grand Forks	54	3	57	4.10	
Invermere	100	7	107	7.69	
Kaslo	18	1	19	1.37	
Kimberley Municipal	27	0	27	1.94	
Kimberley Provincial	49	0	49	3.52	
Midway	59	0	59	4.24	
Nakusp	44	1	45	3.24	
Nelson Provincial	114	5	119	8.55	
New Denver	17	0	17	1.22	
Radium	2	0	2	0.14	
Rossland	8	0	8	0.58	
Salmo	38	0	38	2.73	
Sparwood	36	0	36	2.59	
Trail Municipal	36	0	36	2.59	
Trail Provincial	75	1	76	5.46	
Total	1,359	32	1,391	100%	

SECTION 17 – Police Jurisdiction Report

**Table 17.07 – Traffic collisions by police jurisdiction
– Prince George subdivision RCMP**

Jurisdiction	Injury	Fatal	Total	% of Total
			Collisions	Collisions In Subdivision
Burns Lake	48	2	50	4.24
Chetwynd	64	2	66	5.60
Dawson Creek Municipal	40	1	41	3.48
Dawson Creek Provincial	67	3	70	5.94
Fraser Lake	23	1	24	2.04
Fort Nelson	77	3	80	6.79
Fort. St. James	18	1	19	1.61
Fort St. John Municipal	82	1	83	7.05
Fort St. John Provincial	87	8	95	8.06
Hudson Hope	4	1	5	0.42
Mackenzie Municipal	7	0	7	0.59
Mackenzie Provincial	17	3	20	1.70
McBride	21	0	21	1.78
Prince George Municipal	270	4	274	23.26
Prince George Provincial	108	7	115	9.76
Quesnel Municipal	64	0	64	5.43
Quesnel Provincial	96	6	102	8.66
Tsay Keh Dene	1	0	1	0.08
Takla Landing	1	0	1	0.08
Tumbler Ridge	3	0	3	0.25
Vanderhoof	26	2	28	2.38
Watson Lake	3	1	4	0.34
Wells	5	0	5	0.42
Total	1,132	46	1,178	100%

**Table 17.08 – Victims in traffic collisions by police jurisdiction
– Prince George subdivision RCMP**

Jurisdiction	Injured	Killed	Total	% of Total
			Victims	Victims In Subdivision
Burns Lake	76	2	78	4.28
Chetwynd	98	3	101	5.55
Dawson Creek Municipal	69	1	70	3.84
Dawson Creek Provincial	105	6	111	6.10
Fraser Lake	38	2	40	2.20
Fort Nelson	130	3	133	7.30
Fort. St. James	27	1	28	1.54
Fort St. John Municipal	137	1	138	7.58
Fort St. John Provincial	178	8	186	10.21
Hudson Hope	7	1	8	0.44
Mackenzie Municipal	7	0	7	0.38
Mackenzie Provincial	23	3	26	1.43
McBride	27	0	27	1.48
Prince George Municipal	365	4	369	20.26
Prince George Provincial	174	7	181	9.94
Quesnel Municipal	98	0	98	5.38
Quesnel Provincial	140	6	146	8.02
Tsay Keh Dene	1	0	1	0.05
Takla Landing	1	0	1	0.05
Tumbler Ridge	3	0	3	0.16
Vanderhoof	53	2	55	3.02
Watson Lake	7	1	8	0.44
Wells	6	0	6	0.33
Total	1,770	51	1,821	100%

**Table 17.09 – Traffic collisions by police jurisdiction
– Prince Rupert subdivision RCMP**

Jurisdiction	Injury	Fatal	Total		% of Total Collisions
			Collisions	In Subdivision	
Atlin	1	1	2		0.64
Bella Bella	1	0	1		0.32
Bella Coola	10	0	10		3.19
Dease Lake	8	1	9		2.88
Granisle	2	0	2		0.64
Houston	31	3	34		10.86
Kitimat Municipal	8	1	9		2.88
Kitimat Provincial	15	1	16		5.11
Masset	5	0	5		1.60
New Aiyansh	5	0	5		1.60
New Hazelton	29	0	29		9.27
Prince Rupert Municipal	33	0	33		10.54
Prince Rupert Provincial	8	0	8		2.56
Queen Charlotte	11	0	11		3.51
Smithers	50	1	51		16.29
Stewart	8	1	9		2.88
Terrace Municipal	36	0	36		11.50
Terrace Provincial	41	2	43		13.74
Total	302	11	313		100%

**Table 17.10 – Victims in traffic collisions by police jurisdiction
– Prince Rupert subdivision RCMP**

Jurisdiction	Injured	Killed	Total		% of Total Victims In Subdivision
			Victims	Subdivision	
Atlin	1	1	2		0.43
Bella Bella	1	0	1		0.21
Bella Coola	18	0	18		3.83
Dease Lake	18	1	19		4.04
Granisle	2	0	2		0.43
Houston	42	4	46		9.79
Kitimat Municipal	13	1	14		2.98
Kitimat Provincial	22	1	23		4.89
Masset	10	0	10		2.13
New Aiyansh	5	0	5		1.06
New Hazelton	40	0	40		8.51
Prince Rupert Municipal	51	0	51		10.85
Prince Rupert Provincial	15	0	15		3.19
Queen Charlotte	17	0	17		3.62
Smithers	69	1	70		14.89
Stewart	14	1	15		3.19
Terrace Municipal	46	0	46		9.79
Terrace Provincial	74	2	76		16.17
Total	458	12	470		100%

SECTION 17 – Police Jurisdiction Report

**Table 17.11 – Traffic collisions by police jurisdiction
– Vancouver subdivision RCMP**

Jurisdiction	Injury	Fatal	% of Total	
			Total Collisions	In Subdivision
Bowen Island	2	0	2	0.12
Coquitlam Provincial	24	0	24	1.49
Deas Island Freeway Patrol A	211	4	215	13.36
Port Mann Freeway Patrol B	7	1	8	0.50
Gibsons Provincial	43	0	43	2.67
Langley City	136	1	137	8.51
Langley District	406	7	413	25.67
Maple Ridge Municipal	323	5	328	20.39
Maple Ridge Provincial	15	0	15	0.93
Pemberton	25	6	31	1.93
Pitt Meadows	66	3	69	4.29
Sechelt Municipal	47	0	47	2.92
Sechelt Provincial	36	2	38	2.36
Squamish Municipal	69	2	71	4.41
Squamish Provincial	55	0	55	3.42
Surrey Provincial	4	0	4	0.25
UBC Provincial	29	1	30	1.86
Whistler	48	1	49	3.05
White Rock	30	0	30	1.86
Total	1,576	33	1,609	100%

**Table 17.12 – Victims in traffic collisions by police jurisdiction
– Vancouver subdivision RCMP**

Jurisdiction	Injured	Killed	% of Total	
			Total Victims	Victims in Subdivision
Bowen Island	2	0	2	0.08
Coquitlam Provincial	32	0	32	1.34
Deas Island Freeway Patrol A	337	5	342	14.36
Port Mann Freeway Patrol B	9	1	10	0.42
Gibsons Provincial	57	0	57	2.39
Langley City	201	1	202	8.48
Langley District	596	8	604	25.36
Maple Ridge Municipal	479	5	484	20.32
Maple Ridge Provincial	23	0	23	0.97
Pemberton	45	8	53	2.23
Pitt Meadows	114	4	118	4.95
Sechelt Municipal	62	0	62	2.60
Sechelt Provincial	51	2	53	2.23
Squamish Municipal	115	2	117	4.91
Squamish Provincial	72	0	72	3.02
Surrey Provincial	9	0	9	0.38
UBC Provincial	39	1	40	1.68
Whistler	65	1	66	2.77
White Rock	36	0	36	1.51
Total	2,344	38	2,382	100%

**Table 17.13 – Traffic collisions by police jurisdiction
– Chilliwack subdivision RCMP**

Jurisdiction	Injury	Fatal	% of Total	
			Total Collisions	In Subdivision
Abbotsford Municipal	17	0	17	1.99
Agassiz	66	2	68	7.94
Boston Bar	10	1	11	1.29
Chilliwack Municipal	320	3	323	37.73
Chilliwack Provincial	36	0	36	4.21
Sumas Freeway Patrol C	104	3	107	12.50
Hope Municipal	3	0	3	0.35
Hope Provincial	107	5	112	13.08
Mission Municipal	145	4	149	17.41
Mission Provincial	30	0	30	3.50
Total	838	18	856	100%

**Table 17.14 – Victims in traffic collisions by police jurisdiction
– Chilliwack subdivision RCMP**

Jurisdiction	Injured	Killed	% of Total	
			Total Victims	Victims in Subdivision
Abbotsford Municipal	28	0	28	2.10
Agassiz	102	2	104	7.79
Boston Bar	18	2	20	1.50
Chilliwack Municipal	489	8	497	37.23
Chilliwack Provincial	61	0	61	4.57
Sumas Freeway Patrol C	169	3	172	12.88
Hope Municipal	3	0	3	0.22
Hope Provincial	166	9	175	13.11
Mission Municipal	215	4	219	16.40
Mission Provincial	56	0	56	4.19
Total	1,307	28	1,335	100%

**Table 17.15 – Traffic collisions by police jurisdiction
– Victoria Subdivision RCMP**

Jurisdiction	Injury	Fatal	Total	% of Total Collisions
			Collisions	In Subdivision
Chemainus	3	0	3	0.22
Colwood Municipal	57	1	58	4.22
Duncan Provincial	123	2	125	
Gabriola Island	5	0	5	0.36
Ganges	48	2	50	3.63
Ladysmith Municipal	34	0	34	
Ladysmith Provincial	29	1	30	2.18
Lake Cowichan	38	0	38	2.76
Langford Municipal	118	0	118	
North Saanich	40	1	41	2.98
North Cowichan-Duncan Municipal	109	3	112	8.14
Nanaimo Municipal	388	5	393	28.56
Nanaimo Provincial	55	3	58	4.22
Pender Island	13	0	13	0.94
Shawnigan Lake	114	0	114	8.28
Sidney Municipal	20	0	20	1.45
Sidney Provincial	5	0	5	0.36
Sooke	61	1	62	4.51
View Royal	51	1	52	3.78
Western Communities Provincial	45	0	45	3.27
Total	1,356	20	1,376	80%

**Table 17.16 – Victims in traffic collisions by police jurisdiction
– Victoria subdivision RCMP**

Jurisdiction	Injured	Killed	Total	% of Total Victims in Subdivision
			Victims	Subdivision
Chemainus	7	0	7	0.34
Colwood Municipal	88	1	89	4.33
Duncan Provincial	170	2	172	8.37
Gabriola Island	6	0	6	0.29
Ganges	75	2	77	3.75
Ladysmith Municipal	48	0	48	2.34
Ladysmith Provincial	54	2	56	2.73
Lake Cowichan	69	0	69	3.36
Langford Municipal	168	0	168	8.18
North Saanich	56	1	57	2.78
North Cowichan-Duncan Municipal	157	3	160	7.79
Nanaimo Municipal	568	5	573	27.90
Nanaimo Provincial	81	3	84	4.09
Pender Island	16	0	16	0.78
Shawnigan Lake	183	0	183	8.91
Sidney Municipal	30	0	30	1.46
Sidney Provincial	6	0	6	0.29
Sooke	104	1	105	5.11
View Royal	85	2	87	4.24
Western Communities Provincial	61	0	61	2.97
Total	2,032	22	2,054	100%

**Table 17.17 – Traffic collisions by police jurisdiction
– Courtenay subdivision RCMP**

Jurisdiction	Injury	Fatal	Total	% of Total Collisions
			Collisions	In Subdivision
Campbell River Municipal	162	0	162	15.11
Campbell River Provincial	45	1	46	4.29
Comox	35	1	36	3.36
Courtenay Municipal	111	1	112	10.45
Courtenay Provincial	114	3	117	10.91
Gold River	10	0	10	0.93
Parksville Municipal	37	1	38	3.54
Parksville Provincial	132	2	134	12.50
Port Alice	7	0	7	0.65
Port McNeill	35	0	35	3.26
Powell River Municipal	51	0	51	4.76
Powell River Provincial	26	1	27	2.52
Port Alberni Municipal	88	0	88	8.21
Port Alberni Provincial	72	4	76	7.09
Port Hardy Municipal	25	0	25	2.33
Quadra Island	13	0	13	1.21
Qualicum Beach	30	1	31	2.89
Sayward	19	0	19	1.77
Texada Island	3	1	4	0.37
Tofino	14	1	15	1.40
Ucluelet	24	2	26	2.43
Total	1,053	19	1,072	100%

SECTION 17 – Police Jurisdiction Report

Table 17.18 – Victims in traffic collisions by police jurisdiction – Courtenay subdivision RCMP

Jurisdiction	Injured	Killed	Total	% of Total
			Victims	Victims In Subdivision
Campbell River Municipal	250	0	250	15.67
Campbell River Provincial	70	1	71	4.45
Comox	45	1	46	2.88
Courtenay Municipal	160	1	161	10.09
Courtenay Provincial	178	3	181	11.35
Gold River	14	0	14	0.88
Parksville Municipal	51	1	52	3.26
Parksville Provincial	195	3	198	12.41
Port Alice	10	0	10	0.63
Port McNeill	55	0	55	3.45
Powell River Municipal	65	0	65	4.08
Powell River Provincial	41	1	42	2.63
Port Alberni Municipal	133	0	133	8.34
Port Alberni Provincial	114	4	118	7.40
Port Hardy Municipal	34	0	34	2.13
Quadra Island	27	0	27	1.69
Qualicum Beach	42	1	43	2.70
Sayward	35	0	35	2.19
Texada Island	5	1	6	0.38
Tofino	17	1	18	1.13
Uculelet	34	2	36	2.26
Total	1,575	20	1,595	100%

Table 17.19 – Traffic collisions by police jurisdiction – Municipal Forces

Jurisdiction	Injury	Fatal	Total	% of Total
			Municipal Forces Collisions	Municipal Forces
Abbotsford	491	12	503	10.85
Central Saanich	72	2	74	1.60
Delta	404	9	413	8.91
Esquimalt	20	1	21	0.45
Nelson	28	0	28	0.60
New Westminster	264	4	268	5.78
Oak Bay	46	1	47	1.01
Port Moody	111	1	112	2.42
Saanich	630	4	634	13.68
Vancouver	1832	22	1854	40.00
Victoria	498	6	504	10.87
West Vancouver	177	0	177	3.82
Total	4,573	62	4,635	100%

Table 17.20 – Victims in traffic collisions by police jurisdiction – Municipal Forces

Jurisdiction	Injured	Killed	Total	% of Total
			Municipal Forces Victims	Municipal Forces
Abbotsford	771	13	784	11.77
Central Saanich	114	2	116	1.74
Delta	574	10	584	8.77
Esquimalt	26	1	27	0.41
Nelson	37	0	37	0.56
New Westminster	397	4	401	6.02
Oak Bay	55	1	56	0.84
Port Moody	161	1	162	2.43
Saanich	894	6	900	13.52
Vancouver	2672	23	2695	40.47
Victoria	655	6	661	9.93
West Vancouver	236	0	236	3.54
Total	6,592	67	6,659	100%

Table 17.21 – Traffic collisions by police jurisdiction – Burnaby subdivision RCMP

Jurisdiction	Injury	Fatal	Total	Collisions in Subdivision
Burnaby	768	8		776
Total	768	8		776

Table 17.23 – Traffic collisions by police jurisdiction – Coquitlam subdivision RCMP

Jurisdiction	Injury	Fatal	Total	% of Total	Collisions in Subdivision
			Collisions		
Coquitlam Municipal	457	4	461	70.27	
Port Coquitlam	192	3	195	29.73	
Total	649	7	656		100%

Table 17.25 – Traffic collisions by police jurisdiction – North Vancouver subdivision RCMP

Jurisdiction	Injury	Fatal	Total	% of Total	Collisions in Subdivision
			Collisions		
North Vancouver City	179	2	181	51.86	
North Vancouver District	167	1	168	48.14	
Total	346	3	349		100%

Table 17.22 – Victims in traffic collisions by police jurisdiction – Burnaby subdivision RCMP

Jurisdiction	Injured	Killed	Total	Victims in Subdivision
Burnaby	1,133	8		1,141
Total	1,133	8		1,141

Table 17.24 – Victims in traffic collisions by police jurisdiction – Coquitlam subdivision RCMP

Jurisdiction	Injured	Killed	Total	% of Total	Victims in Subdivision
			Victims		
Coquitlam Municipal	669	5	674	69.13	
Port Coquitlam	298	3	301	30.87	
Total	967	8	975		100%

Table 17.26 – Victims in traffic collisions by police jurisdiction – North Vancouver subdivision RCMP

Jurisdiction	Injured	Killed	Total	% of Total	Victims in Subdivision
			Victims		
North Vancouver City	236	2	238	51.0	
North Vancouver District	228	1	229	49.0	
Total	464	3	467		100%

**Table 17.27 – Traffic collisions by police jurisdiction
– Richmond subdivision RCMP**

Jurisdiction	Injury	Fatal	Total Collisions
Richmond	743	7	750
Total	743	7	750

**Table 17.28 – Victims in traffic collisions by police jurisdiction
– Richmond subdivision RCMP**

Jurisdiction	Injured	Killed	Total Victims
Richmond	1,073	7	1,080
Total	1,073	7	1,080

**Table 17.29 – Traffic collisions by police jurisdiction
– Surrey subdivision RCMP.**

Jurisdiction	Injury	Fatal	Total Collisions
Surrey Municipal	1,815	29	1,844
Total	1,815	29	1,844

**Table 17.30 – Victims in traffic collisions by police jurisdiction
– Surrey subdivision RCMP.**

**Table 17.30 – Victims in traffic collisions by police jurisdiction
– Surrey subdivision RCMP.**

Jurisdiction	Injured	Killed	Total Victims
Surrey Municipal	2,742	32	2,774
Total	2,742	32	2,774

**Table 17.31 – Traffic collisions by police jurisdiction
– Other Forces**

Jurisdiction	Injury	Fatal	Total Collisions
Military Police	1	0	1
Total	1	0	1

**Table 17.32 – Victims in traffic collisions by police jurisdiction
– Other Forces**

Jurisdiction	Injured	Killed	Total Victims
Military Police	1	0	1
Total	1	0	1

**Table 17.33 – Traffic collisions by police jurisdiction
– First Nation Police Service**

Jurisdiction	Injury	Fatal	Total Collisions
Stl'atl'imx Tribal Police/Lillooet	14	1	15
Kitasso/Xaixais Tribal Police	1	0	
Total	15	1	16

**Table 17.34 – Victims in traffic collisions by police jurisdiction
– First Nation Police Service**

Jurisdiction	Injured	Killed	Total Victims
Stl'atl'imx Tribal Police/Lillooet	27	1	28
Kitasso/Xaixais Tribal Police	4	0	4
Total	31	1	32