# **IMPAIRED DRIVING IN CANADA - 1998**

Julie Sauvé

# HIGHLIGHTS

- In 1998, 70,587 persons were charged with impaired driving in Canada. The rate of impaired driving (295 per 100,000 persons 16 years of age and over) fell 4% in 1998, the 15<sup>th</sup> consecutive annual decrease. Since the rate peaked in 1981, there has been a 65% decline in persons charged with impaired driving.
- Some of this decrease may be due to the increased use of roadside suspensions by police, rather than laying a charge against a driver with a blood-alcohol concentration just over the legal limit. This increased use of roadside suspensions by the police is primarily due to the amount of paperwork and time required in the processing of an impaired driving charge.
- With the exception of small increases in Nova Scotia (+1%) and Manitoba (+1%), all provinces and territories followed the national trend of a decline in impaired driving rates in 1998. Prince Edward Island had the largest decrease, down 19%. Yukon had the highest rate (1,148) and for the 10<sup>th</sup> straight year, Saskatchewan recorded the highest rate among the provinces (683). Newfoundland reported the lowest rate (218) for the 3<sup>rd</sup> year in a row.
- The most serious consequence of impaired driving is causing the death of another person. In 1998, 103 persons were charged with impaired driving causing death, the lowest number since 1989. There were also 886 persons charged with impaired driving causing bodily harm, a figure that has also been decreasing.
- The 19-24 age group was found to have the highest age-specific rate of impaired drivers. Rates gradually declined from the peak age of 20 until the early 30's where there was a second smaller peak.
- Compared to other Criminal Code offences, impaired driving has a relatively high proportion of convictions. Over three-quarters (77%) of impaired driving cases resulted in a conviction in 1997-98, compared to 62% of all Criminal Code offences. However, in recent years, there has been a gradual decline in guilty verdicts in impaired driving cases.
- Possibly in response to increased penalties for conviction, it appears as though more impaired driving cases are being contested in court, as measured by the number of appearances of the accused. In 1994-95, 19% of cases required six or more appearances before the courts. By 1997-98, this had increased to 23% of impaired driving cases. Of those cases requiring six or more appearances, two-thirds (67%) of the accused were found guilty, compared to 85% of those where only one or two appearances were necessary.







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#### INTRODUCTION

Impaired driving is a socially unacceptable behavior that has been a criminal offence in Canada for over 75 years. Despite 15 years of declining numbers of persons charged, impaired driving remains a priority among governments and police. Statistics show that each year in Canada, 1,350 persons lose their lives due to an accident where alcohol is involved (Transport Canada, 1999).

Both federal and provincial/territorial governments continue to introduce harsher penalties for those convicted of impaired driving. Police officers see impaired driving as a serious offence, as a recent survey of officers indicated that it was ranked 5th among 15 high-profile offences <sup>1</sup>. Impaired driving followed homicide, sexual assaults, kidnapping and robbery, and was ranked more serious than offences such as breaking and entering and assault.

The question which remains is whether measuring trends in impaired driving through the number of persons "charged" by police is an accurate tool. Has there been a real decline in the number of drunk drivers on the road or has the decline in charges been a result of other factors such as decreased police enforcement or the increased use of roadside license suspensions? In this report, data on police enforcement practices will be examined as well as data on fatally-injured drivers, trends in alcohol consumption, and changes in the demographic composition of the Canadian population. Another issue addressed in this report is whether a greater proportion of accused persons are clogging the courts by contesting impaired driving charges.

Police-reported data are presented at the national, provincial and census metropolitan area (CMA) level. Data on characteristics of impaired driving incidents and accused persons are examined from a sample of police departments.

#### IMPAIRED DRIVING LEGISLATION IN CANADA

As noted in the introduction, impaired driving legislation has been undergoing significant change. In June 1999, Parliament passed Bill C-82, which amended, in July, the current statute by increasing the penalties that had been in effect since 1985. These changes are summarized in Table 1.

Impaired driving is not just a federal issue. Provincial governments have also taken action in the fight against impaired driving and have established their own legislation as a complement to the *Criminal Code*.

The provinces are responsible for road safety regulations and control (highway traffic acts, issuing and controlling driver's licences and motor vehicle registrations, etc.). Over the past few years, a number of provincial jurisdictions have introduced or amended acts and regulations to reduce the incidence of impaired driving. These measures have included lowering the legal alcohol limit for new drivers, particularly young drivers. The following sections describe a few provisions of new provincial acts and regulations in force in 1999 that extend legal control of impaired driving.

# Drivers with a blood alcohol concentration below the legal limit can have their licences suspended for a specified period

Some provinces have given police the power to suspend the licence of a driver who is slightly below the legal limit of 80 mg of alcohol per 100 ml of blood. Licence suspension can be imposed for a blood alcohol concentration (BAC) as low as 40 mg (e.g. Saskatchewan - with the rest of the provinces being 50 mg), depending on the province or territory. The length of the suspension ranges from 24 hours in Newfoundland, Prince Edward Island, New Brunswick, Nova Scotia, British Columbia, Saskatchewan and Manitoba to 12 hours in Ontario.

Jonah et al.



Table 1



### Criminal Code Penalties for Impaired Driving Offences, 1999

	OFFENCE			PENALTIES			
			Prohibition from Driving	Fine	Jail		
Driving While Impaired	1st offence	Summary Indictment	12* to 36 months 12* to 36 months	\$ 600 to \$ 2,000 \$ 600 no maximum	0 to 6 months 0 to 60 months		
BAC Over 0.08	2nd Offence	Summary Indictment	24 to 60 months 24 to 60 months	up to \$ 2,000 no maximum	14 days to 6 months 14 days to 60 months		
(Refusal to Provide Sample)	3rd+ Offence	Summary Indictment	36 months to lifetime ban	up to \$ 2,000 no maximum	90 days to 6 months 90 days to 60 months		
Impaired Driving Causing Bodily Harm		Indictiment	up to 10 years	no maximum	up to 10 years		
Impaired Driving Causing Death		Indictment	up to 10 years	no maximum	up to 14 years		

<sup>\*</sup> The 12-month prohibition for a first-time offender under the Criminal Code of Canada is reductible to a minimum 3-month prohibition with the use of an ignition interlock where the program is available. The Criminal Code prohibition period is distinct from any suspension period issued by the province or territory.

Source: Smashed - The Magazine on Drinking and Driving, Transport Canada, 1999.

# New driver licensing programs are more restrictive regarding alcohol use

In the past few years, a number of provinces have introduced or significantly altered novice driver licensing programs to reduce the level of tolerance for drinking and driving. Such programs are currently in effect in Newfoundland, Prince Edward Island, New Brunswick, Nova Scotia, Quebec, Ontario and Saskatchewan. They apply to all new drivers, except in Quebec, where the program only covers drivers under 25 years of age. In most provinces, there is zero tolerance for drinking by novice drivers during the two-year probationary or graduated licence period. In all cases, drivers caught breaking the law are given licence suspensions, which are graduated depending on the frequency of offences. In Prince Edward Island, zero tolerance applies only to minors (under age 18); the legal limit for all other new drivers is 40 mg of alcohol per 100 ml of blood.

#### Licence suspension periods are set by law

Section 259 of the *Criminal Code*, since June 1999 (table 1), prescribes a minimum one-year driving prohibition for a first impaired driving offence. The minimum increases to two years for a second offence and to three years for subsequent offences. The maximum suspension is a lifetime ban.

Most provinces have set their own minimum licence suspension periods: one year for a first offence in all provinces except New Brunswick (six months); one to three years for a second offence in some provinces; and between five years and indefinite suspension for subsequent offences. Ontario has gone so far as to add suspension for life for a fourth offence.

#### Administrative licence suspension programs

A number of provinces have instituted automatic administrative licence suspension programs for drivers who have a positive breathalyser reading. Under these programs, provinces can suspend the licences of drivers from the date on which they test positive (over 80 mg per 100 ml of blood). The length of the suspension is 90 days in all provinces that have introduced the program, with the exception of Quebec, where it is 15 days for a first offence. The intention is to prevent drivers who test positive from driving prior to their court appearance and the disposition of their case. Judges are not required to take the length of the suspension into consideration in their sentence.

In addition to these administrative and legal sanctions, more and more provinces are forcing offenders to pay all costs relating to their arrest and rehabilitation. Offenders may also be required to pay any towing and vehicle storage expenses, as well as the cost of the rehabilitation program, which is often mandatory. Finally, in addition to a criminal court judgement and a criminal record, drivers convicted of impaired operation of a vehicle face increased licensing costs and insurance premiums.

#### Vehicles can be seized and impounded

In a number of jurisdictions, police have been given the power, under provincial legislation, to seize vehicles operated by unlicensed drivers or drivers whose licence has been suspended and impound them for a specified period. The aim is to deter people from driving while their licence is suspended and to get vehicle owners to take some responsibility for ensuring that their vehicles are operated by drivers with valid licences. Provinces that introduced this measure have also established a review process for special cases.



Table 2



### **Comparison of Selected Impaired Driving Provincial Legislation** - As in force in November 1999

		- AS III IOIC	e ili Novellibei	1999		
	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
Transporting an open alcoholic beverage container within a motor vehicle	Yes	Yes	Yes	Yes	Consumption is prohibited	Yes
Impaired driving prohibited for other vehicles than specified in Criminal Code	No	Bicycle and horse	No	No	Bicycle	No
Driving prohibition for BAC below Criminal Code limit	24 hours for 50 to 80 mg	24 hours for 50 to 80 mg	Yes <sup>3</sup>	24 hours for 50 to 80 mg	No	12 hours for 50 to 80 mg
Graduated driver's licence holders program <sup>1</sup>	Term: 2 years Tolerance: 0 mg	Term: 2 years Tolerance: 0 mg <sup>2</sup>	Term: 2 years Tolerance: 0 mg	Term: 2 years Tolerance: 0 mg	Term: 2 years <sup>5</sup> Tolerance: 0 mg	Term: 2 years Tolerance: 0 mg
Minimum fixed suspension depending on frequency of offence	1st: 1 year 2nd: 2 years 3rd: 3 years	1st: 1 year 2nd: 2 years 3rd: 3 years	1st: 1 year 2nd: 3 years 3rd and 4th: Indefinite <sup>3 and 4</sup>	1st: 6 months 2nd: 1 year 3rd: 1 year	1st: 1 year 2nd: 2 years 3rd: 3 years	1st: 1 year 2nd: 3 years 3rd: lifetime ban <sup>6</sup> 4th: lifetime ban
Administrative licence suspension	No	90 days	90 days	No	1st: 15 days 2nd and more: 30 days	90 days
Seizure and Impoundment Measure	No	Yes	Yes <sup>3</sup>	No	Yes	Yes
	Manitoba	Saskatchewan	Alberta	British Columbia	N.W.T.	Yukon
Transporting an open alcoholic beverage container within a motor vehicle	Yes	Yes	Yes	Yes	Yes	Yes
Impaired driving prohibited for other vehicles than specified in Criminal Code	Bicycle and horse and other animals	No	No	No	No	No
Driving prohibition for BAC below Criminal Code limit	24 hours for 50 to 80 mg <sup>5</sup>	24 hours for 40 to 80 mg	24 hours for any suspect levels < 80 mg <sup>7</sup>	24 hours for 50 to 80 mg	4 to 24 hours 50 to 80 mg <sup>10</sup>	24 hours <sup>7</sup>
Graduated driver's licence holders program <sup>1</sup>	No	Term: 2 years Tolerance: 40 mg	No	Term: 2 years Tolerance: 0 mg	No	Yes <sup>9</sup>
Minimum fixed suspension dependingon frequency of offence	1st: 1 year 2nd and more: 5 years	1st: 1 year 2nd: 3 years 3rd: 5 years	1st: 1 year 2nd: 3 years 3rd: 5 years	1st: 1 year 2nd: 3 years 3rd: Indefinite	No	1st: 1 year 2nd: 3 years 3rd: Indefinite
Administrative licence suspension	3 months	90 days	No	90 days <sup>8</sup>	No	90 days
Seizure and Impoundment Measure	Yes	Yes	Yes	Yes	Yes <sup>11</sup>	Yes

Only program characteristics related to impaired driving are shown.

Zero tolerance is applicable to new drivers under 18. 40 mg for all other new drivers.

Awaiting proclamation.

For the third offence, the drivers' license is suspended for 10 years after which the case can be reviewed. For the fourth offence, the license is suspended permanently if the offence occurred within a 10 year-window.

Program is applicable solely to new drivers under 25.

Reductible to 10 years if conditions met.

Any level which, in the view of police, may impair driving ability.

Only program characteristics related to driving with BAS > 80 mg and refusing to give a breath sample are shown.

Should be in effect April 1st, 2000.

<sup>10</sup> If the driver is suspected of impaired driving, he or she may have their license suspended for a period of 4 to 24 hours. The driver, however, may ask for a breathalyser test in order to prove that their driving is not impaired by alcohol consumption. If it is determined that their BAC is greater than 60 mg, their license will be suspended. If, however, their BAC is less than 60 mg, there is no licence suspensions.

In cases where there is an accident.



# IN RESPONSE TO IMPAIRED DRIVING LAWS

In 1998, impaired driving accounted for 62% of the 140,000 *Criminal Code* traffic offences reported by police. While impaired driving offences made up only 3% of all *Criminal Code* offences, the 70,500 persons charged with impaired driving constituted 13% of all persons charged.

Impaired driving charges arise from both responsive and preventive action by police. According to a Transport Canada survey <sup>2</sup> of a sample of 1,401 police officers across Canada, erratic driving was the cause in nearly half (48%) of the cases of responsive action by police against an intoxicated driver. One fifth (21%) of the cases were due to traffic accidents, and 15% resulted from complaints by members of the public.

## Impaired driving declined for 15th straight year

The impaired driving rate (number of persons charged with impaired driving per 100,000 people aged 16 and over, the population of potential drivers) fell 4% between 1997 and 1998, posting its 15<sup>th</sup> consecutive annual decrease (see Table 4). After peaking at 859 in 1979 and 1981, the rate has declined to 295 in 1998, a drop of about 65%.

Table 3 Impaired Driving Indicators according to police officers	
Driving Indicators	%
Vehicle weaving	97
Straddling two lanes	95
Driving too slow	93
Erratic Speed	91
Running over curb	90
Failure to obey traffic signs	88
No headlights on at night	86
Running red light	80
Speeding	75
Window open in cold weather	57
Non-use of seat-belt	14
Source: Front-Line Police Officers' Perceptions and attitudes About the Enfo of Impaired Driving Laws in Canada, Transport Canada, 1997.	rcement

Impaired driving is a criminal offence under the *Criminal Code* of Canada. Five different charges are involved: impaired driving

Table 4

Numbe	ber and rate of persons charged with impaired driving, Canada, 1977-1998						
Year	Persons Charged	Population 16 and older	Rate* per 100,000 population 16 and older				
1977	148,824	17,384,050	856				
1978	149,738	17,727,808	845				
1979	155,260	18,081,133	859				
1980	157,492	18,479,016	852				
1981	162,048	18,858,323	859				
1982	143,424	19,191,258	747				
1983	148,040	19,457,216	761				
1984	142,100	19,705,262	721				
1985	131,726	19,946,761	660				
1986	128,797	20,220,126	637				
1987	128,030	20,551,418	623				
1988	121,178	20,854,383	581				
1989	118,722	21,262,389	558				
1990	112,161	21,587,112	520				
1991	111,917	21,858,478	512				
1992	105,805	22,126,276	478				
1993	92,531	22,396,082	413				
1994	88,582	22,683,555	391				
1995	84,085	22,975,844	366				
1996	79,347	23,273,706	341				
1997 <sup>r</sup>	72,307	23,600,777	306				
1998	70,587	23,906,438	295				

<sup>\*</sup> Rates are calculated on the basis of 100,000 population 16 years and older. The population estimates come from the Annual Demographic Statistics, 1998 report, produced by Statistics Canada, Demography Division. Population as of July 1st: Revised intercensal estimates for 1977 to 1990, final intercensal estimates for 1991 to 1995, final postcensal estimates for 1996, updated postcensal estimates for 1997 and 1998.

**Source:** Uniform Crime Reporting Survey, CCJS.

<sup>&</sup>lt;sup>2</sup> Idem.

r revised



Figure 1



# Persons Charged with Impaired Driving, Canada, 1977-1998

Rate per 100,000 population 16 years and older
1,000
800
400
200
1977 1980 1983 1986 1989 1992 1995 1998

Source: Uniform Crime Reporting Survey, CCJS.

causing death (s. 255 (3)), impaired driving causing bodily harm (s. 255 (2)), driving a vehicle with a BAC in excess of 80 mg (80 milligrams of alcohol per 100 millilitres of blood) (s. 253 (b)), driving while the person's ability is impaired by alcohol or a drug (s.253 (a)) and refusal to provide a breath sample or a blood sample (s. 254 (5)).

Of the 70,587 persons charged in 1998 under sections 253, 254 and 255 of the *Criminal Code*, 93% were charged with driving a vehicle while their BAC was greater than 80 mg. This percentage has remained constant over the past 10 years. A small percentage were charged with refusing to provide a breath sample (5%). The remaining 2% were charged with impaired driving causing death, impaired driving causing bodily harm, or refusing to provide a blood sample.

While impaired driving causing death accounts for only a small proportion of the charges, it is clearly the most serious offence. In 1998, 103 people were charged with that offence in Canada<sup>3</sup>. All but one were caught while driving an automobile. The remaining person was charged with impaired driving of a boat, a vessel or an aircraft. This is the smallest number of persons charged with the offence in the last 10 years, and it constitutes a 44% decline since 1989. A further 886 persons were charged with impaired driving causing bodily harm, a 28% decrease since 1989. Of this number, 12 were charged with impaired driving of a boat, vessel or aircraft.

#### Nine in ten impaired drivers are men

Although males continue to account for the large majority (89%) of persons charged with impaired driving, the proportion of females has been increasing over the last decade. In 1989, the ratio was 10 males charged for each female; by 1998, it had fallen to 8 to 1. According to Transport Canada (1999), physiological differences make women more sensitive than men to the effects of alcohol.

#### Impaired driving charges down in most provinces

In 1998, the impaired driving rates in all provinces and territories except Nova Scotia and Manitoba echoed the national downward trend. Nova Scotia and Manitoba's rate were up slightly (1%). Prince Edward Island had the largest decrease (19%).

Yukon had the highest rate of persons charged with impaired driving (1,148) and, for the tenth consecutive year, Saskatchewan posted the highest impaired driving rate among the provinces (683), despite a 7% decline from 1997. Alberta had the second highest rate for the second straight year (439). For the third year in a row, Newfoundland recorded the lowest rate (218).

Table 5

# Persons Charged with Offences Related to Impaired Driving, by Type of Offence and Province/Territory, 1998

			peration of vehicle				operation of vehicle				se to provide lood sample	
Province	Over 80 mg	Causing bodily harm	Causing death	Total	Over 80 mg	Causing bodily harm	Causing death	Total	Breath	Blood	Total	Total persons charged
Newfoundland	871	7	3	881	2	1	_	3	50	9 4	63	947
Prince Edward Island	315	-	-	315	3	_	-	3	79	-	79	397
Nova Scotia	1,847	13	2	1,862	39	3	-	42	363	17	380	2,284
New Brunswick	1,932	14	6	1,952	2	1	-	3	322	16	338	2,293
Québec	16,371	326	26	16,723	23	-	-	23	578	17	595	17,341
Ontario	18,433	172	14	18,619	34	1	-	35	1,460	) 9	1,469	20,123
Manitoba	3,030	55	8	3,093	9	2	-	11	305	8	313	3,417
Saskatchewan	5,069	80	9	5,158	6	1	-	7	163	5	168	5,333
Alberta	9,425	99	12	9,536	5	2	-	7	251	13	264	9,807
British Columbia	7,724	95	22	7,841	16	1	1	18	153	8	161	8,020
Yukon	251	5	-	256	2	-	-	2	1.	' 1	18	276
Northwest Territories (including Nunavut)	329	8	-	337	2	-	-	2	C	1	10	349
Canada	65,597	874	102	66,573	143	12	1	156	3,759	99	3,858	70,587

- Nil

Source: Uniform Crime Reporting Survey, CCJS.

The 103 could be under-counted as the Crown could prosecute these as criminal negligence causing death.



Table 6

## Number and Rate1 of Persons Charged with Impaired Driving, by Province/Territory, 1994-1998

		1994	1995	1996	1997	1998	% change 1994-1998 <sup>2</sup>	% change 1997-1998 <sup>2</sup>
Newfoundland	Number Rate	1,754 393	1,333 300	1,191 270	962 219	947 218	-44.6	-0.5
Prince Edward Island	Number Rate	509 497	554 535	542 517	489 462	397 375	-24.6	-18.9
Nova Scotia	Number Rate	3,279 450	2,816 385	2,444 332	2,244 302	2,284 307	-31.7	1.5
New Brunswick	Number Rate	3,165 536	2,721 458	2,638 442	2,487 414	2,293 381	-29.0	-8.1
Québec	Number Rate	20,734 364	21,324 371	19,518 337	17,637 302	17,341 295	-18.9	-2.4
Ontario	Number Rate	26,240 309	25,995 303	24,688 284	20,355 230	20,123 224	-27.5	-2.6
Manitoba	Number Rate	3,552 412	3,454 398	3,082 354	3,384 387	3,417 389	-5.6	0.6
Saskatchewan	Number Rate	5,523 729	5,675 743	5,552 720	5,682 732	5,333 683	-6.3	-6.7
Alberta	Number Rate	12,921 633	10,660 514	10,335 489	10,377 479	9,807 439	-30.7	-8.4
British Columbia	Number Rate	10,087 347	8,916 298	8,767 285	8,021 255	8,020 251	-27.8	-1.6
Yukon	Number Rate	495 2,216	326 1,416	253 1,056	290 1,193	276 1,148	-48.2	-3.8
Northwest Territories (including Nunavut)	Number Rate	323 749	311 705	337 751	379 840	349 776	3.6	-7.6
Canada	Number Rate % change	88,582 391 -5.5	84,085 366 -6.3	79,347 341 -6.8	72,307 306 -10.1	70,587 295 -3.6	-24.4	-3.6

Rates are calculated on the basis of 100,000 persons 16 years and older. Population estimates come from the Annual Demographic Statistics, 1998 report, produced by Statistics Canada, Demography Division. Populations as of July 1st: final intercensal estimates for 1994 and 1995, estimates for 1996, updated postcensal estimates for 1997 and 1998.

Source: Uniform Crime Reporting Survey, CCJS.

# Edmonton has highest rate among the nine largest CMAs

Of Canada's nine largest CMAs, Edmonton has posted the highest impaired driving rate for the last three years, despite a 13% decrease since 1996. Edmonton's rate in 1998 was 374 charges per 100,000 population. The Quebec City and

Calgary CMAs ranked second and third, at 297 and 264 respectively. Winnipeg was the only major CMA to have an increase since 1996 (20%). The recent increases in Winnipeg are a result of additional public and private funding specifically ear-marked for impaired driving enforcement. Toronto continued to report the lowest rate among all the major CMAs (126).

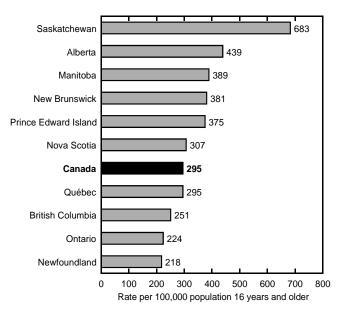
Percent changes are based on non-rounded rates.



Figure 2



# Rate of Persons Charged with Impaired Driving by Province, 1998

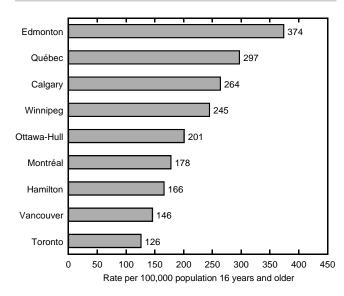


Source: Uniform Crime Reporting Survey, CCJS.

Figure 3



### Persons Charged with Impaired Driving by Nine Largest Metropolitan Areas, 1998



Source: Uniform Crime Reporting Survey, CCJS.

Table 7

# Rate<sup>1</sup> of Persons Charged with Impaired Driving, by Census Metropolitan Area (CMA), 1996-1998

	1996	1997	1998	% change 1996-1998 <sup>2</sup>
Population 500,000 and over				
Calgary	328	312	264	-19.4
Edmonton	429	407	374	-12.8
Hamilton	179	166	166	-7.1
Montréal	198	172	178	-9.9
Ottawa-Hull	207	228	201	-3.1
Québec	350	313	297	-15.1
Toronto	162	106	126	-22.2
Vancouver	180	152	146	-18.6
Winnipeg	205	225	245	19.7
Population less than 500,000				
Chicoutimi-Jonquière <sup>3</sup>	348	306	298	-14.5
Halifax	289	239	242	-16.0
Kitchener <sup>4</sup>	345	280	293	-15.1
London	391	260	235	-39.8
Regina	363	410	440	21.3
St. Catharines-Niagara <sup>4</sup>	229	230	233	1.5
St. John's	316	255	245	-22.4
Saint John	273	350	354	29.7
Saskatoon	460	399	429	-6.6
Sherbrooke	384	325	247	-35.9
Sudbury	227	210	215	-5.3
Thunder Bay	555	438	428	-22.8
Trois-Rivières	423	438	401	-5.2
Victoria	328	268	253	-22.7
Windsor	440	301	287	-34.7

<sup>&</sup>lt;sup>1</sup> Rate are calculated ont the basis of 100,000 persons 16 years and older. Population estimates come from the Annual Demographic Statistics, 1998 report produced by Demography Division, Statistics Canada, Population as of July 1st: final postcensal estimates for 1996, updated postcensal estimates for 1997 and 1998. The intercensal estimates match the jurisdictional boundaries of the police department. The Oshawa Census Metropolitan Area (CMA) is excluded from this table due to methological concerns with the matching of the police agency jurisdictional boundaries and the CMA boundaries.

Source: Uniform Crime Reporting Survey, CCJS.

Percent changes are based on non-rounded rates.

<sup>&</sup>lt;sup>3</sup> CMA population has been adjusted to follow polie force boundaries for Chicoutimi-Jonquière for 1998 only.

CMA populations for St. Catharines-Niagara and Kitchener have been adjusted to follow police forces boundaries for 1996 to 1998.



#### FACTORS EXPLAINING IMPAIRED DRIVING

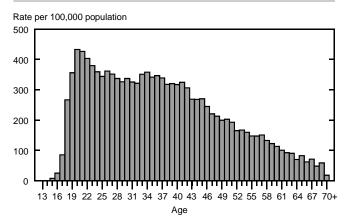
# **Demographic factors**

More people aged 19-24 are charged

Figure 4



Age-specific Rates of Persons Accused of Impaired Driving in Canada, Sample of 169 Police Agencies, 1998



Source: Uniform Crime Reporting Survey, CCJS.

#### Canadians' drinking habits

In September 1999, Health Canada, in collaboration with Statistics Canada and the Canadian Institute on Health Information, published the Statistical Report on the Health of the Canadian Population which presented the most recent results of the 1996-97 National Health Population Survey conducted by the Health Statistics Division at Statistics Canada (see the methodology section). This survey, carried out among Canadians aged 12 years and older, collects information on a number of health-related issues including alcohol consumption. Between 1994-95 (the first cycle of the survey) and 1996-97 (the second cycle), it seems that alcohol consumption among Canadians remained stable. While in 1994-95, 55% of Canadians were regular drinkers (at least one glass per month), the same was true of 53% of Canadians in 1996-97. For almost half of Canadians (43%), their drinking was limited to one to six glasses per week. Twelve percent (12%) of respondents in 1996-97 stated that have never consumed alcohol.

Those most likely to be regular drinkers were male (63% of men were regular drinkers versus 43% of women). A higher proportion of regular drinkers were also found among young people aged 20 to 24 years (68%). More than one-third (36%) of this age group were regular excessive drinkers (drinking 5 glasses or more during one occasion, and doing so 12 times or more during the last year), followed by 34% of persons aged 18 to 19 years.

In previous reports, data showed that people in their mid-thirties accounted for most of the charges of impaired driving. In this report, for the first time, age-specific rates 4 have been calculated for crime data from the Revised Uniform Crime Reporting (UCR) Survey (see Methodology). These data show that now, the 19-24 age group has the highest rate of impaired driving (see figure 4). Specifically, 20 year-olds have the highest single-age impaired driving rate, at 433 per 100,000 persons 20 years of age. Their higher rates may be the result of proactive measures taken by police through check-stop programs taking place mostly at night, as this age group tends to frequent bars more so than older age groups. According to the National Population Health Survey (NPHS), adolescents aged 18-19 are more likely to indicate that they had taken the wheel while under the influence of alcohol. This tendency diminishes with age. The 33-37 age group now shows the second highest impaired driving rate.

People under 18 made up just under 1% of those charged with driving while under the influence of alcohol. The low percentage may be due to the fact that many people under 18 do not have their driver's licence. Furthermore, under some provincial legislation, persons with probationary licenses are prohibited from driving without supervision, and novice drivers are forbidden from having any trace of alcohol in their blood. Moreover, in all Canadian provinces, people under 18 or 19 are not permitted to buy alcohol or even to enter establishments where alcoholic beverages are sold.

Population aging may have an effect on the trend in various crimes <sup>5</sup> including impaired driving. There are fewer young people in our society, and more people over the age of 55. Young people are more likely to drink and drive under the influence of alcohol (see text box on this page). Thus, it may be that because of population aging and the decrease in potential drinkers, fewer people are in a position to be caught driving while impaired. While the aging of the population is a factor, it cannot be concluded that this has caused the entire decline in impaired driving.

#### Social Factors

#### Changes in public attitudes

In addition to changing demographics, there are other variables that could influence the trend in impaired driving. The public's awareness of the seriousness of impaired driving is due, in part, to the numerous prevention and educational programs on the consequences caused by impaired driving.

In response to increased awareness of the risks of driving while impaired, the attitudes of Canadians have changed. The use of "designated drivers" has become commonplace to ensure that there is someone sober to drive everyone else home after a "night on-the-town". According to NPHS, in 1996-97, 60% of Canadians who engage in social drinking indicate that they take measures to assign a designated driver. Operation Red Nose, which is in place in certain cities, is a campaign usually effective during the month of December where volunteers are called to take persons home who have had too much to drink.

<sup>&</sup>lt;sup>4</sup> Age-specific crime rates were computed using the combined age distribution for all census subdivisions that include incident-based UCR Survey respondents.

<sup>5</sup> Tremblay, S. (1999).



#### Preventing impaired driving

RIDE (Reduce Impaired Driving Everywhere) - Ontario

Under this year-round campaign, police in Ontario conduct spot checks in which they stop vehicles and lay charges against intoxicated drivers.

#### P.A.S. (Programme d'Application Sélective) - Quebec

Quebec's P.A.S. is a promotional campaign combined with roadside checks. Launched in 1998, the program is intended to increase drivers' perception of the risk of being stopped. It involves conducting more frequent roadside checks across the province at specific times of the year, along with a media campaign to increase public awareness.

#### Starter-lock devices

In Alberta and Quebec, drivers whose licences have been suspended by the province must have a starter lock installed in order to obtain restricted driving privileges. A starter lock is a device that can measure a driver's BAC with a single breath sample. It prevents the driver from starting the vehicle if the BAC is above a preset level (Société de l'assurance automobile du Québec).

### OTHER MEASURES OF IMPAIRED DRIVING

#### Trends in police-enforcement measures

For this report, major police services in Canada were asked to provide information on trends in enforcement measures related to impaired driving, such as the number of roadside suspensions, check-stop programs, vehicles stopped and drivers tested. Of all the information provided, the data on roadside suspensions were the most frequent and comparable. As mentioned earlier, roadside suspensions are common practices in all provinces except Quebec (Nova Scotia is currently incorporating this measure into their provincial legislation).

An examination of these data shows that in most police services, the number of roadside suspensions appears to have increased in recent years. This finding may be related to the findings of a recent Transport Canada survey which found that about 30% of police officers said that drivers with BAC's over the legal limit are "sometimes" (22%) or "frequently" (8%) given a stort-term suspension rather than charged for impaired driving under the *Criminal Code*. Three main reasons were cited for this tendency: (i) it takes too long to process impaired driving charges laid under the *Criminal Code*; (ii) there are too few staff to process such charges; and, (iii) a license suspension gets the driver off the road immediately.

In addition, three quarters of the police officers who responded said they charge suspects with impared driving only when their BAC is above 100 mg. They believed that the charges in such cases were less likely to be challenged in court. The fact that the readings of the BAC-measuring machines used by police are often challenged as evidence in court appears to be an inhibiting factor in pursuing impaired driving charges.

The data related to trends in police enforcement of impaired drivers (e.g. number of check-stops, drivers tested) was inconclusive, as some police services showed an increase in enforcement in recent years, while just as many were reporting a decrease.

All of the above indicates that perhaps some of the recent reduction in the number of persons charged with impaired driving may be due to the increased use of roadside suspensions by police, rather than laying a charge against a driver with a blood-alcohol concentration over the legal limit. This increased use of roadside suspensions by the police is primarily due to the amount of paperwork and time required in the processing of an impaired driving charge.

# The proportion of fatally injured drivers who were impaired has fallen since 1991

For just over 10 years, the Traffic Injury Research Foundation (TIRF) has been collecting data on the number of drivers, passengers and pedestrians fatally injured in traffic accidents. The data presented in this section relate to the amount of alcohol fatally injured drivers had consumed at the time of the accident. In 1997, almost two third (61%) of the drivers tested had no

Table 8



#### Drivers Fatally Injured in Traffic Accidents, by Blood Alcohol Concentration, 1987 to 1997

Year	Number of fatally- injured drivers tested		Not legally	impaired			Legally imp	oaired	
	Total	0 mg	1-80 mg	Total	%	81-150 mg	>150 mg	Total	%
1987	1,721	807	172	979	57	191	551	742	43
1988	1,796	887	186	1,073	60	184	539	723	40
1989	1,872	1,002	143	1,145	61	206	521	727	39
1990	1,756	959	155	1,114	63	159	483	642	37
1991	1,635	850	127	977	60	168	490	658	40
1992	1,585	823	126	949	60	165	471	636	40
1993	1,677	928	115	1,043	62	162	472	634	38
1994	1,602	899	127	1,026	64	143	433	576	36
1995	1,617	915	129	1,044	65	143	430	573	35
1996	1,436	838	97	935	65	133	368	501	35
1997	1,475	899	108	1,007	68	122	346	468	32

Excludes operators of bicycles, snowmobiles, farm tractors and other off-highway vehicles.

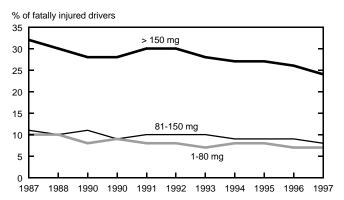
Source: Mayhew, D.R., Brown, S.W. and Simpson, H.M. Alcohol Use Among Drivers ans Pedestrians Fatally Injured in Motor Vehicle Accidents: Canada, 1997, Transport Canada, 1998.



Figure 5



# Blood Alcohol Concentration Among Fatally Injured Drivers, Canada, 1987-1997



Source: Traffic Injury Research Foundation.

trace of alcohol in their blood. This proportion has been increasing steadily since 1991. On the other hand, almost one quarter (24%) of drivers tested had a BAC in excess of 150 mg of alcohol per 100 millilitres of blood, nearly double the limit set by the *Criminal Code*.

Figure 5 shows a general decrease since 1991 in the proportion of fatally injured drivers who had alcohol in their blood. In addition, a decrease in the proportion of drivers with a BAC higher than 150 mg at the moment of their fatal accident is noted. Drivers having a BAC that high are usually known as "hard-core" drinking drivers and are rarely affected by preventive measures to reduce impaired driving.

The problems that remain with regard to impaired driving may be due in large measure to people who abuse alcohol and continue to drive despite their drinking habits (Transport Canada, 1999). Such people are known to have difficulty changing their habits and their attitudes toward drinking and driving. A BAC of more than double the legal limit under the *Criminal Code* is one of their common characteristics. They have little awareness of how serious impaired driving is, and they continue to drive despite their excessive alcohol consumption. TIRF maintains that a small number of individuals are responsible for a large number of traffic accidents due to excessive drinking. The Foundation states that in contrast to the national trend, "hard-core" drinking drivers show no signs of reducing their drinking and driving. Arresting such drivers seems to have little deterrent effect on their behaviour (Transport Canada, 1999).

# CASES OF IMPAIRED DRIVING IN THE COURTS

The Adult Criminal Courts Survey (ACCS) collects information on cases handled by the courts. It covers the following nine jurisdictions: Newfoundland, Prince Edward Island, Nova Scotia, Quebec, Ontario, Saskatchewan, Alberta, the Yukon and the Northwest Territories (including Nunavut). In 1997-98, 15% of the cases heard in adult criminal courts involved impaired driving

charges. <sup>6</sup> Of the 411,576 cases heard in Canadian criminal courts, 59,982 <sup>7</sup> were related to driving under the influence of alcohol. This is a 3% decrease since 1996-97 and a 10% drop over the past four years. Of the 68,384 <sup>8</sup> traffic offence cases handled by the courts, 88% involved impaired driving charges.

Compared to other *Criminal Code* offences, impaired driving has a relatively high proportion of convictions. Over three-quarters (77%) of impaired driving cases resulted in a conviction in 1997-98, compared to 62% of all *Criminal Code* offences. However, in recent years, there has been a gradual decline in guilty verdicts in impaired driving cases. Acquittals in impaired driving cases rose 16% between 1994-95 and 1997-98.

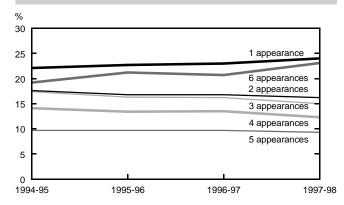
Possibly in response to increased penalties for conviction, it seems that more persons charged with impaired driving are pleading not guilty according to the results from Transport Canada's report. These pleas generally involve the hiring of lawyers who are experts in impaired driving, so as to obtain acquittals. According to data from ACCS, court cases are becoming more complex, at the same time as penalties are becoming more severe. Since the beginning of the collection of data from ACCS, the number of impaired driving court cases requiring six or more appearances by the accused person has increased. While in 1994-95 19% (12,775) of cases required six or more appearances before courts, that proportion rose to 23% (13,911) of cases in 1997-98.

Comparing the number of court cases requiring one or two appearances with cases requiring 6 appearances or more, differences are noticeable in terms of outcomes. In cases where only

Figure 6



### Proportion of Impaired Driving Court Cases by Number of Appearances, 1994-95 to 1997-98



Source: Adult Criminal Court Survey, CCJS.

<sup>&</sup>lt;sup>6</sup> See "Adult Criminal Courts Statistics, 1997-98", by C. Brookbank and B. Kingsley, Juristat, No. 85-002, Vol. 18, No. 14.

<sup>&</sup>lt;sup>7</sup> Some of the figures given here may differ slightly from the data presented in the Juristat article "Adult Criminal Courts Statistics, 1997-98", which include data for sections 256 and 257 of the Criminal Code. For the sake of comparability with UCR data, the present article covers only sections 253, 254 and 255.

<sup>8</sup> This figure includes all Criminal Code traffic offences and impaired driving offences.



#### Impaired driving in the Criminal Code, 1998

#### Operation while impaired

Section 253 defines the general offence of impaired driving:

Everyone commits an offence who operates a motor vehicle or vessel or operates or assists in the operation of an aircraft or of railway equipment or has the care or control of a motor vehicle, vessel, aircraft or railway equipment, whether it is in motion or not,

- (a) while the person's ability to operate the vehicle, vessel, aircraft or railway equipment is impaired by alcohol or a drug; or
- (b) having consumed alcohol in such a quantity that the concentration in the person's blood exceeds eighty milligrams of alcohol in one hundred millilitres of blood.

Subsection 254 (5) concerns the refusal, without reasonable excuse, to comply with an order given by a peace officer such as the refusal to provide a breath sample.

#### **Penalties**

Subsection 255 (1) provides for the following minimum penalties for offences under sections 253 and 254:

- (i) for a first offence, to a fine of not less than three hundred dollars,
- (ii) for a second offence, to imprisonment for not less than fourteen days, and
- (iii) for each subsequent offence, to imprisonment for not less than ninety days;

and maximum penalties of:

- (a) where the offence is prosecuted by indictment, to imprisonment for a term not exceeding five years; and
- (b) where the offence is punishable on summary conviction, to imprisonment for a term not exceeding six months.

Subsection 255 (2) provides that everyone who commits an offence under paragraph 253(a) and thereby causes bodily harm to any other person is guilty of an indictable offence and liable to imprisonment for a term not exceeding ten years.

Subsection 255 (3) provides that everyone who commits an offence under paragraph 253(a) and thereby causes the death of any other person is guilty of an indictable offence and liable to imprisonment for a term not exceeding fourteen years.

one or two appearances were necessary, the majority (85%) of persons accused were found guilty compared to 68% of the people whose cases required six or more appearances.

Similarly, less than 1% of cases of persons making only one or two appearances were acquitted, compared to 6% of cases with six or more appearances. For almost a quarter (24%) of court cases which required six or more appearances, the charges were withdrawn. That proportion dropped to 11% for those who appeared only once or twice before the courts.

#### Fines remain the most common sentence

In 1998, the sentences prescribed by the *Criminal Code* ranged from a minimum of a \$300 fine for an impaired driving offence (concentration in the driver's blood exceeding 80 milligrams of alcohol in 100 millilitres of blood) to a maximum of 14 years in prison for impaired driving causing death. Some sentencing provisions were changed in July 1999 when legislation to amend the *Criminal Code* (Bill C-82) was passed in June of the same year (see table 1). The type and degree of the sentences are relative to recidivism and the sentencing policies in effect in the jurisdictions.

# Fewer persons receiving imprisonment

The proportion of persons receiving a sentence of incarceration for an impaired driving conviction in provincial court has decreased in recent years, from 22% in 1994-95 to 19% in 1997-98. Conversely, the proportion receiving a fine as their most serious sentence has increased from 67% to 71% over the same time period. As data on recidivism, conditional sentencing and other mitigating circumstances are not available, this trend must be interpreted with caution.

Of those incarcerated for impaired driving, most are sentenced to less than two years (median term is 30 days) which is served in provincial/territorial institutions. In 1997-98 9, offenders convicted of impaired driving made up 10% of the inmate population of provincial/territorial institutions and 2% of the population of federal institutions. Of those who received a fine, the median fine amount was \$500 10.

#### CONCLUSION

The number of persons charged with impaired driving in Canada has been dropping for the past 15 years; however, these data relate only to impaired drivers who have been formally charged by police. With this limitation in mind, this report has examined additional sources of information to try and determine if impaired driving has truly been decreasing.

The majority of additional data sources examined support the declining trend of police-reported data:

- our aging population has resulted in proportionally fewer drivers in the higher-risk age categories;
- changing societal attitudes (e.g. increase in the use of "designated drivers", IMPACT) appear to have dissuaded the average person from drinking and driving;
- stronger penalties for convictions have increased public awareness of the seriousness that the justice system have placed on impaired driving offences;
- trends in alcohol consumption show a general decline in recent years; and,

<sup>9</sup> Adult Correctional Services in Canada, 1997-1998. Catalogue No. 85-211.

<sup>10</sup> Excluding amount of fine equal to zero or unknown.



 data show a consistent drop in the proportion of fatally injured drivers who were tested to be legally impaired.

Data on levels of police enforcement were inconclusive in determining whether levels of such enforcement have been increasing or decreasing. However, data from a number of major police services showed an increase in the number of roadside suspensions given by police. This trend is confirmed by the results

of a recent survey of police officers discussing the amount of paperwork and time involved in the processing of an impaired driving charge.

All of the above would seem to indicate that impaired driving, with the exception of the hard-core drinking driver, is probably still decreasing.

Table 9

# Age specific rate of persons charged with impaired driving, sample of 169 police agencies, 1998

		Persons Charged		
Age	Population	Number	Rate per 100,000 population	
13-15	599,492	18	3	
16	202,733	51	25	
17	209,126	179	86	
18	210,753	563	267	
19	209,098	745	356	
20	209,905	909	433	
21	215,980	922	427	
22	220,595	890	403	
23	223,949	850	380	
24	220,355	792	359	
25	223,456	769	344	
26	229,738	831	362	
27	241,693	850	352	
28	245,675	829	337	
29	244,777	799	326	
30	247,293	834	337	
31	254,198	828	326	
32	267,512	860	321	
33	285,492	1,003	351	
34	292,252	1,047	358	
35	295,389	1,009	342	
36	288,474	1,000	347	
37	292,037	990	339	
38	288,153	917	318	
39	283,049	907	320	
40	279,922	888	317	
11	274,454	891	325	
12	265,599	814	306	
43	263,572	709	269	
14	254,715	684	269	
45	243,802	659	270	
46	235,997	578	245	
17	232,010	512	221	
18	226,816	483	213	
19	223,579	446	199	
50	221,793	450	203	
51	220,769	426	193	
52	193,951	321	166	
53	181,211	303	167	
54	175,063	280	160	
55 and older	3,311,808	2,306	70	

<sup>1</sup> The population figures presented here for each specific age correspond to the areas represented by the incident-based Uniform Crime Reporting survey, and not for all of Canada. These data are not nationally representative.

Source: Incident-based Unifrom Crime Reporting Survey, CCJS



#### **METHODOLOGY**

- 1. Aggregate Uniform Crime Reporting Survey: The aggregate-based UCR survey records the number of incidents reported to police. It includes the number of reported offences and the number of actual offences (excluding those that are unfounded), the number of offences cleared by charge, the number of persons charged by sex and by an adult/youth breakdown. Unless otherwise mentioned, all analysis in this report is based on aggregate survey counts.
- 2. Revised UCR Survey (UCRII): The revised microdata survey captures detailed information on individual criminal incidents reported to police, including characteristics of accused persons and the incidents. The reader is cautioned that these data are not nationally representative. In 1998, detailed data were collected from 169 police services in six provinces through the Revised UCR Survey. These data make up 46% of the national volume of actual *Criminal Code* offences. The incidents contained in the 1998 Research File are distributed as follows: 41% from Quebec, 35% from Ontario, 12% from Alberta, 8% from British Columbia. 3% from Saskatchewan, and 1% from New Brunswick.
- 3. Adult Criminal Courts Survey (ACCS): Provincial criminal courts in seven provinces and two territories (accounting for approximately 80% of the national provincial criminal court caseload) reported to the ACCS. The provinces and territories are Newfoundland, Prince Edward Island, Nova Scotia, Quebec, Ontario, Saskatchewan, Alberta, the Yukon and the Northwest Territories.

**Definition**: A **Case** is one or more charges against an accused person or corporation, where the charges are disposed of in the same court on the same date. Charges are linked to as case on the basis of court location, accused identifier and date of last court appearance. The offences listed in each "case-based" table contain offence information on the one offence defined as the most serious in each case.

- 4. Adult Correctional Services Survey (ACSS): This survey is based on the operation of adult correctional services (custodial and community corrections) in Canada at the federal and provincial level. It is conducted annually (on a fiscal year basis from April to March) and is designed to collect caseload and case characteristics information on adult offenders (18 and over).
- **5. Youth Courts Survey (YCS):** This survey is a census of all cases heard in youth courts concerning offences under the *Criminal Code* and other federal statutes where the accused is between the ages of 12 and 17.
- **6. National Survey of Front-Line Police Officers:** In conjunction with Transport Canada, the Canadian Association of Chiefs of Police (CACP) surveyed 1,401 police officers in Canada. The purpose of the survey was to identify current problems in enforcing impaired driving laws, determine the cause of the problems, and find possible solutions. The sample consisted of 48% of police officers serving communities of more than 100,000. Sixty percent of the respondents worked in a municipal police service, 17% in a provincial force, and 26% in the RCMP. Fourteen percent were full-time traffic officers, and

44% were qualified breathalyser technicians (not necessarily full-time). The questionnaire consisted of multiple-choice questions. The results presented in the analysis section of the report have a 5% margin of error.

- 7. The Traffic Injury Research Foundation (TIRF) maintains a database on fatal traffic accidents involving drivers, passengers and pedestrians in Canada, dating back to 1987. The data come from two sources: police accident reports and coroners' and medical examiners' reports from all provinces. In 1997, 1,802 drivers were killed in traffic accidents, and 82% were tested for the presence of alcohol in their blood (excluding operators of bicycles, snowmobiles, farm tractors, and other non-highway vehicles).
- 8. National Population Health Survey conducted by Statistics Canada from personal interviews from June 1996 to August 1997. The survey visited over 20,000 households that had also participated in the first cycle two years earlier, for a total of 16,000 respondents who provided full information; an additional 66,00 respondents (who were not part of the longitudinal panel) were also surveyed to provide detailed cross-sectional data on the indepth health questions. The findings are based on the full sample of 82,000 respondents age 12 and older.

#### REFERENCES

Standard Committee on Justice and Human Rights, (1999), Toward Eliminating Impaired Driving, report no.21, Ottawa, May.

Eliany, M. et al. (1992), Alcohol and Other Drug Use by Canadians: A National Alcohol and Other Drugs Survey (1989) - Technical Report, Health and Welfare Canada, Ottawa.

Federal, Provincial and Territorial Advisory Committee on Population Health (1999), *Statistical Report on the Health of Canadians*, Publisher Health Canada, in collaboration woth Statistics Canada and Canadian Institute for Health Information, Ottawa.

Federal, Provincial and Territorial Advisory Committee on Population Health, (1999), *Toward a Healthy Future: Second Report on the Health of Canadians*, Publisher Health Canada, in collaboration with Statistics Canada and Canadian Institute on Health Information, Ottawa.

Jonah, B. et al.(1997), Front-line Police Officers' Perceptions and Attitudes About the Enforcement Laws of Impaired Driving in Canada, Transport Canada, Ottawa, 164p.

Laudrum, K. (1998), «Driving Home the Message: Don't Drink and Drive» in *Canadian Police Chief Magazine*, Ottawa, p.48-51

Mayhew, D.R., Brown, S.W. and Simpson, H.M., (1999), Alcohol Use Among Drivers and Pedestrians Fatally Injured in Motor Vehicle Accidents: Canada, 1997, Traffic Injury Research Foundation of Canada, Transport Canada, Ottawa.



MacNeil, P. and Webster, I., (1997), Canada's Alcohol and Other Drugs Survey 1994: A Discussion of the Findings, Office of Alcohol, Drugs and Dependency Issues, Health Canada, Ottawa

McKenzie, D., Williams, B., Single, E., (1998), Canadian profile: Alcohol, Tobacco and Other Drugs, Canadian Centre on Substance Abuse, Addiction Research Foundation of Ontario, Ottawa.

Thérien, E.J. (1998), «The Hard Core Drinking Driver» in *The RCMP Gazette*, Vol. 60, no. 11, November, Ottawa, p.22-23.

Traffic Injury Research Foundation (1999), Research and Suggestions for Hard-core Drinking Drivers, in *The RCMP Gazette*, Vol. 61, no. 5, Ottawa, p.28-29.

Transport Canada, (1999), Smashed - The Magazine on drinking and driving, Ottawa

Tremblay, S., «Crime Statistics in Canada, 1998», *Juristat*, Catalogue 85-002, Vol. 19, no. 9, Canadian Centre for Justice Statistics, Statistics Canada, 1999

Tremblay, S., «Impaired Driving in Canada, 1994», *Juristat*, Catalogue 85-002, Vol. 17, no. 12, Canadian Centre for Justice Statistics, Statistics Canada, 1998



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