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ALCOHOL AND FATAL ROAD ACCIDENTS IN CANADA:

A STATISTICAL LOOK AT ITS MAGNITUDE AND PERSISTENCE



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ALCOHOL AND FATAL ROAD ACCIDENTS IN CANADA:

A STATISTICAL LOOK AT ITS MAGNITUDE AND PERSISTENCE

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ALCOHOL AND FATAL ROAD ACCIDENTS IN CANADA: A STATISTICAL LOOK AT ITS MAGNITUDE AND PERSISTENCE

1.0 INTRODUCTION

This report presents detailed statistics on the use of alcohol by persons fatally injured in motor vehicle crashes in Canada. The report examines:

- o the persistence of the alcohol-crash problem over time;
- o the characteristics of victims and crashes as a function of blood alcohol concentration (BAC);
- o inter-provincial comparisons of the magnitude and characteristics of the alcohol crash problem.

The purpose of this report is to compile and summarize the best available information concerning alcohol and fatal road accidents in Canada. This purpose relates to the need for statistics that support policy decisions and that inform interested agencies and individuals of the magnitude and characteristics of the problem.

1.1 Background

Since 1974, the Foundation has maintained a Fatality Database that contains information on persons fatally injured in motor vehicle accidents in seven Canadian provinces. The purpose of this database is to provide a comprehensive source of objective data that assist in characterizing the nature and extent of alcohol-involvement in road accidents in Canada. In addition to data on the blood alcohol concentration (BAC) of victims, the database contains information on the age and sex of victims as well as the type of vehicle and type of crash. The database files are compiled from records of provincial coroners or medical examiners as well as Departments of Transportation or their equivalent. The data are abstracted from these records according to meticulous and rigorous procedures in order to minimize errors. The creation and maintenance of this database, therefore, has required the cooperation of numerous provincial agencies. Those responsible for the abstracting and coding of the data must also ensure its accuracy while maintaining the confidentiality of individual cases.

Data on traffic fatalities from Nova Scotia, Quebec and Newfoundland are not now included in the database. The reasons for exclusion relate to the rate of testing for alcohol in these provinces, the accessibility to the data, and the reliability of available data. These factors and their implications have been examined in more detail elsewhere (Simpson and Heayn 1975; Simpson, Warren and Page-Valin 1977).

The Fatality Database, as its name implies, has files organized and identified by victim. Information related to the road accident itself (e.g., time of day, day of week, type of crash) and to the vehicles involved (e.g., vehicle type) is associated with each victim. The reasons for this design of the database are historical in nature. Early efforts to establish the database were undertaken by the Foundation at its own expense and supported by coroners and medical examiners. Provincial agencies responsible for investigations of sudden and unexpected deaths have files organized by victim, not by the event leading to death. The primary purpose of the work was to examine the frequency and amount of alcohol used by victims of motor vehicle accidents.

Objective, toxicologic data could only be obtained from coroners' files, many of which did not contain detailed information on the road accident and vehicles involved. Therefore, the initial design of the database reflected its orientation to the victim and to its primary aim: to examine the involvement of alcohol in their deaths.

In later years, the Foundation arranged to collect motor vehicle accident reports to supplement basic descriptive data already captured on the victim and BAC. Information on a greater number of variables was entered into so-called expanded files, which were then linked to victim files. This approach has certain drawbacks. For example, for those accidents resulting in two or more deaths, the database contains two or more sets of accident-related information. This precludes straightforward analysis of fatal road <u>accidents</u>, as would be facilitated by crash-oriented files. Nevertheless, the main purpose of the database -to study and monitor alcohol involvement -- was (and is) not compromised.

In recent years, the Foundation has established databases that have both victim- and crash-based files. In addition, efforts are planned to convert the existing Fatality Database into crash-based files to extend its usefulness in the general study of fatal motor vehicle accidents. In the meantime, the Fatality Database with its ten-year files offers the best available information on the magnitude of, and trends associated with, the problem of alcohol-involved fatal motor vehicle accidents in Canada.

Using the Fatality Database, the Foundation has prepared periodic reports presenting basic descriptive statistics on alcohol involvement in fatal road accidents. Due to the large number of case files and associated variables, these summary reports did not contain very detailed information. Furthermore, these reports usually covered the most recent two- or three-year period. Having compiled information dating back to 1973, TIRF is now in a position to examine the nature and extent of the alcohol-crash problem over a <u>ten year period</u> in an attempt to identify any changes or trends that have occurred in the characteristics associated with this problem. This project also provided an opportunity to generate and analyse more detailed statistics and to make them available to a wider audience.

1.2 Reporting Conventions

The primary objective of this report is to present information on traffic fatalities with particular reference to the magnitude and nature of the role of drinking drivers as agents in the occurrence of these accidents. Data on the BACs of fatally injured passengers and pedestrians, while of interest in their own right, are not the focus of analysis. The statistics presented deal primarily with <u>drivers</u> who died in motor vehicle accidents. In addition, this report deals exclusively with <u>highway vehicle</u> fatalities--snowmobiles, bicycles and farm tractors have been excluded from consideration.

Blood alcohol concentration (BAC) is reported in milligrams (mg) of alcohol per 100 milliliters (ml) of blood--abbreviated as mg%. For

example, it is an offence under the Criminal Code of Canada to have care or control of a motor vehicle while having a BAC in excess of 80 mg of alcohol in 100 ml of blood, or 80 mg%. In this report, BAC is grouped into five categories: 0 or negative; 1 to 49 mg%; 50 to 80 mg%; 81 to 150 mg%; and over 150 mg%. In attempting to interpret the findings within these BAC ranges, it is important that the reader recognize that these groupings were chosen to reflect existing legislation concerning the BACs of drivers.

A common difficulty in reporting the results of alcohol detected in traffic crash victims is the selection of an appropriate convention to express the frequency (or percent) of victims who are found to have a positive BAC. This difficulty arises simply because not all victims are tested for the presence of alcohol. Therefore, one may choose to express the frequency of victims positive for alcohol as a percentage of either: (1) the total number of victims, or; (2) the total number of victims tested for alcohol. The issues involved and the resulting implications are not trivial (Warren and Simpson 1980). The former method makes the assumption that all victims not tested have a BAC equal to zero and thus represents a minimum frequency of alcohol involvement; the latter method makes no such assumptions and therefore provides a reasonable upper limit and possibly a more accurate indicator of the degree of alcohol involvement in fatal motor vehicle accidents. This report utilizes exclusively the latter convention in reporting the incidence of alcohol involvement.

1.3 Scope of the Report

This report consists of four sections and an appendix. The organization and scope of the report are briefly described below.

Section 2.0, The Persistence of the Alcohol-Crash Problem, presents statistics that indicate the nature and extent of alcohol-involvement in fatal motor vehicle crashes over a ten year period, from 1973 to 1982. The data are compiled by year according to various characteristics such as BAC, gender, crash type, and vehicle type. The results of time series analyses performed on these data are also presented.

Section 3.0, Victim and Crash Characteristics as a Function of BAC, examines the characteristics of fatally injured drivers with different BACs at the time of death.

Section 4.0, Inter-provincial Comparisons, presents the magnitude and characteristics of alcohol-related traffic accidents in each of seven Canadian provinces over the most recent four year period.

For the most part, this report merely compiles and presents the data in a descriptive and informative fashion such that the reader may be able to use it in the manner desired. Little is offered in the way of interpretation or explanation. Thus, the appendix to this report contains all the figures and tables prepared to make available these statistics.

2.0 THE PERSISTENCE OF THE ALCOHOL-CRASH PROBLEM IN CANADA, 1973-1982

It is sometimes difficult to appreciate how long the alcohol-crash problem has been with us. It is a very old problem, one that has persisted in spite of efforts over the past 100 years. In light of the recent groundswell of concern and renewal of efforts to deal with the problem, one might expect to have seen significant reductions in the alcohol-crash problem in recent years. The data presented in this section clearly indicate that this has not been the case; the alcoholcrash problem (as indicated by alcohol-involvement in fatal road accidents) has not gone away; in fact, it appears resistant to virtually all attempts to reduce its magnitude. Hence, the problem persists, as reflected by the consistency of the factors that characterize it over time.

2.1 The Magnitude of the Problem Over Time

Table 1 presents the number of persons fatally injured in traffic accidents in seven Canadian provinces from 1973 to 1982. Although the total number of fatalities fluctuates from year to year, there is a consistency in the magnitude of these figures. For each year, the total number of fatalities is separated by type of victim--driver, passenger or pedestrian. As indicated in Section 1.2, this report focusses primarily on fatally injured <u>drivers</u>. As is apparent in this table, drivers comprise approximately 50% of traffic fatalities and this proportion has remained relatively constant over the 10 year period represented.

The remainder of this section outlines the characteristics of fatally injured drivers and the accidents in which they were involved.

2.2 Blood Alcohol Concentration

Any attempt to assess the extent to which alcohol is involved in fatal motor vehicle accidents is constrained by the fact that not every fatally injured driver is tested for the concentration of alcohol. Approximately three quarters of drivers are tested and it is on the basis of these test results that statements are made concerning the magnitude of the alcohol-crash problem. There remain, however, 25% of cases about which we have no objective information on BAC.

Table 2 presents the distribution of BAC among fatally injured drivers for each year from 1973 to 1982. Of drivers who were tested, approximately 60% were found to have a positive BAC; over 30% had a BAC in excess of 150 mg%. Hence, it is clear that the alcohol-crash problem most often involves drivers of high BACs. Regardless of the absolute number of fatally injured drivers, the distribution of BAC has remained consistent throughout the 10 year period spanned in the table. By examining only fatally injured drivers who tested positive for alcohol, one finds that over 80% had a BAC in excess of the statutory limit (i.e., over 80 mg%), whereas only about 8% had a BAC between 50 and 80 mg%.

Figure 1 displays the number of driver fatalities, number of drivers tested for alcohol, the number found positive for alcohol, and the number who were legally impaired for each month during the period The regular and consistent monthly pattern of driver 1973-1982. fatalities is apparent in the figure. These data were subjected to time series analyses (Gottman 1981; McCleary and Hay 1980) in order to examine the quantitative nature of these curves. In all cases, the time-series analyses revealed a highly significant seasonal trend. This trend, of course, can be readily discerned in Figure 1. Driver fatalities (and alcohol-related fatalities) reach their highest levels in the summer months and are at the lowest level in the winter months. When this seasonal trend is removed mathematically, the actual level of the process fluctuates from year to year, but these changes in level are not significant and can be attributed to "random drift", reflecting perhaps the probablistic nature of traffic accidents and other, more intangible factors (e.g., the state of the economy). To summarize, the time-series analyses confirm the persistence of the alcohol-crash problem, despite our efforts over the past 10 years.

The focus of countermeasure efforts over the past ten years has been during the December and January holiday period, relying on so-called "enforcement blitzes" and media campaigns. Figure 2A presents the percentage of drivers fatally injured in motor vehicle accidents who were found to have been drinking or were legally impaired at the time of their death during the December-January period from 1973-1982. A sub-set of these, single-vehicle-accident fatalities, are represented in Figure 2B. Because single-vehicle accidents involve only one driver

who, in most cases, is deemed responsible for the crash, single-vehicle accidents are often used as a more refined index of alcohol-involvement in fatal crashes. It is apparent from these aggregate data that increased enforcement efforts at this time of year have not been successful in producing an overall, substantial reduction in alcohol-related traffic deaths during this period. These data do not, however, indicate the effectiveness (or lack of effectiveness) of local action programs or intensive provincial efforts. These data do show the striking resistance of the overall problem to these efforts, despite acute national awareness of the problem at this time of year.

2.3 Age

Table 3 presents the age distribution of drivers who were fatally injured in traffic crashes during 1973 to 1982. The age distribution has remained consistent through the ten year period with drivers aged 20-25 being the most prevalent, followed closely by drivers aged 26-35. The proportion of young driver (16-19 years) fatalities has decreased somewhat over this period, perhaps reflecting the proportionately fewer numbers of licenced drivers in this age group.

The distributions of BAC according to the age of driver are presented for each year in Tables 4A (1973) through 4J (1982). An examination of these tables reveals that the distribution of BAC by age of driver has remained relatively consistent across the ten year period. The proportion of drivers who were found to have been drinking is lowest among

young drivers (19 and under), increases among drivers aged 20-45, and then decreases again in older drivers (46 and over). Young drivers and older drivers were most likely to have relatively low BACs (80 mg% and below) relative to drivers between the ages of 20 and 45 who were most likely to have a BAC in excess of 150 mg%.

2.4 Sex of Driver

Male drivers have traditionally been overrepresented among traffic fatalities, particularly those involving alcohol. In aggregate, male driver fatalities cutnumber females by approximately a 6 to 1 margin. Table 5 presents the male-female breakdown of driver fatalities for each year from 1973 to 1982. It is apparent in this table that the proportional representation of female drivers in fatal accidents has been increasing from 1973 to 1982.

The distribution of BAC among fatally injured drivers according to sex is also presented in Table 5. Again, males are more likely than females to have been drinking and to have high BACs (150 mg% and over) at the time of their deaths. However, in this regard, it is important to note the increasing involvement of alcohol in female driver fatalities.

Figure 3 displays for each month over 10 years the proportion of women among all driver fatalities and the proportion of alcohol-involved fatalities in which a female was the victim. <u>Time-series analyses of</u> <u>these data revealed a significant rising trend in both cases</u>. Therefore, not only are female drivers becoming involved in fatal traffic

accidents more often, they are doing so with an increased frequency of alcohol involvement.

2.5 Type of Crash

Table 6 presents the distribution of BAC among fatally injured drivers according to whether the crash involved either a single vehicle (SVA) or multiple vehicles (MVA). Over the ten year period, MVAs have consistently accounted for about 56% of driver fatalities. Alcohol is involved in approximately 75% of SVA fatalities and 45% of NVA fatalities. One explanation is that in multiple vehicle accidents, some drivers involved do not die and are not tested for their use of alcohol. Thus we can expect a higher percentage of MVAs do involve alcohol than indicated here. Finally, a larger proportion of SVA fatalities involve alcohol at high levels (over 150 mg%).

Accidents involving only one vehicle are free from the confounding influence of a second driver who may have been responsible for the crash but for whom the results of tests for blood alcohol are not available, either because the test was not performed or the injuries sustained were not fatal. Hence, SVAs are often used as a more refined indicator of the role of alcohol in traffic fatalities. In fact, because alcohol is more likely to be involved in accidents during nighttime hours on Thursday, Friday and Saturday, these accidents have been isolated for further study. Figure 4 displays the monthly figures of total driver fatalities from SVAs occurring on "weekend" nights, the total number tested for alcohol, those found positive for alcohol, and those with a BAC over 80 mg%. Time-series analyses of these data reveal a highly significant seasonal trend, again, very apparent in Figure 4. When this seasonal trend is removed, there remain fluctuations in the level of the process but these fluctuations are random and not significant. Thus, the involvement of alcohol in SVA fatalities has persisted in a very consistent way over the ten-year period examined. 3.0 VICTIM AND CRASH CHARACTERISTICS AS A FUNCTION OF BAC

Traditionally, drinking drivers have been grouped according to various BAC ranges for comparison along a number of dimensions. Table 7 presents ranges of BAC according to type of accident and sex of driver, aggregated over a ten year period. Several aspects of this table are noteworthy. At zero BAC, drivers fatally injured in MVAs outnumber SVAs almost 3 to 1. This ratio becomes 1 to 1 at BACs between 50 and 80 mg% and reverses at BACs above 80 mg%, such that SVA fatalities outnumber MVAs almost 2 to 1. This indicates that alcohol is much more likely to be involved in SVA fatalities and at higher levels than in MVA fatalities. A greater proportion of fatal SVAs that occur on weekend nights involve a driver who has been drinking relative to SVAs in general.

Males outnumber females 6 to 1 among fatally injured drivers. As shown in Table 7, males are more likely to have high BACs. Hence, the alcohol-crash problem remains predominately one that involves male drivers. Nonetheless, we note again that findings presented previously (Section 2.4) indicate that the proportion of females among drivers fatally injured at high BACs has increased significantly over the years.

Table 8 presents the ranges of BAC according to age groups of drivers. Within each BAC range, a large proportion of fatally injured drivers are aged 20-35. This is not surprising due to the fact that almost 50% of all cases are in this age range. A close examination of the table reveals, in addition, that persons in this age range are more likely to

have moderate to high BAC ranges. Younger drivers show a tendency toward being involved in fatal collisions at low to moderate BAC ranges while the oldest age group of drivers (55 and over) has proportionately fewer people with high BACs.

The variables age, sex, crash type, time of day, and day of week were entered into a discriminant analysis in an attempt to distinguish amongst the five BAC groups. This analysis, however, was unable to utilize successfully the information contained in the three intermediate BAC ranges. Subsequently, the distribution was dichotomized to represent drivers testing either positive or negative for BAC. In this case, the discriminant analysis was able to correctly classify 73% of cases. According to the discriminant function, therefore, an alcohol-involved fatal crash was most likely to occur between 1800 and 600 hours, involve a single vehicle, involve a male driver, occur on a weekend, and involve a "younger" driver.

Unfortunately, the necessary step of dividing the distribution of BAC into a positive/negative dichotomy involves discarding a great deal of potentially useful information. For example, a driver with a BAC of 175 mg% is grouped together with those at a BAC of 25 mg% for the purpose of the analysis. Therefore, in an attempt to utilize all the information on BAC, a multiple regression was performed to predict BAC from the same variables used in the discriminant analysis. Basically, the multiple regression function attempts to predict the BAC of fatally injured drivers using the variables named above. In doing so we can assess the usefulness of the variables in predicting BAC. If we had a "perfect"

multiple regression function (or equation), then, given information on the variables contained in that equation we could predict with a high degree of certainty the BAC of fatally injured drivers.

The stepwise multiple regression procedure selected the variables into the equation in order of their relative contribution. This order was: time of day, type of collision, sex of driver, and day of week. Although driver age was a statistically significant variable, its relative contribution to the overall prediction equation was negligible. In combination these variables were able to account for 26% of the variance in BAC. In simpler terms, the information on the variables included in the multiple regression reduced the error in blind or random prediction by 26%. This indicates that, based on the variables in the equation used, there is some predictability in a driver's BAC. There is, however, still substantial error involved in the prediction.

4.0 INTER-PROVINCIAL COMPARISONS

This section examines the magnitude and characteristics of the alcohol-crash problem in each of the seven provinces included in the Fatality Database. The tables in this section are similar to those presented in previous sections except that each province is represented separately and only include data from the years 1979 to 1982. The year to year fatality figures in individual provinces show considerable fluctuation, in many cases due to small sample sizes. For example, in Prince Edward Island in 1982 (Table 9G), 53% of traffic fatalities were pedestrians. Although as a percentage of all fatalities this figure is almost twice that of previous years, one should note that the actual number of pedestrian fatalities in 1982 in P.E.I. is comparable to that of previous years. Thus, we urge caution in the interpretation of these numbers and percentages.

4.1 Type of Victim

Tables 9A to 9G categorize motor vehicle accident fatalities for each of seven provinces by type of victim. Although the absolute number of traffic fatalities varies considerably from province to province, the proportional representation of the various victim types is relatively consistent across provinces and years. Drivers account for approximately 50% of fatalities in all provinces, passengers 30%, and pedestrians 15 to 20%.

4.2 Blood Alcohol Concentration

Table 10 presents the distribution of BAC in driver fatalities for each province. The rate of testing for alcohol in victims ranges from a high of about 83% in Ontario to a low of 58% in British Columbia and New Brunswick. It is interesting to note that provinces with the lowest rates of testing also have the lowest proportion of cases with a BAC of zero. It would appear that in some provinces, victims are more likely tested when there is a reasonable suspicion of alcohol involvement. In general, the alcohol-crash problem is pervasive across the country with no one province demonstrating a relatively greater problem than any other.

4.3 Age

Table 11 presents the age distribution of fatally injured drivers in each province. The age distribution is very consistent across provinces, the only exception being a tendency for the prairie provinces to have a slightly higher proportion of young driver fatalities (i.e., age 17 and under).

Tables 12A to F present the distribution of BAC among fatally injured drivers according to age for each province with the exception of Prince Edward Island. The size of the fatality population in this province was so small as to render comparisons virtually meaningless. In addition, the few number of cases could allow the identification of individual cases, which would violate agreements with provincial agencies concerning the confidentiality of data provided.

The different rates of testing among provinces and within age groups complicate inter-provincial comparisons. In addition, the break-out of data by age and BAC range greatly reduces the number of cases, increasing uncertainty about the reliability of percentages. Thus, any comparisons among provinces about the differences in BAC distribution in various age groups would be highly speculative.

4.4 Sex

The distribution of BAC in fatally injured drivers is presented by sex for each province in Table 13. The proportion of female driver fatalities is somewhat lower in the Maritime provinces than in the rest of the country. In all provinces, fatally injured male drivers are more likely to have been drinking than females and more likely to have a BAC in excess of the legal limit.

4.5 Type of Crash

The distribution of BAC in fatally injured drivers according to type of crash is very similar in each of the seven provinces (Table 14). Alcohol is found more often and at higher levels in drivers fatally injured in single vehicle accidents (SVAs) than in multiple vehicle accidents (MVAs). The proportion of SVA and MVA does differ somewhat by province, with MVAs predominating in all provinces except British Columbia and Prince Edward Island.

4.6 Type of Vehicle

The distribution of BAC of fatally injured drivers is presented by type of vehicle for each province in Table 15. Once again, due to small number of fatalities and the possibility of identifying individual cases, data for Prince Edward Island have been excluded. In all provinces, the majority of driver fatalities involve an automobile. Trucks and vans account for 12-20% of driver fatalities, the exceptions being the prairie provinces where these vehicles are involved in a higher proportion of fatal accidents. Manitoba and New Brunswick have higher proportions of fatally injured drivers of motorcycles and mopeds compared to other provinces.

The distribution of BAC among drivers of different types of vehicles reveals an interesting trend. In almost every province, drivers of trucks and vans have the highest proportion of fatalities with BACs in excess of 150 mg%. Fatally injured drivers of tractor trailers had relatively low proportions of positive BACs; however, the very small number of such cases in many provinces dictates extreme caution in interpreting inter-provincial differences among tractor-trailer fatalities.

5.0 REFERENCES

- Gottman, J.M. 1981. <u>Time Series Analysis: A Comprehensive</u> <u>Introduction For Social Scientists</u>. Cambridge: Cambridge University Press.
- McCleary, R. and Hay, R.A. 1980. <u>Applied Time Series Analysis for the</u> Social Sciences. Beverely Hills: Sage Publications.
- Simpson, H. and Heayn, B. 1975. <u>Alcohol and Drug Determinations in</u> <u>Traffic Fatalities: A Survey of the Practices of Coroners and</u> <u>Testing Laboratories</u>. Ottawa: Proceedings of the Annual Conference of the Traffic Injury Research Foundation of Canada.
- Simpson, H.M., Warren, R.A. and Page-Valin, L. 1977. <u>Analysis of Fatal</u> <u>Traffic Crashes in Canada, 1974-1975.</u> Focus: The Impaired Driver. Ottawa: Traffic Injury Research Foundation of Canada.
- Warren, R.A. and Simpson, H.M. 1980. Effect of measurement assumption on estimations of the risk of collision. <u>Accident Analysis and</u> <u>Prevention 12: 143-150.</u>

6.0 APPENDIX

ALCOHOL AND FATAL ROAD ACCIDENTS IN CANADA: A STATISTICAL LOOK AT ITS MAGNITUDE AND PERSISTENCE

TABLES AND FIGURES
PERSONS FATALLY INJURED BY TYPE OF VICTIM AND YEAR OF DEATH

PERSONS FATALLY INJURED AS:

YEAR		DRIVER	PASSENGER	PEDESTRIAN	UNKNOWN	TOTAL
1973	N	1776	1181	646	39	3642
	(%)	(48.8)	(32.4)	(17.7)	(1.1)	(100)
1974	N	1963	1258	766	52	4039
	(%)	(48.6)	(31.1)	(19.0)	(1.3)	(100)
1975	N	1862	1182	723	42	3809
	(%)	(48.9)	(31.0)	(19.0)	(1.1)	(100)
1976	N	1640	1143	544	27	3354
	(%)	(48.9)	(34.1)	(16.2)	(0.8)	(100)
1977	N	1695	1048	583	26	3352
	(%)	(50.6)	(31.3)	(17.4)	(0.8)	(100)
1978	N	1601	929	633	43	3206
	(%)	(49.9)	(29.0)	(19.7)	(1.3)	(100)
1979	N	1846	1065	672	29	3612
	(%)	(51.1)	(29.5)	(18.6)	(0.8)	(100)
1980	N	1832	1118	670	42	3662
	(%)	(50.0)	(30.5)	(18.3)	(1.1)	(100)
1981	N	1879	1111	668	25	3683
	(%)	(51.0)	(30.2)	(18.1)	(0.7)	(100)
1982	N	1571	839	513	16	2939
	(%)	(53.5)	(28.5)	(17.5)	(0.5)	(100)

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors. Traffic Injury Research Foundation of Canada, 1984.

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DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS

(SEVEN PROVINCES)

		NUMBER OF	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRATION						
	NUMBER	DRIVERS TESTED		(% OF NUMBER '	FESTED)			
YEAR	OF DRIVERS	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	<u>81 - 150</u>	> 150		
1973	1776	1356	568	56	73	233	426		
		(76.4)	(41.9)	(4.1)	(5.4)	(17.2)	(31.4)		
1974	1962	1505	659	91	79	235	441		
		(76.7)	(43.8)	(6.0)	(5.2)	(15.6)	(29.3)		
1975	1862	1480	614	108	81	211	466		
		(79.5)	(41.5)	(7.3)	(5.5)	(14.3)	(31.5)		
1976	1640	1266	517	73	78	182	416		
		(77.2)	(40.8)	(5.8)	(6.2)	(14.4)	(32.9)		
1977	1695	1262	525	89	65	189	394		
		(74.5)	(41.6)	(7.1)	(5.2)	(15.0)	(31.2)		
1978	1601	1209	513	78	50	162	406		
		(75.5)	(42.4)	(6.5)	(4.1)	(13.4)	(33.6)		
1979	1846	1334	566	90	53	191	434		
		(72.3)	(42.4)	(6.7)	(4.0)	(14.3)	(32.5)		
1980	1832	1233	501	85	56	174	417		
		(67.3)	(40.6)	(6.9)	(4.5)	(14.1)	(33.8)		
1981	1879	1400	538	92	47	221	502		
		(74.5)	(38.4)	(6.6)	(3.4)	(15.8)	(35.9)		
1982	1571	1182	474	74	54	171	409		
		(75.2)	(40.1)	(6.3)	(4.6)	(14.5)	(34.6)		

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

AGE DISTRIBUTION OF FATALLY INJURED DRIVERS¹

(SEVEN PROVINCES)

YEAR		_≤15	16-17	18-19	20-25	26-35	36-45	46-55	>55	TOTAL
1973	N	13	104	231	460	322	183	182	262	1757
	(%)	(0.7)	(5.9)	(13.1)	(26.2)	(18.3)	(10.4)	(10.4)	(14.9)	(100)
1974	N	32	130	237	486	357	222	200	275	1939
	(%)	(1.7)	(6.7)	(12.2)	(25.1)	(18.4)	(11.4)	(10.3)	(14.2)	(100)
1975	N	22	146	230	434	318	207	195	294	1846
	(%)	(1.2)	(7.9)	(12.5)	(23.5)	(17.2)	(11.2)	(10.6)	(15.9)	(100)
1976	N	22	115	185	413	312	158	167	262	1634
	(%)	(1.3)	(7.0)	(11.3)	(25.3)	(19.1)	(9.7)	(10.2)	(16.0)	(100)
1977	N	48	125	187	423	303	198	151	260	1695
	(%)	(2.8)	(7.4)	(11.0)	(25.0)	(17.9)	(11.7)	(8.9)	(15.3)	(100)
1978	N	24	118	187	411	319	171	131	235	1596
	(%)	(1.5)	(7.4)	(11.7)	(25.8)	(20.0)	(10.7)	(8.2)	(14.7)	(100)
1979	N	24	126	208	482	398	195	132	273	1838
	(%)	(1.3)	(6.9)	(11.3)	(26.2)	(21.7)	(10.6)	(7.2)	(14.9)	(100)
1980	N	26	112	193	461	388	215	159	275	1829
	(%)	(1.4)	(6.1)	(10.6)	(25.2)	(21.2)	(11.8)	(8.7)	(15.0)	(100)
1981	N	29	110	193	466	428	219	162	266	1873
	(%)	(1.5)	(5.9)	(10.3)	(24.9)	(22.9)	(11.7)	(8.6)	(14.2)	(100)
1982	N	27	79	143	392	332	202	133	254	1562
	(%)	.(1.7)	(5.1)	(9.2)	(25.1)	(21.3)	(12.9)	(8.5)	(16.3)	(100)

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 4A

DISTRIBUTION OF BAC ACCORDING TO AGE OF DRIVER! 1973

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(SEVEN PROVINCES)

	NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRAT (% OF NUMBER TESTED)					
AGE	(% OF TOTAL)	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	<u>81 - 150</u>	>150	
< 16	13	6	3	0	2	0	1	
	(0.7)	(46.2)	(50.0)	(0.0)	(33.3)	(0.0)	(10./)	
16-17	104	77	32	5	8	18	14	
	(5.9)	(74.0)	(41.6)	(6.5)	(10.4)	(23.4)	(18.2)	
18-19	231	172	60	16	15	43	38	
	(13.1)	(74.5)	(34.9)	(9.3)	(8.7)	(25.0)	(22.1)	
20-25	460	360	125	17	21	79	118	
	(26.2)	(78.3)	(34.7)	(4.7)	(5.8)	(21.9)	(32.8)	
26-35	322	264	100	5	8	41	110	
	(18.3)	(82.0)	(37.9)	(1.9)	(3.0)	(15.5)	(41.7)	
36-45	183	152	55	7	5	20	65	
	(10.4)	(83.1)	(36.2)	(4.6)	(3.3)	(13.2)	(42.8)	
46-55	182	144	69	3	4	18	50	
	(10.4)	(79.1)	(47.9)	(2.1)	(2.8)	(12.5)	(34.7)	
> 55	262	172	118	3	8	14	29	
	(14.9)	(65.6)	(68.6)	(1.7)	(4.7)	(8.1)	(16.9)	
TOTAL	1757	1347	562	56	71	233	425	
	(100)	(76.7)	(41.7)	(4.2)	(5.3)	(17.3)	(31.6)	

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 4B

DISTRIBUTION OF BAC ACCORDING TO AGE OF DRIVER! 1974

(SEVEN PROVINCES)

	NUMBER	NUMBER OF	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRATION						
	OF DRIVERS	DRIVERS TESTED	(% OF NUMBER TESTED)						
AGE	(% OF TOTAL)	(% TESTED)	ZERO	1 - 49	<u>50 - 80</u>	81 - 150	>150		
< 16	32	13	7	3	0	1	2		
	(1.7)	(40.6)	(53.8)	(23.1)	(0.0)	(0.4)	(0.5)		
16-17	130	104	50	8	14	15	17		
	(6.7)	(80.0)	(48.1)	(7.7)	(13.5)	(14.4)	(16.3)		
18-19	237	175	71	12	12	40	40		
	(12.2)	(73.8)	(40.6)	(6.9)	(6.9)	(22.9)	(22.9)		
20-25	486	392	148	31	22	85	106		
	(25.1)	(80.7)	(37.8)	(7.9)	(5.6)	(21.7)	(27.0)		
26-35	357	281	101	10	12	42	116		
	(28.4)	(78.7)	(35.9)	(3.6)	(4.3)	(14.9)	(41.3)		
36-45	222	181	73	12	5	12	79		
	(11.4)	(81.5)	(40.3)	(6.6)	(2.8)	(6.6)	(43.6)		
46-55	200	154	76	5	8	18	47		
	(10.3)	(77.0)	(49,4)	(3.2)	(5.2)	(11.7)	(30.5)		
> 55	275	189	125	9	5	20	30		
	(14.2)	(68.7)	(66.1)	(4.8)	(2.6)	(10.6)	(15.9)		
TOTAL	1939	1489	651	90	78	233	437		
	(100)	(76.8)	(43.7)	(6.0)	(5.2)	(15.6)	(29.3)		

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

Traffic Injury Research Foundation of Canada, 1984.

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TABLE 4C

DISTRIBUTION OF BAC ACCORDING TO AGE OF DRIVER! 1975

(SEVEN PROVINCES)

	NUMBER	NUMBER OF	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED)						
AGE	(% OF TOTAL)	(% TESTED)	ZERO	1 - 49	<u>50 - 80</u>	<u>81 - 150</u>	> 150		
< 16	22	11	6	1	0	2	2		
	(1.2)	(50.0)	(54.5)	(9.2)	(0.0)	(18.2)	(18,2)		
16-17	146	109	51	11	9	21	17		
	(7.9)	(74.7)	(46.8)	(10.1)	(8.3)	(19.3)	(15.6)		
18-19	230	204	71	21	19	46	47		
	(12.5)	(88.7)	(34.8)	(10.3)	(9.3)	(22.5)	(23.0)		
20-25	434	355	128	23	18	57	129		
	(23.5)	(81.8)	(36.1)	(6.5)	(5.1)	(16.1)	(36.3)		
26-35	318	269	93	13	16	42	105		
	(17.2)	(84.6)	(34.6)	(4.8)	(5.9)	(15.6)	(39.0)		
36-45	207	169	65	15	7	13	69		
	(11.2)	(81.6)	(38.5)	(8.9)	(4.1)	(7.7)	(40.8)		
46-55	195	159	77	8	4	14	56		
	(10.6)	(81.5)	(48.4)	(5.0)	(8.8)	(8.8)	(35,2)		
> 55	294	198	188	16	8	15	41		
	(15.9)	(67.3)	(59.6)	(8.1)	(4.0)	(7.6)	(20.7)		
TOTAL	1846	1474	609	108	81	210	466		
	(100)	(79.8)	(41.3)	(7.3)	(5.5)	(14.2)	(31.6)		

Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 4D

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DISTRIBUTION OF BAC ACCORDING TO AGE OF DRIVER¹: 1976

(SEVEN PROVINCES)

	NUMB ER	NUMBER OF	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRATION						
	OF DRIVERS	DRIVERS TESTED	a FD O	(%	OF NUMBER TES	STED)	N150		
AGE	(% OF TUTAL)	(% TESTED)	ZERU	$\frac{1-49}{1-49}$	<u> 50 - 80</u>	81 - 150	~150		
< 16	22	14	9	1	2	2	0		
	(1.3)	(63.6)	(64.3)	(7.1)	(14.3)	(14.3)	(0.0)		
16-17	115	79	38	5	10	14	12		
	(7.0)	(68.7)	(48.2)	(6.3)	(12.7)	(17.7)	(15.2)		
18-19	185	149	45	10	17	35	42		
	(11.3)	(80.5)	(30.2)	(6.7)	(11.4)	(23.5)	(28.2)		
20-25	413	335	105	16	24	56	134		
	(25.3)	(81.1)	(31.3)	(4.8)	(7.2)	(16.7)	(40.0)		
26-35	312	255	90	16	12	39	9 8		
	(19.1)	(81.7)	(35.3)	(6.3)	(4.7)	(15.3)	(38.4)		
36-45	158	125	51	4	4	15	51		
	(9.7)	(79.1)	(40.8)	(3.2)	(3.2)	(12.0)	(40.8)		
46-55	167	128	65	7	2	8	46		
	(10.2)	(76.6)	(50,8)	(5.5)	(1.6)	(6.3)	(35.9)		
> 55	262	176	113	14	6	12	31		
	(16.0)	(67.2)	(64.2)	(8.0)	(3.4)	(6.8)	(17.6)		
TOTAL	1634	1261	516	73	77	181	414		
	(100)	(77.2)	(40.9)	(5.8)	(6.1)	(14.4)	(32.8)		

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 4E

DISTRIBUTION OF BAC ACCORDING TO AGE OF DRIVER¹: 1977

(SEVEN PROVINCES)

	NUMBER	NUMBER OF	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED)						
AGE	(% OF TOTAL)	(%_TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	81 - 150	>150		
< 16	48	28	10	2	4	1	11		
	(2.8)	(58.3)	(35.7)	(7.1)	(14.3)	(3.6)	(39.3)		
16-17	125	85	39	6	3	19	18		
	(7.4)	(68.0)	(45.9)	(7.1)	(3,5)	(22.4)	(21.2)		
18-19	187	145	41	8	18	44	34		
	(11.0)	(77.5)	(28.3)	(5.5)	(12.4)	(30.3)	(23.4)		
20-25	423	317	92	23	23	60	119		
	(25.0)	(74.9)	(29.0)	(7.3)	(7.3)	(18.9)	(37.5)		
26-35	303	328	89	9	7	34	99		
	(17.9)	(78.5)	(37.4)	(3.8)	(2.9)	(14.3)	(41.6)		
36-45	198	156	76	11	4	16	49		
	(11.7)	(78.8)	(48.7)	(7.1)	(2.6)	(10.3)	(31.4)		
46-55	151	122	62	10	4	9	37		
	(8.9)	(80.8)	(50.8)	(8,2)	(3.3)	(7.4)	(30.3)		
> 55	260	171	116	20	2	6	27		
	(15.3)	(65.8)	(67.8)	(11.7)	(1.2)	(3.5)	(15.8)		
TOTAL	1695	1262	525	89	65	189	394		
	(100)	(74.5)	(41.6)	(7.1)	(5,2)	(15.0)	(31.2)		

'Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 4F

DISTRIBUTION OF BAC ACCORDING TO AGE OF DRIVER¹: 1978

(SEVEN PROVINCES)

	NUMBER OF DRIVERS	NUMBER OF Drivers tested	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRATION (% OF NUMBER TESTED)						
AGE	(% OF TOTAL)	(% TESTED)	ZERO	1 - 49	<u>50 - 80</u>	<u>81 - 150</u>	>150		
< 16	24	11	5	1	0	2	3		
	(1.5)	(43.0)	(43.3)	(9.1)	(0.0)	(18.2)	(27.3)		
16-17	118	91	45	11	5	16	14		
	(7.4)	(77.1)	(49.5)	(12.1)	(5.5)	(17.6)	(15.4)		
18-19	187	138	42	15	13	25	43		
	(11.7)	(73.8)	(30.4)	(10,9)	(9.4)	(18.1)	(31.2)		
20-25	411	323	103	22	14	60	124		
	(25.8)	(78.6)	(31.9)	(6.8)	(4.3)	(18.6)	(38.4)		
26-35	319	254	108	6	11	26	103		
	(20.0)	(79.6)	(42.5)	(2.4)	(4.3)	(10.2)	(40.6)		
36-45	171	133	51	6	5	13	58		
	(10.7)	(77.8)	(38.3)	(4.5)	(3.8)	(9.8)	(43.6)		
46-55	131	107	58	7	0	8	34		
	(8.2)	(81.7)	(54.2)	(6.5)	(0.0)	(7.5)	(31.8)		
> 55	235	149	99	10	2	12	26		
	(14.7)	(63.4)	(66.4)	(6.7)	(1.3)	(8.1)	(17.4)		
TOTAL	1596	1206	511	78	50	162	405		
	(100)	(75.6)	(42.4)	(6.5)	(4.1)	(13.4)	(33.6)		

'Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 4G

DISTRIBUTION OF BAC ACCORDING TO AGE OF DRIVER! 1979

(SEVEN PROVINCES)

	NUMBER	NUMBER OF	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRAT					
AGE	OF DRIVERS (% OF TOTAL)	(% TESTED)	ZERO	<u>1 - 49</u> (%	<u>50 - 80</u>	<u>81 - 150</u>	>150	
< 16	24	14	12	0	0	1	1	
	(1.3)	(58.3)	(85.7)	(0.0)	(0.0)	(7.1)	(7.1)	
16-17	126	91	42	9	6	24	10	
	(6.9)	(72.2)	(46.2)	(9.9)	(6.6)	(26.4)	(11.0)	
18-19	208	160	57	10	6	34	53	
	(11.3)	(76.9)	(35.6)	(6.3)	(3.8)	(21.3)	(33.1)	
20-25	482	360	118	31	20	73	118	
	(26.2)	(74.7)	(32.8)	(8.6)	(5.6)	(20.3)	(32.8)	
26-35	398	286	102	16	8	39	121	
	(21.7)	(71.9)	(35.7)	(5.6)	(2.8)	(13.6)	(42.3)	
36-45	195	141	65	9	3	9	55	
	(10.6)	(72.3)	(46.1)	(6.4)	(2.1)	(6.4)	(39.0)	
46-55	132	110	50	7	3	4	46	
	(7.2)	(83.3)	(45.5)	(6.4)	(2.7)	(3.6)	(41.8)	
> 55	273	169	118	8	7	7	29	
	(14.9)	(61.9)	(69.8)	(4.7)	(4.1)	(4.1)	(17.2)	
TOTAL	1838	1331	564	90	53	191	433	
	(100)	(72.4)	(42.4)	(6.8)	(4.0)	(14.4)	(32.5)	

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 4H

DISTRIBUTION OF BAC ACCORDING TO AGE OF DRIVER¹: 1980

(SEVEN PROVINCES)

	NUMBER	NUMBER OF	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRAT					
AGE	(% OF TOTAL)	(% TESTED)	ZERO	1 - 49	$\frac{50 - 80}{50 - 80}$	<u>81 - 150</u>	>150	
< 16	26	8	4	0	1	1	2	
	(1.4)	(30.8)	(50.0)	(0.0)	(12.5)	(12.5)	(25.0)	
16-17	112	79	25	5	8	24	17	
	(6.1)	(70.5)	(31.6)	(6.3)	(10.1)	(30.4)	(21.5)	
18-19	193	145	44	14	10	32	45	
	(10.6)	(75.1)	(30.3)	(9.7)	(6.9)	(22.1)	(31.0)	
20-25	461	310	103	20	20	47	120	
	(25.2)	(67.2)	(33.2)	(6.5)	(6.5)	(15.2)	(38.7)	
26-35	388	273	102	16	8	42	105	
	(21.2)	(70.4)	(37.4)	(5.9)	(2.9)	(15.4)	(38.5)	
36-45	215	154	60	12	3	15	64	
	(11.8)	(71.6)	(39.0)	(7.8)	(1.9)	(9.7)	(41.6)	
46-55	159	117	67	4	4	10	32	
	(8.7)	(73.6)	(57.3)	(3.4)	(3.4)	(8,5)	(27.4)	
> 55	275	147	96	14	2	3	32	
	(15.0)	(53.5)	(65.3)	(9.5)	(1.4)	(2.0)	(21.8)	
TOTAL	1829	1233	501	85	56	174	417	
	(100)	(67.4)	(40.6)	(6.9)	(4.5)	(14.1)	(33.8)	

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

DISTRIBUTION OF BAC ACCORDING TO AGE OF DRIVER': 1981

(SEVEN PROVINCES)

	NUMBER	NUMBER OF	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRATION						
	OF DRIVERS	DRIVERS TESTED	(% OF NUMBER TESTED)						
AGE	(% OF TOTAL)	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	<u>81 - 150</u>	>150		
< 16	29	10	7	0	1	2	0		
	(1.5)	(34.5)	(70.0)	(0.0)	(10.0)	(20.0)	(0.0)		
16-17	110	72	26	7	7	14	18		
	(5.9)	(65.5)	(36.1)	(9.7)	(9.7)	(19.4)	(25.0)		
18-19	193	149	45	12	6	35	51		
	(10.3)	(77.2)	(30.2)	(8.1)	(4,0)	(23.5)	(34.2)		
20-25	466	381	110	28	12	85	146		
	(24.9)	(81.8)	(28.9)	(7.3)	(3.1)	(22.3)	(38.3)		
26-35	428	316	103	19	10	49	135		
	(22.9)	(73.8)	(32.6)	(6.0)	(3.2)	(15.5)	(42.7)		
36-45	219	172	69	10	3	14	76		
	(11.7)	(78.5)	(40.1)	(5.8)	(1.7)	(8.1)	(44.2)		
46-55	162	125	63	8	4	11	39		
	(8.6)	(77.2)	(50,4)	(6.4)	(3.2)	(8.8)	(31.2)		
> 55	266	170	114	8	4	11	33		
	(14.2)	(63.9)	(67.1)	(4.7)	(2.4)	(6.5)	(19.4)		
TOTAL	1873	1395	537	92	47	221	498		
	(100)	(74.5)	(38.5)	(6.6)	(3.4)	(15.8)	(35.7)		

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'Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 4J

DISTRIBUTION OF BAC ACCORDING TO AGE OF DRIVER¹: 1982

(SEVEN PROVINCES)

	NUMBER	NUMBER OF	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRATION						
	OF DRIVERS	DRIVERS TESTED	(% OF NUMBER TESTED)						
AGE	(% OF TOTAL)	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	<u>81 - 150</u>	>150		
< 16	27	11	7	1	0	1	2		
	(1.7)	(40.7)	(63.6)	(9.1)	(0.0)	(9.1)	(18.2)		
16-17	79	62	24	5	2	13	18		
	(5.1)	(78.5)	(38.7)	(8.1)	(3.2)	(21.0)	(29.0)		
18-19	143	105	31	11	9	22	32		
	(9.2)	(73.4)	(29.5)	(10.5)	(8.6)	(21.0)	(30.5)		
20-25	392	310	93	21	20	61	115		
	(25.1)	(79.1)	(30.0)	(6.8)	(6,5)	(19.7)	(37.1)		
26-35	332	265	88	11	13	43	110		
	(21.3)	(79.8)	(33.2)	(4.2)	(4.9)	(16.2)	(41.5)		
36-45	202	154	61	10	3	17	63		
	(12.9)	(76.2)	(39.6)	(6.5)	(1.9)	(11.0)	(40.9)		
46-55	133	104	53	5	2	7	37		
	(8.5)	(78.2)	(51.0)	(4.8)	(1.9)	(6.7)	(35.6)		
> 55	254	165	116	10	4	6	29		
	(16.3)	(65.0)	(70.3)	(6.1)	(2.4)	(3.6)	(17.6)		
TOTAL	1562	1176	473	74	53	170	406		
	(100.0)	(75.3)	(40.2)	(6.3)	(4.5)	(14.5)	(34.5)		

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

DISTRIBUTION OF BAC ACCORDING TO SEX OF DRIVER¹

(SEVEN PROVINCES)

YEARSEX $(\% \text{ OF TOTAL})$ $(\% \text{ TESTED})$ ZERO $1 - 49$ $50 - 80$ $81 - 150$ 1973Male157312104764762218(88.8)(76.9)(39.3)(3.9)(5.1)(18.0)Female1981449091115	>150 407 33.6) 19
1973 Male 1573 1210 476 47 62 218 (88.8) (76.9) (39.3) (3.9) (5.1) (18.0) (Female 198 144 90 9 11 15	407 33.6) 19
1973Male1573121047047 02 210 (88.8)(76.9)(39.3)(3.9)(5.1)(18.0)(Female1981449091115	33.6) 19
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	19
Female 198 144 90 9 11 15	+ 7
(20, 5) $(20, 5)$ $(20, 5)$ $(20, 5)$ $(10, 4)$	12 21
(11.2) (72.7) (62.5) (6.3) (7.6) (10.4)	13.2)
1076 Wale 1720 1326 538 83 74 218	413
(87.9) (77.1) (40.6) (6.3) (5.6) (16.4) (31.1)
$R_{0}=10$ 237 175 119 8 5 16	27
(12,1) (73,8) (68,0) (4,6) (2,9) (9,1) (15.4)
1975 Male 1620 1303 498 95 75 192	443
(87.1) (80.4) (38.2) (7.3) (5.8) (14.7) (34.0)
Female 240 176 115 13 6 19	23
(12.9) (73.3) (65.3) (7.4) (3.4) (10.8)	(13.1)
1076 No.1- 1426 1113 418 65 72 171	387
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(34.8)
	29
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(19.1)
(12.4) (74.9) (64.5) (5.5) (5.7) (7.2)	(1),
1977 Male 1410 1064 391 81 57 171	364
(83,2) (75,5) (36,7) (7,6) (5,4) (16,1)	(34.2)
Female 284 197 133 8 8 18	30
(16.8) (69.4) (67.5) (4.1) (4.1) (9.1)	115 05

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TABLE 5 (Continued)

DISTRIBUTION OF BAC ACCORDING TO SEX OF DRIVER

(SEVEN PROVINCES)

		NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED	NUMBER OF	TESTED DRIVER (% OF	S BY BLOOD A NUMBER TEST	LCOHOL CONCE ED)	ENTRATION
YEAR	SEX	(% OF TOTAL)	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	81 - 150	>150
1978	Male	1324	1007	385	65	- 45	141	371
		(82.8)	(76.1)	(38.2)	(6.5)	(4.5)	(14.0)	(36.8)
	Female	276	202	128	13	5	21	35
		(17.2)	(73.2)	(63.4)	(6.4)	(2.5)	(10.4)	(17.3)
1979	Male	1573	1142	443	81	46	175	397
		(85.3)	(72.6)	(38.8)	(7.1)	(4.0)	(15.3)	(34.8)
	Female	272	191	122	9	7	16	37
		(14.7)	(70.2)	(63.9)	(4.7)	(3.7)	(8.4)	(19.4)
1980	Male	1534	1037	383	74	46	158	376
		(83.7)	(67.6)	(36.9)	(7.1)	(4.4)	(15.2)	(36.3)
	Female	298	196	118	11	10	16	41
		(16.3)	(65.8)	(60.2)	(5.6)	(5.1)	(8.2)	(20.9)
1981	Male	1574	1185	408	76	41	197	463
		(83.8)	(75.3)	(34.4)	(6.4)	(3.5)	(16.6)	(39.1)
	Female	304	215	130	16	6	24	39
		(16.2)	(70.7)	(60.5)	(7.4)	(2.8)	(11.2)	(18.1)
1982	Male	1291	976	355	58	44	152	367
		(82.2)	(75.6)	(36.4)	(5.9)	(4.5)	(15.6)	(37.6)
	Female	279	205	119	15	10	19	42
		(17.8)	(73.5)	(58.0)	(7.3)	(4.9)	(9.3)	(20.5)

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

Traffic Injury Research Foundation of Canada, 1984

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DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO TYPE OF CRASH'

(SEVEN PROVINCES)

	TYPE	NUMBER	NUMBER OF	NUMBER O	F TESTED DRIVE	RS BY BLOOD	ALCOHOL CONCI	ENTRATION
DEATH	OF	OF DRIVERS	DRIVERS TESTED		(% OF	NUMBER TEST	'ED)	
YEAR	CRASH	(% OF TOTAL)	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	<u>81 - 150</u>	>150
1973	SVA	718	567	143	18	32	122	252
		(41.2)	(79.0)	(25.2)	(3.2)	(5.6)	(21.5)	(44.4)
	MVA	1026	768	422	37	40	104	165
		(58.8)	(74.9)	(54.9)	(4.8)	(5.2)	(13.5)	(21.5)
1974	SVA	817	640	187	25	41	135	252
		(42.8)	(78.3)	(29.2)	(3.9)	(6.4)	(21.1)	(39.4)
	MVA	1091	835	462	63	37	97	176
		(57.2)	(76.5)	(55.3)	(7.5)	(4.4)	(11.6)	(21.1)
1975	SVA	773	634	161	38	42	123	270
		(42.3)	(82.0)	(25.4)	(6.0)	(6.6)	(19.4)	(42.6)
	MVA	1053	824	446	68	37	84	189
		(57.7)	(78.3)	(54.1)	(8.3)	(4.5)	(10.2)	(22.9)
1976	SVA	713	570	137	24	47	108	254
		(43.6)	(79.9)	(24.0)	(4.2)	(8.2)	(18.9)	(44.6)
	MVA	922	694	379	49	31	74	161
		(56.4)	(75.3)	(54.6)	(7.1)	(4.5)	(10.7)	(23.2)
1977	SVA	740	554	129	34	29	121	241
	+	(43.8)	(74.9)	(23.3)	(6.1)	(5.2)	(21.8)	(43.5)
	MVA	948	704	395	55	36	66	152
		(56.2)	(74.3)	(56.1)	(7.8)	(5.1)	(9.4)	(21.6)

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TABLE 6 (Continued)

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO TYPE OF CRASH¹ (SEVEN PROVINCES)

DEATH	TYPE	NUMBER OF DRIVERS	NUMBER OF	NUMBER O	F TESTED DRIVE	RS BY BLOOD	ALCOHOL CONC	ENTRATION
YEAR	CRASH	(% OF TOTAL)	<u>(% TESTED)</u>	ZERO	$\frac{1-49}{1-49}$	<u>50 - 80</u>	<u>81 - 150</u>	>150
1978	SVA	688	528	129	31	22	86	260
		(43.1)	(76.7)	(24.4)	(5.9)	(4.2)	(16.3)	(49.2)
	MVA	907	677	383	47	27	75	145
		(56.9)	(74.6)	(56,6)	(6.9)	(4.0)	(11.1)	(21.4)
1979	SVA	763	551	147	33	28	98	245
		(41.3)	(72.2)	(26.7)	(6.0)	(5.1)	(17.8)	(44.5)
	MVA	1083	783	419	57	25	93	189
		(58.7)	(72.3)	(53.5)	(7.3)	(3.2)	(11.9)	(24.1)
1980	SVA	775	543	133	23	26	106	255
		(42.4)	(70.1)	(24.5)	(4.2)	(4.8)	(19.5)	(47.0)
	MVA	1054	690	368	62	30	68	162
		(57.6)	(65.5)	(53.3)	(9.0)	(4.3)	(9.9)	(23.5)
1981	SVA	860	649	136	31	21	134	327
		(45.8)	(75,5)	(21.0)	(4.8)	(3.2)	(20.6)	(50.4)
	MVA	1017	751	402	61	26	87	175
		(54.2)	(73.8)	(53.5)	(8.1)	(3.5)	(11.6)	(23.3)
1982	SVA	717	567	125	28	25	105	284
		(45.8)	(79.1)	(22.0)	(4.9)	(4.4)	(18.5)	(50.1)
	MVA	849	612	346	46	29	66	125
		(54.2)	(72.1)	(56.5)	(7.5)	(4.7)	(10.8)	(20.4)

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

Abbreviations: SVA, single-vehicle accident; MVA, multiple-vehicle accident.

RANGES OF BLOOD ALCOHOL CONCENTRATION ACCORDING TO TYPE OF ACCIDENT AND SEX OF DRIVER' (SEVEN PROVINCES, 1973 - 1982)

					NUMBER SVA		NUMBER	NUMBER	
BAC RANGES		NUMBER MVA	NUMBER <u>SVA</u>	RATIO MVA/SVA	NIGHTTIME WEEKEND	RATIO SVA/SVA(NW)	OF MALES	OF FEMALES	RATIO MALES/FEMALES
ZERO	N (%)	4022 (54.8)	1427 (24.6)	2.8: 1	114 (8.1)	12.5: 1	4295 (37.8)	1172 (63.2)	3.7 : 1
1 - 49	N (%)	545 (7.4)	285 (4.9)	1.9: 1	53 (3.7)	5.4: 1	725 (6.4)	110 (5.9)	6.6 : 1
50 - 80	N (%)	318 (4.3)	313 (5.4)	1.0: 1	94 (6.6)	3.3: 1	562 (4.9)	74 (4.0)	7.6 : 1
81 - 150	N (%)	814 (11.1)	1138 (19.6)	0.7: 1	390 (27.5)	2.9: 1	1793 (15.8)	175 (9.4)	10.2 : 1
>150	N (Z)	1639 (22.3)	2640 (45.5)	0.6: 1	765 (54.0)	3.5: 1	3988 (35.1)	322 (17.4)	12.4 : 1
TOTAL	N (%)	7338 (100)	5803 (100)	1.3: 1	1416 (100)	4.1: 1	11363 (100)	1853 (100)	6.1 : 1

'Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

Abbreviations: MVA, multiple-vehicle accidents; SVA, single-vehicle accidents; and SVA(NW), single-vehicle accidents during nighttime weekends.

RANGES OF BLOOD ALCOHOL CONCENTRATION ACCORDING TO AGE GROUPS OF DRIVERS¹ (SEVEN PROVINCES, 1973 - 1982)

AGE GROUPS OF DRIVERS

BAC RANGE	<u>s</u>	< 16	16-17	18-19	20-25	26-35	36-45	46-55	> 55	TOTAL
ZERO	N	70	372	507	1125	976	626	640	1133	5449
	(%)	(1.3)	(6.8)	(9.3)	(20.6)	(17,9)	(11,5)	(11,7)	(20.8)	(100)
1 - 49	N	9	72	129	232	121	96	64	112	835
	(%)	(1.1)	(8.6)	(15.4)	(27.8)	(14.5)	(11.5)	(7.7)	(13.4)	(100)
50 - 80	N	10	72	125	194	105	42	35	48	631
	(%)	(1.6)	(11.4)	(19.8)	(30.7)	(16.6)	(6.7)	(5.5)	(7.6)	(100)
81 - 150	N	13	178	356	663	397	144	107	106	1964
	(%)	(0.7)	(9.1)	(18.1)	(33.8)	(20.2)	(7.3)	(5.4)	(5.4)	(100)
>150	N	24	155	425	1229	1102	629	424	307	4295
	(%)	(0.6)	(3.6)	(9.9)	(28.6)	(25.7)	(14.6)	(9.9)	(7.1)	(100)
TOTAL	N	126	849	1542	3443	2701	1537	1270 /	1706	13174
	(%)	(1.0)	(6.4)	(11.7)	(26.1)	(20.5)	(11.7)	(9.6)	(12.9)	(100)

'Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 9A

PERSONS FATALLY INJURED BY TYPE OF VICTIM¹ (BRITISH COLUMBIA, 1979 - 1982)

PERSONS FATALLY INJURED AS:

YEAR		DRIVERS	PASSENGERS	PEDESTRIANS	UNKNOWN	TOTAL
1979	N	395	192	141	7	735
	(%)	(53.7)	(26.1)	(19.2)	(1.0)	(100)
1980	N	408	243	123	6	780
	(%)	(52.3)	(31.2)	(15.8)	(0.8)	(100)
1981	N	428	273	135	0	836
	(%)	(51.2)	(32.7)	(16.1)	(0.0)	(100)
1982	N	325	167	94	4	590
	(Z)	(55.1)	(28.3)	(15.9)	(0.7)	(100)
TOTAL	N	1556	875	493	17	2941
	(%)	(52.9)	(29.8)	(16.8)	(0.6)	(100)

TABLE 9B

PERSONS FATALLY INJURED BY TYPE OF VICTIM

(ALBERTA, 1979 - 1982)

PERSONS FATALLY INJURED AS:

YEAR		DRIVERS	PASSENGERS	PEDESTRIANS	UNKNOWN	TOTAL
1979	N	369	222	76	8	675
	(%)	(54.7)	(32.9)	(11.3)	(1.2)	(100)
1980	N	345	200	82	25	652
	(%)	(52.9)	(30.7)	(12.6)	(3.8)	(100)
1981	N	350	242	106	11	709
	(%)	(49.4)	(34.1)	(15.0)	(1.6)	(100)
1982	N	295	146	75	3	519
	(%)	(56.8)	(28.1)	(14.5)	(0.6)	(100)
TOTAL	N	1359	810	339	47	2555
	(%)	(53.2)	(31.7)	(13.3)	(1.8)	(100)

TABLE 9C

PERSONS FATALLY INJURED BY TYPE OF VICTIM¹ (SASKATCHEWAN, 1979 - 1982)

PERSONS FATALLY INJURED AS:

YEAR		DRIVERS	PASSENGERS	PEDESTRIANS	UNKNOWN	TOTAL
1979	N	133	88	40	3	264
	(%)	(50.4)	(33.3)	(15.2)	(1.1)	(100)
1980	N	115	109	40	2	266
	(%)	(43.2)	(41.0)	(15.0)	(0.8)	(100)
1981	N	144	76	39	6	265
	(%)	(54.3)	(28.7)	(14.7)	(2.3)	(100)
1982	N	132	82	28	2	244
	(%)	(54.1)	(33.6)	(11.5)	(0.8)	(100)
TOTAL	N	524	355	147	13	1039
	(%)	(50.4)	(34.2)	(14.1)	(1.3)	(100)

TABLE 9D

PERSONS FATALLY INJURED BY TYPE OF VICTIM'

(MANITOBA, 1979 - 1982)

PERSONS FATALLY INJURED AS:

YEAR		DRIVERS	PASSENGERS	PEDESTRIANS	UNKNOWN	TOTAL
1979	N	92	53	39	0	184
	(%)	(50.0)	(28.8)	(21.2)	(0.0)	(100)
1980	N	83	56	39	0	178
	(%)	(46.6)	(31.5)	(21.9)	(0.0)	(100)
1981	N	93	54	49	0	196
	(%)	(47.4)	(27.6)	(25.0)	(0.0)	(100)
1982	N	73	55	32	0	160
	(Z)	(45.6)	(34.4)	(20.0)	(0.0)	(100)
TOTAL	N	341	218	159	0	718
	(%)	(47.5)	(30.4)	(22.1)	(0.0)	(100)

TABLE 9E

PERSONS FATALLY INJURED BY TYPE OF VICTIM' (ONTARIO, 1979 - 1982)

PERSONS FATALLY INJURED AS:

YEAR		DRIVERS	PASSENGERS	PEDESTRIANS	UNKNOWN	TOTAL
1979	N	703	426	323	10	1462
	(%)	(48.1)	(29.1)	(22.1)	(0.7)	(100)
1980	N	763	425	333	9	1530
	(%)	(49.9)	(27.8)	(21.8)	(0.6)	(100)
1981	N	766	407	291	6	1470
	(%)	(52.1)	(27.7)	(19.8)	(0.4)	(100)
1982	N	641	324	235	5	1205
	(%)	(53.2)	(26.9)	(19.5)	(0.4)	(100)
Total	N	2873	1582	1182	30	5667
	(%)	(50.7)	(27.9)	(20.8)	(0.5)	(100)

TABLE 9F

PERSONS FATALLY INJURED BY TYPE OF VICTIM' (NEW BRUNSWICK, 1979 - 1982)

PERSONS FATALLY INJURED AS:

YEAR		DRIVERS	PASSENGERS	PEDESTRIANS	UNKNOWN	TOTAL
1979	N (Y)	138	79 (30-2)	44 (16-8)	$\begin{pmatrix} 1 \\ (0, 4) \end{pmatrix}$	262
	(%)	()2.7)	(30.2)	(10.0)	(0.4)	(100)
1980	N	105	73	44	0	222
	(%)	(47.3)	(32.9)	(19.8)	(0.0)	(100)
1981	N	92	50	42	2	186
	(%)	(49.5)	(26.9)	(22.6)	(1.1)	(100)
1982	N	100	63	41	2	206
	(%)	(48.5)	(30.6)	(19.9)	(1.0)	(100)
τοτάι.	N	435	265	171	5	876
101nm	(%)	(49.7)	(30.3)	(19.5)	(0.6)	(100)

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS BY PROVINCE¹

(1979 - 1982)

	NUMBER	NUMBER OF DRIVERS TESTED	NUMBER O	F TESTED DRIV (%	VERS BY BLOOD OF NUMBER TES	ALCOHOL CONCI	ENTRATION
PROVINCE	OF DRIVERS	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	<u>81- 150</u>	>150
BRITISH	1556	906	316	49	34	141	366
COLUMBIA		(58.2)	(34.9)	(5.4)	(3.8)	(15.6)	(40.4)
ALBERTA	1359	917	38 3	80	29	127	298
		(67.5)	(41.8)	(8.7)	(3.2)	(13.8)	(32.5)
SASKATCHEWAN	524	391	176	29	17	37	132
		(74.6)	(45.0)	(7.4)	(4.3)	(9.5)	(33.8)
MANITOBA	341	272	103	18	18	42	91
		(79.8)	(37.9)	(6.6)	(6.6)	(15.4)	(33.5)
ONTARIO	2875	2380	1016	149	93	360	762
		(82.8)	(42.7)	(6.3)	(3.9)	(15.1)	(32.0)
NEW	435	254	72	16	19	46	101
BRUNSWICK		(58.4)	(28.3)	(6.3)	(7.5)	(18.1)	(39.8)
PRINCE EDWARD	40	29	13	0	0	4	12
ISLAND		(72.5)	(44.8)	(0.0)	(0.0)	(13.8)	(41.4)

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

Traffic Injury Research Foundation of Canada, 1984.

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AGE DISTRIBUTION OF FATALLY INJURED DRIVERS BY PROVINCE

(1979 - 1982)

PROVINCE		< 16	<u>16 - 17</u>	<u>18 - 19</u>	<u>20 – 25</u>	26 - 35	<u> 36 - 45</u>	<u>46 - 55</u>	>55	TOTAL
BRITISH	N	16	85	165	374	333	187	122	261	1543
COLUMBIA	(%)	(1.0)	(5.5)	(10.7)	(24.2)	(21.6)	(12.1)	(7 .9)	(16.9)	(100)
ALBERTA	N	25	100	128	354	321	143	99	186	1356
	(%)	(1.8)	(7.4)	(9.4)	(26.1)	(23.7)	(10.5)	(7.3)	(13.7)	(100)
SASKATCHEWAN	N	18	46	59	122	75	65	46	92	523
	(%)	(3.4)	(8.8)	(11.3)	(23.3)	(14.3)	(12.4)	(8.8)	(17.6)	(100)
MANITOBA	N	10	26	36	78	62	33	35	57	337
	(%)	(3.0)	(7.7)	(10.7)	(23,1)	(18.4)	(9.8)	(10.4)	(16.9)	(100)
ONTARIO	N	29	150	301	740	656	344	249	404	2873
	(%)	(1.0)	(5.2)	(10.5)	(25.8)	(22.8)	(12.0)	(8.7)	(14.1)	(100)
NEW	N	7	19	45	123	91	50	34	61	430
BRUNSWICK	(%)	(1.6)	(4.4)	(10.5)	(28.6)	(21.2)	(11.6)	(7.9)	(14.2)	(100)
PRINCE EDWARI	DN.	1	1	3	10	8	9	1	7	40
	(%)	(2.5)	(2.5)	(7.5)	(25.0)	(20.0)	(22.5)	(2.5)	(17.5)	(100)

Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

Traffic Injury Research Foundation of Canada, 1984.

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TABLE 12A

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO AGE¹

(BRITISH COLUMBIA, 1979 - 1982)

	NUMBER	NUMBER OF	NUMBER O	F TESTED DRIVE	ERS BY BLOOD	ALCOHOL CONCI	ENTRATION
	OF DRIVERS	DRIVERS TESTED			% OF NUMBER	TESTED)	
AGE	(% OF TOTAL)	(% TESTED)	ZERO	$\frac{1-49}{1-49}$	<u>50 - 80</u>	81 - 150	>150
< 16	16	5	3	0	0	0	2
	(1.0)	(31.3)	(60.0)	(0.0)	(0.0)	(0.0)	(40.0)
16-17	85	45	14	1	1	15	14
	(5.5)	(52.9)	(31.1)	(2.2)	(2.2)	(33.3)	(31.1)
18-19	165	104	24	6	4	18	52
	(10.7)	(63.0)	(23.1)	(5.8)	(3.8)	(17.3)	(50.0)
20-25	374	233	71	14	11	50	87
	(24.2)	(62.3)	(30.5)	(6.0)	(4.7)	(21.5)	(37.3)
26-35	333	187	54	9	7	30	87
	(21.6)	(56.2)	(28.9)	(4.8)	(3.7)	(16.0)	(46.5)
36-45	187	125	36	11	1	11	66
	(12.1)	(66.8)	(28.8)	(8.8)	(0.8)	(8.8)	(52.8)
46-55	122	89	38	5	5	8	33
	(7.9)	(73.0)	(42.7)	(5.6)	(5.6)	(9.0)	(37.1)
> 55	261	113	75	3	4	9	22
	(16.9)	(43.3)	(66.4)	(2.7)	(3.5)	(8.0)	(19.5)
TOTAL	1543	901	315	49	33	141	363
	(100)	(58.4)	(35.0)	(5.4)	(3.7)	(15.6)	(40.3)

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 12B

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO AGE¹

(ALBERTA, 1979 - 1982)

	NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED	NUMBER (OF TESTED DI	RIVERS BY BLO (% OF NUMBER	OD ALCOHOL CON TESTED)	CENTRATION
AGE	(% OF TOTAL)	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	81 - 150	> 150
< 16	25	11	7	0	1	3	0
	(1.8)	(44.0)	(63.6)	(0.0)	(9.1)	(27.3)	(0.0)
16-17	100 (7.4)	70 (70.0)	26 (37.1)	10 (14.3)	3 (4.3)	16 (22.9)	15 (21.4)
18-19	128	94	31	4	4	23	32
	(9.4)	(73.4)	(33.0)	(4.3)	(4.3)	(24.5)	(34.0)
20-25	354	252	81	25	9	35	102
	(26.1)	(71.2)	(32.1)	(9.9)	(3.6)	(13.9)	(40.5)
26-35	321	218	78	19	6	32	83
	(23.7)	(67.9)	(35.8)	(8.7)	(2.8)	(14.7)	(38.1)
36-45	143	102	51	8	3	10	30
	(10.5)	(71.3)	(50.0)	(7.8)	(2.9)	(9.8)	(29.4)
46-55	99	67	39	5	0	3	20
	(7.3)	(67.7)	(58.2)	(7.5)	(0.0)	(4.5)	(29.9)
> 55	186	101	69	9	3	5	15
	(13.7)	(54.3)	(68.3)	(8.9)	(3.0)	(5.0)	(14.9)
TOTAL	1356	915	382	80	29	127	297
	(100)	(67.5)	(41.7)	(8.7)	(3.2)	(13.9)	(32.5)

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

Traffic Injury Research Foundation of Canada, 1984.

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TABLE 12C

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO AGE¹

(SASKATCHEWAN, 1979 - 1982)

	NUMBER	NUMBER OF	NUMBER	OF TESTED DRI	VERS BY BLOOD	ALCOHOL CONC	ENTRATION
	OF DRIVERS	DRIVERS TESTED		(%	OF NUMBER TES	TED)	
AGE	(% OF TOTAL)	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	<u>81 - 150</u>	>150
< 16	18	9	6	1	0	1	1
	(3.4)	(50.0)	(66.7)	(11.1)	(0.0)	(11.1)	(11.1)
16-17	46	38	15	4	7	5	7
	(8.8)	(82.6)	(39.5)	(10.5)	(18.4)	(13.2)	(18.4)
18-19	59	46	20	7	1	5	13
	(11.3)	(78.0)	(43.5)	(15.2)	(2.2)	(10.9)	(28.3)
20-25	122	. 94	28	8	6	15	37
	(23.3)	(77.0)	(29.8)	(8.5)	(6.4)	(16.0)	(39.4)
26-35	75	60	25	4	2	4	25
	(14.3)	(80.0)	(41./)	(6./)	(3.3)	(6.7)	(41.7)
36-45	65	41	19	1	0	2	19
	(12.4)	(63.1)	(46.3)	(2.4)	(0.0)	(4.9)	(46.3)
46-55	46	39	20	0	0	4	15
	(8.8)	(84.8)	(51.3)	(0.0)	(0.0)	(10.3)	(38.5)
> 55	92	63	43	4		1	14
	(17.6)	(68.5)	(68.3)	(6.3)	(1.6)	(1.0)	(22,2)
TOTAL	523	390	176	29	17	37	131
	(100)	(74.6)	(45.1)	(7.4)	(4.4)	(9.5)	(33.6)

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 12D

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO AGE¹

(MANITOBA, 1979 - 1982)

	NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED	NUMBER OF	F TESTED DRI (%	VERS BY BLOOD OF NUMBER TE:	ALCOHOL CONCE STED)	NTRATION
ACE	(% OF TOTAL)	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	81 - 150	>150
< 16	10	2	2	0	· 0	0	0
	(3.0)	(20.0)	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)
16-17	26	24	4	4	4	7	5
	(7.7)	(92.3)	(16.7)	(16.7)	(16.7)	(29.2)	(20.8)
18-19	36	28	6	1	3	8	10
	(10.7)	(77.8)	(21.4)	(3.6)	(10.7)	(28.6)	(35.7)
20-25	78	65	21	4	2	11	27
	(23.1)	(83.3)	(32.3)	(6.2)	(3.1)	(16.9)	(41.5)
26-35	62	54	21	2	5	8	18
	(18.4)	(87.1)	(38.9)	(3.7)	(9.3)	(14.8)	(33.3)
36-45	33	27	8	1	2	6	10
	(9.8)	(81.8)	(29.6)	(3.7)	(7.4)	(22.2)	(37.0)
46-55	35	29	15	3	1	0	10
	(10.4)	(82.9)	(51.7)	(10.3)	(3.4)	(0.0)	(34.5)
> 55	57	40	26	3	1	1	9
	(16.9)	(70.2)	(65.0)	(7.5)	(2.5)	(2.5)	(22.5)
TOTAL	337	269	103	18	18	41	89
	(100)	(79.8)	(38.3)	(6.7)	(6.7)	(15.2)	(33.1)

'Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

TABLE 12E

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO AGE¹

	NUMBER OF DRIVERS	NUMBER OF DRIVERS TESTED	NUMBER	OF TESTED DR (%	IVERS BY BLOO OF NUMBER TE	D ALCOHOL CONC STED)	ENTRATION
AGE	(% OF TOTAL)	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	<u>81 - 150</u>	>150
< 16	29	14	10	0	1	1	2
	(1.0)	(48.3)	(71.4)	(0.0)	(7.1)	(7.1)	(14.3)
16-17	150	113	51	6	8	28	20
	(5.2)	(75.3)	(45.1)	(5.3)	(7.1)	(24.8)	(17.7)
18-19	301	261	90	26	15	63	67
	(10.5)	(86.7)	(34.5)	(10.0)	(5.7)	(24.1)	(25.7)
20-25	740	629	203	45	35	135	211
	(25.8)	(85.0)	(32.3)	(7.2)	(5.6)	(21.5)	(33.5)
26-35	656	554	199	24	18	84	229
	(22.8)	(84.4)	(35.9)	(4.3)	(3.2)	(15.2)	(41.3)
36-45	344	290	130	18	5	23	114
	(12.0)	(84.3)	(44.8)	(6.2)	(1.7)	(7.9)	(39.3)
46-55	249	212	115	10	5	17	65
	(8.7)	(85.1)	(54.2)	(4.7)	(2.4)	(8.0)	(30,7)
> 55	404	307	218	20	6	9	54
	(14.1)	(76.0)	(71.0)	(6.5)	(2.0)	(2.9)	(17.6)
TOTAL	2873	2380	1016	149	93 (2 0)	360	762
	(100)	(02.0)	(44.7)	(0.3)	しつ・フリ	(13.1)	(32.0)

(ONTARIO, 1979 - 1982)

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

Traffic Injury Research Foundation of Canada, 1984.

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TABLE 12F

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO AGE¹

(NEW BRUNSWICK, 1979 - 1982)

	NUMBER	NUMBER OF	NUMBER	OF TESTED DR	IVERS BY BLOC	D ALCOHOL CONC	ENTRATION
AGE	(% OF TOTAL)	<u>(% TESTED)</u>	ZERO	$\frac{1-49}{1-49}$	$\frac{50 - 80}{2}$	$\frac{81 - 150}{2}$	>150
< 16	7	1	1	0	0	0	0
	(1.6)	(14.3)	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)
16-17	19	13	6	1	0	4	2
	(4.4)	(68.4)	(46.2)	(7.7)	(0.0)	(30.8)	(15.4)
18-19	45	25	6	3	4	6	6
	(10.5)	(55.6)	(24.0)	(12.0)	(16.0)	(24.0)	(24.0)
20-25	123	81	18	4	9	19	31
	(28.6)	(65.9)	(22,2)	(4.9)	(11.1)	(23.5)	(38.3)
26-35	91	60	14	4	1	12	29
	(21.2)	(65.9)	(23.3)	(6.7)	(1.7)	(20.0)	(48.3)
36-45	50	30	9	2	1	3	15
	(11.6)	(60.0)	(30.0)	(6.7)	(3.3)	(10.0)	(50.0)
46-55	34	19	6	1	2	0	10
	(7.9)	(55.9)	(31.6)	(5.3)	(10.5)	(0.0)	(52.6)
>55	61	22	10	1	2	2	7
	(14.2)	(36.1)	(45.5)	(4.5)	(9.1)	(9.1)	(31.8)
TOTAL	430	251	70	16	19	46	100
	(100)	(58.4)	(27.9)	(6.4)	(7.6)	(18.3)	(39.8)

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors.

Traffic Injury Research Foundation of Canada, 1984.

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DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO SEX¹ (SEVEN PROVINCES, 1979 - 1982)

		NUMBER	NUMBER OF	NUMBER OF	TESTED DRIVER	RS BY BLOOD A	LCOHOL CONCE	NTRATION
		OF DRIVERS	DRIVERS TESTED		(% 01	F NUMBER TEST	ED)	
PROVINCE	SEX	(% OF TOTAL)	(% TESTED)	ZERO	1 - 49	<u>50 - 80</u>	81 - 150	>150
BRITISH	MALE	1298	763	246	40	26	124	327
COLUMBIA		(83.4)	(58.8)	(32.2)	(5.2)	(3.4)	(16.3)	(42.9)
	FEMALE	258	143	70	9	8	17	39
		(16.6)	(55.4)	(49.0)	(6.3)	(5.6)	(11.9)	(27.3)
ALBERTA	MALE	1118	756	286	62	22	117	269
		(82.4)	(67.6)	(37.8)	(8.2)	(2.9)	(15.5)	(35.6)
	FEMALE	239	159 -	96	17	7	10	29
		(17.6)	(66.5)	(60.4)	(10.7)	(4.4)	(6.3)	(18.2)
SASKATCHEWAN	MALE	437	328	139	25	15	31	118
		(83.4)	(75.1)	(42.4)	(7.6)	(4.6)	(9.5)	(36.0)
	FEMALE	87	63	37	4	2	6	14
		(16.6)	(72.4)	(58.7)	(6.3)	(3.2)	(9.5)	(22.2)
MANITOBA	MALE	283	223	76	17	13	38	79
		(83.0)	(78.8)	(34.1)	(7.6)	(5.8)	(17.0)	(35.4)
	FEMALE	58	49	27	1	5	4	12
		(17.0)	(84.5)	(55.1)	(2.0)	(10.2)	(8.2)	(24.5)
ONTARIO	MALE	2406	2014	776	130	84	322	702
		(83.7)	(83.7)	(38.5)	(6.5)	(4.2)	(16.0)	(34.9)
	FEMALE	E 467	366	240	19	9	38	60
		(16.3)	(78.4)	(65.6)	(5.2)	(2.5)	(10.4)	(16.4)
NEW	MALE	393	230	56	15	17	46	96
BRUNSWICK		(90.6)	(58.5)	(24.3)	(6.5)	(7.4)	(20.0)	(41.7)
	FEMALE	E 41	24	16	1	2	0	5
		(9.4)	(58.5)	(66.7)	(4.2)	(8.3)	(0.0)	(20.8)
PRINCE	MALE	37	26	10	0	0	4	12
EDWARD ISLAN	D	(92.5)	(70.3)	(38.5)	(0.0)	(0.0)	(15.4)	(46.2)
	FEMALE	E 3	3	3	0	0	0	0
		(7.5)	(100.0)	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)

¹Excludes victims of crashes involving bicycles, snowmobiles, and farm tractors. Traffic Injury Research Foundation of Canada, 1984. σG

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DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO COLLISION TYPE¹ (SEVEN PROVINCES, 1979 - 1982)

		NUMBER	NUMBER OF	NUMBER O	F TESTED	DRIVERS BY ALC	OHOL BLOOD CON	CENTRATION
	TYPE OF	OF DRIVERS	DRIVERS TESTED			(% OF NUMBER	TESTED)	
PROVINCE	COLLISION	(% OF TOTAL)	(% TESTED)	ZERO	<u>1 - 49</u>	<u>50 - 80</u>	81 - 150	>150
BRITISH	SVA	800	496	113	24	17	92	250
COLUMBIA	2	(51,5)	(62.0)	(22.8)	(4.8)	(3.4)	(18.5)	(50.4)
oo lond m	MVA	753	409	202	25	17	49	116
		(48.5)	(54.3)	(49.4)	(6.1)	(4.2)	(12.0)	(28.4)
ΔΙ.ΒΕΡΤΔ	SVA	492	351	92	22	9	60	168
mount	0,111	(36-3)	(71.3)	(26, 2)	(6,3)	(2.6)	(17.1)	(47,9)
	MUA	865	565	290	58	20	67	130
		(63.7)	(65.3)	(51.3)	(10.3)	(3.5)	(11.9)	(23.0)
SASKATCHEWA	N SVA	238	178	49	10	9	20	90
		(45.4)	(74.8)	(27.5)	(5.6)	(5,1)	(11.2)	(50.6)
	MVA	286	213	127	19	8	17	42
		(54.6)	(74.5)	(59.6)	(8.9)	(3.8)	(8.0)	(19.7)
MANITOBA	SVA	162	138	22	6	13	32	65
		(47.8)	(85,2)	(15.9)	(4.3)	(9.4)	(23.2)	(47.1)
	MVA	177	133	80	12	5	10	26
		(52.2)	(75.1)	(60.2)	(9.0)	(3.8)	(7.5)	(19.5)
ONTARIO	SVA	1194	1001	241	49	42	209	460
•••		(41.6)	(83.8)	(24.1)	(4.9)	(4.2)	(20.9)	(46.0)
	MVA	1678	1379	775	100	51	151	302
		(58.4)	(82.2)	(56.2)	(7.3)	(3.7)	(10.9)	(21.9)
NEW	SVA	207	131	21	4	10	26	70
BRUNSWICK		(47.8)	(63.3)	(16.0)	(3.1)	(7.6)	(19.8)	(53.4)
	MVA	226	123	51	12	9	20	31
		(52.2)	(54.4)	(41.5)	(9,8)	(7.3)	(16.3)	(25.2)
PRINCE	SVA	22	15	3	0	0	4	8
EDWARD ISLA	ND	(55.0)	(68.2)	(20.0)	(0.0)	(0.0)	(26.7)	(53.3)
	MVA	18	14	10	0	0	0	4
		(45.0)	(77.8)	(71.4)	(0.0)	(0.0)	(0.0)	(28.6)

	VEUTCIE	NUMBER	NUMBER OF	NUMBER O	F TESTED DRI	IVERS BY BLOOM	D ALCOHOL CONC	ENTRATION
PROVINCE	TYPE	(% OF TOTAL)	(% TESTED)	ZERO	1 - 49	$\frac{50 - 80}{2}$	$\frac{81 - 150}{2}$	>150
BRITISH	AUTO	949	564	206	22	23	84	229
COLUMBIA		(61.0)	(59.4)	(36.5)	(3.9)	(4.1)	(14.9)	(40.6)
	MC/MOP	207	118	33	12	5	30	38
		(13.3)	(57.0)	(28.0)	(10.2)	(4.2)	(25.4)	(32.2)
	TRUCK	312	177	49	12	5	21	90
		(20.1)	(56.7)	(27.7)	(6.8)	(2.8)	(11.9)	(50.8)
	TR/TR	71	37	23	3	1	4	6
		(4.6)	(52.1)	(62.2)	(8.1)	(2.7)	(10.8)	(16.2)
	OTHER	17	10	5	0	0	2	3
		(1.1)	(58.8)	(50.0)	(0.0)	(0.0)	(20.0)	(30.0)
ALBERTA	AUTO	720	484	223	39	12	58	152
		(53.0)	(67.2)	(46.1)	(8.1)	(2.5)	(12.0)	(31.4)
	MC/MOP	152	88	29	12	3	19	25
		(11.2)	(57.9)	(33.0)	(13.6)	(3.4)	(21.6)	(28.4)
	TRUCK	424	309	104	25	13	49	118
		(31.2)	(72.9)	(33,7)	(8.1)	(4,2)	(15.9)	(38.2)
	TR/TR	55	33	24	4	1	1	3
		(4.0)	(60.0)	(72.7)	(12.1)	(3.0)	(3.0)	(9.1)
	OTHER	8	3	3	0	0	0	0
		(0.6)	(3.8)	(100)	(0.0)	(0.0)	(0.0)	(0.0)
SASKATCHEWAN	AUTO	278	209	99	14	9	21	66
		(53.1)	(75.2)	(47.4)	(6.7)	(4.3)	(10.0)	(31.6)
	MC/MOP	59	35	15	3	3	4	10
		(11.3)	(59.3)	(42.9)	(8.6)	(8.6)	(11.4)	(28.6)
	TRUCK	166	132	50	11	5	12	54
		(31.7)	(79.5)	(37.9)	(8.3)	(3.8)	(9.1)	(40.9)
	TR/TR	17	12	10	0	0	0	2
		(3.2)	(70.6)	(83.3)	(0.0)	(0.0)	(0.0)	(16.7)
	OTHER	4	3	2	1	0	0	0
		(0.8)	(75.0)	(66.7)	(33,3)	(0.0)	(0,0)	(0,0)

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO TYPE OF VEHICLE¹ (SIX PROVINCES, 1979 - 1982)

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TABLE 15 (Continued)

DISTRIBUTION OF BAC AMONG FATALLY INJURED DRIVERS ACCORDING TO TYPE OF VEHICLE¹ (SIX PROVINCES, 1979 - 1982)

		NINIBER	NUMBER OF	NUMBER OF TESTED DRIVERS BY BLOOD ALCOHOL CONCENTRATION					
PROVINCE	VEHICLE TYPE	OF DRIVERS (% OF TOTAL)	DRIVERS TESTED (% TESTED)	(% OF NUMBER TESTED)					
				ZERO	1 - 49	<u>50 - 80</u>	<u>81 - 150</u>	>150	
MANTTORA	AUTO	192	159	71	10	9	20	49	
MANIIOBA	NULO	(56-3)	(82.8)	(44.7)	(6.3)	(5.7)	(12.6)	(30.8)	
	MC /MOP	61	43	14	5	3	12	9	
	no, nor	(17.9)	(70.5)	(32.6)	(11.6)	(7.0)	(27.9)	(20.9)	
	TRUCK	77	61	14	3	6	10	28	
	INCON	(22.6)	(79.2)	(23.0)	(4,9)	(9.8)	(16.4)	(45.9)	
	TR /TR	(2210)	6	3	0	0	0	3	
	16,76	(2,1)	(85,7)	(50.0)	(0.0)	(0.0)	(0.0)	(50.0)	
	OTHER	4	2	1	0	0	0	2	
	OTHER	(1.2)	(50,0)	(33.3)	(0.0)	(0.0)	(0.0)	(66.7)	
ONTARIO	AUTO	2022	1674	720	92	66	250	546	
		(70.4)	(82.8)	(43.0)	(5.5)	(3.9)	(14.9)	(32.6)	
	MC/MOP	370	300	106	27	21	60	86	
	,	(12.9)	(81.1)	(35.3)	(9.0)	(7.0)	(20.0)	(28.7)	
	TRUCK	365	313	120	24	4	46	119	
		(12.7)	(85.8)	(38.3)	(7.7)	(1.3)	(14.7)	(38.0)	
	TR/TR	78	68	54	4	1	2	7	
		(2.7)	(87.2)	(79.4)	(5.9)	(1.5)	(2.9)	(10.3)	
	OTHER	38	25	16	2	1	2	4	
		(1.3)	(65.8)	(64.0)	(8.0)	(4.0)	(8.0)	(16.0)	
NEW	AUTO	287	167	42	12	14	31	68	
BRUNSWICK		(66.0)	(58.2)	(25.1)	(7.2)	(8.4)	(18.6)	(40.7)	
	MC/MOP	77	40	10	3	2	11	14	
	-	(17.7)	(51,9)	(25.0)	(7.5)	(5.0)	(27.5)	(35.0)	
	TRUCK	53	36	16	1	1	4	14	
		(12.2)	(67.9)	(44.4)	(2.8)	(2.8)	(11.1)	(38.9)	
	TR/TR	12	7	3	0	. 1	0	3	
	-	(2.8)	(58.3)	(42.9)	(0.0)	(14.3)	(0.0)	(42.9)	
	OTHER	6	4	1	0	1	0	2	
		(1.4)	(66.7)	(25.0)	(0.0)	(25.0)	(0.0)	(50.0)	

¹Excluses victims of crashes involving bicycles, snowmobiles, and farm tractors. Abbreviations: AUTO, automobiles; MC/MOP, Motorcycles and Mopeds; TR/TR, tractor-trailers. Traffic Injury Research Foundation of Canada, 1984.



DRIVER FATALITIES BY MONTH AND YEAR (SEVEN PROVINCES, 1973 TO 1982)



A-DRIVERS B-DRIVERS TESTED FOR MO C-DRIVERS THIM POSITIVE SAC d-DRIVERS WITH MAC OVER LEGAL LIMIT

TRAFFIC INJURY RESEARCH FOUNDATION OF CANADA - - 1984

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2 - DRIVERS b - DRIVERS TESTED FOR SAC c - DRIVERS THE POCHUS SAC d - DRIVERS THE BAC OVER LEGAL LIST

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0 - 27 753 b-200733 72775 753 240 c - 384 253 774 7007771 240 d - 384 253 774 840 0458 1200 1207

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PERCENT FEMALE DRIVER FATALITIES BY MONTH AND YEAR (SEVEN PROVINCES, 1973 TO 1932)



TRAFFIC INJURY RESEARCH FOUNDATION OF CANADA - - 1964







TRAFFIC INJURY RESEARCH FOUNDATION OF CANADA - - 1934

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