

## **Blood Alcohol Levels for Fatally Injured Drivers**



# CONTENTS

## TABLES

## PAGE

Table 1	Blood Alcohol Levels of Fatally Injured Drivers by Age Groups . . . . .	141
Table 2	Blood Alcohol Levels of Fatally Injured Drivers by Time of Day . . . . .	142
Table 3	Blood Alcohol Levels of Fatally Injured Drivers by Day of Week . . . . .	143
Table 4	Blood Alcohol Levels of Fatally Injured Drivers by Month . . . . .	144
Table 5	Blood Alcohol Levels of Fatally Injured Drivers by Type of Crash . . . . .	145
Table 6	Blood Alcohol Levels of Fatally Injured Drivers by Type of Vehicle . . . . .	146
Table 7	Blood Alcohol Levels of Fatally Injured Drivers - Historical . . . . .	147

## Figures

Figure 1	Blood Alcohol Levels of Fatally Injured Drivers . . . . .	140
Figure 2	Blood Alcohol Levels of Fatally Injured Drivers by Age Groups . . . . .	141
Figure 3	Blood Alcohol Levels of Fatally Injured Drivers by Time of Day . . . . .	142
Figure 4	Blood Alcohol Levels of Fatally Injured Drivers by Day of Week . . . . .	143
Figure 5	Blood Alcohol Levels of Fatally Injured Drivers by Month . . . . .	144
Figure 6	Blood Alcohol Levels of Fatally Injured Drivers by Type of Crash . . . . .	145
Figure 7	Blood Alcohol Levels of Fatally Injured Drivers by Type of Vehicle . . . . .	146
Figure 8	Number of Drivers Killed, Number Tested for Alcohol, and Percentage Tested for Alcohol . . . . .	147
Figure 9	Number of Dead Drivers who had a Blood Alcohol Level above the Legal Limit . . . . .	148
Figure 10	Percentage of Dead Drivers who had a Blood Alcohol Level above the Legal Limit. . . . .	148

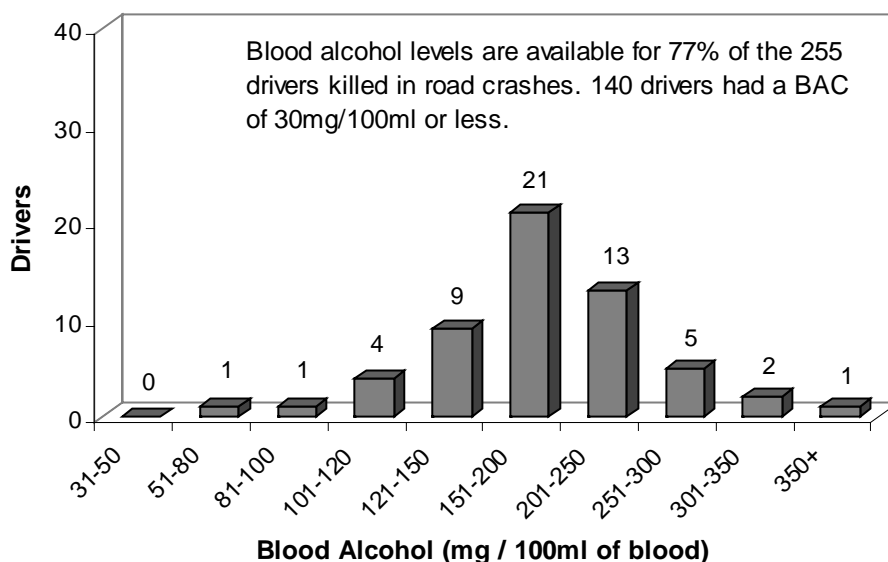
## **Notes**

1. The data in this section is derived by matching MoT's Traffic Crash Reports with blood alcohol measurements taken as part of post mortem examinations for dead drivers.
2. In cases where the driver dies at some time after the crash, the blood alcohol level measured in a post mortem examination may be different to that present at the time of the crash.

## Summary

1. Of the 255 drivers/riders who were killed in road crashes in 2004, 197 (77%) were given a blood test to detect the presence of alcohol.
2. 57 drivers had a blood alcohol level above the legal limit (including one driver under 20 years with a blood alcohol level between 30 and 80mg/100ml). That is, 29% of those tested and at least 22% of the total number killed were above the legal limit.
3. A number of those not tested may also have had a blood alcohol level above the legal limit, so the percentage of killed drivers who were above the legal limit is likely to be higher than 22%. An estimate of the number of untested drivers who may have been above the legal limit can be made by assuming that the alcohol involvement rate for untested drivers with 'alcohol suspected' is the same as that for the tested drivers with 'alcohol suspected' and similarly for drivers with 'alcohol not suspected'. For 2004 this estimate gives a further 12 drivers likely to be above the legal limit. Hence, based on the above assumptions, and the presently available data, a likely estimate is that about 27% of all the drivers killed were above the legal blood alcohol limit.
4. In addition, 7 adult (15 years and over) pedestrians had blood alcohol levels above 80 mg of alcohol per 100 mls of blood. Of the 32 adult pedestrians killed only 9 were tested for alcohol and of the 7 adult cyclists killed 4 were tested.

**Figure 1**  
**Blood Alcohol Levels of Fatally Injured Drivers**  
**Year Ended 31 December 2004**



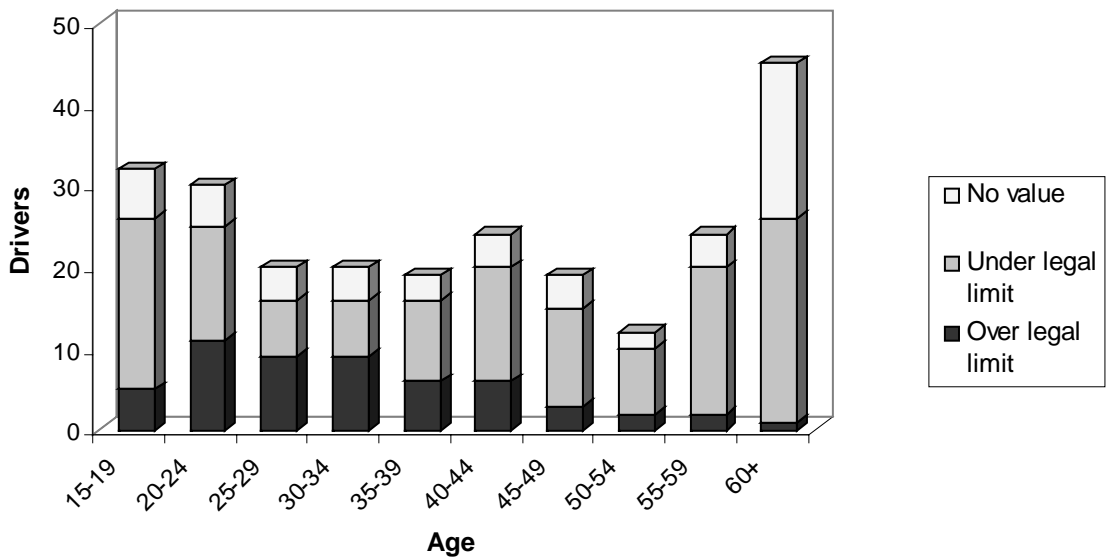
**Table 1**

**Blood Alcohol Levels of Fatally Injured Drivers by Age Group  
Year ending 31 December 2004**

Age Group	No Value	Blood Alcohol levels (1)											Total
		0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	
15 to 19	6	21	-	1	-	-	2	2	-	-	-	-	32
20 to 24	5	14	-	-	-	2	1	5	2	1	-	-	30
25 to 29	4	7	-	-	-	1	2	3	1	2	-	-	20
30 to 34	4	7	-	-	1	-	1	2	4	1	-	-	20
35 to 39	3	10	-	-	-	-	1	2	1	1	1	-	19
40 to 44	4	14	-	-	-	1	-	2	2	-	-	1	24
45 to 49	4	12	-	-	-	-	1	1	1	-	-	-	19
50 to 54	2	8	-	-	-	-	-	2	-	-	-	-	12
55 to 59	4	18	-	-	-	-	-	1	1	-	-	-	24
60 and over	19	25	-	-	-	-	-	-	-	-	1	-	45
Unknown age	3	4	-	-	-	-	1	1	1	-	-	-	10
<b>Total</b>	<b>58</b>	<b>140</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>9</b>	<b>21</b>	<b>13</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>255</b>

(1) In milligrams of alcohol per 100 millilitres of blood

**Figure 2  
Blood Alcohol Levels of Fatally Injured Drivers by Age**



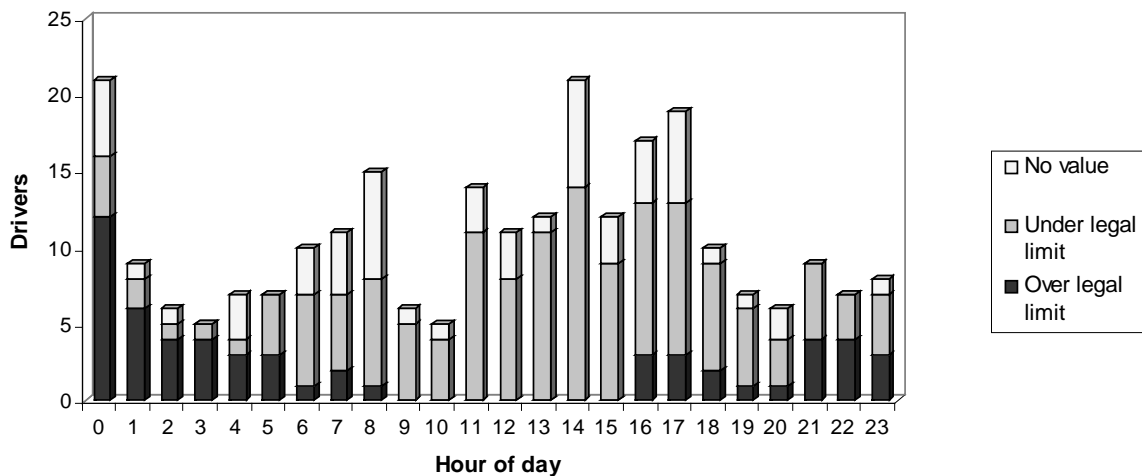
**Table 2**

**Blood Alcohol Levels of Fatally Injured Drivers by Time of Day  
Year ending 31 December 2004**

Time of Day	No Value	Blood Alcohol levels (1)											Total
		0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	
Midnight to 12.59am	5	4	-	-	-	-	2	6	3	1	-	-	21
1am to 1.59am	1	2	-	-	-	-	-	3	1	1	1	-	9
2am to 2.59am	1	1	-	-	-	-	1	1	2	-	-	-	6
3am to 3.59am	-	1	-	-	-	1	1	1	1	-	-	-	5
4am to 4.59am	3	1	-	-	-	-	-	1	-	2	-	-	7
5am to 5.59am	-	4	-	-	-	1	2	-	-	-	-	-	7
6am to 6.59am	3	6	-	-	-	-	-	1	-	-	-	-	10
7am to 7.59am	4	5	-	-	-	-	-	-	1	-	1	-	11
8am to 8.59am	7	7	-	-	-	-	1	-	-	-	-	-	15
9am to 9.59am	1	5	-	-	-	-	-	-	-	-	-	-	6
10am to 10.59am	1	4	-	-	-	-	-	-	-	-	-	-	5
11am to 11.59am	3	11	-	-	-	-	-	-	-	-	-	-	14
Noon to 12.59am	3	8	-	-	-	-	-	-	-	-	-	-	11
1pm to 1.59pm	1	11	-	-	-	-	-	-	-	-	-	-	12
2pm to 2.59pm	7	14	-	-	-	-	-	-	-	-	-	-	21
3pm to 3.59pm	3	9	-	-	-	-	-	-	-	-	-	-	12
4pm to 4.59pm	4	10	-	-	-	-	-	1	1	-	-	1	17
5pm to 5.59pm	6	10	-	-	-	-	1	1	-	1	-	-	19
6pm to 6.59pm	1	7	-	-	-	-	-	1	1	-	-	-	10
7pm to 7.59pm	1	5	-	-	1	-	-	-	-	-	-	-	7
8pm to 8.59pm	2	3	-	-	-	1	-	-	-	-	-	-	6
9pm to 9.59pm	-	5	-	-	-	1	1	1	1	-	-	-	9
10pm to 10.59pm	-	3	-	-	-	-	-	2	2	-	-	-	7
11pm to 11.59pm	1	4	-	1	-	-	-	2	-	-	-	-	8
<b>Total</b>	<b>58</b>	<b>140</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>9</b>	<b>21</b>	<b>13</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>255</b>

(1) In milligrams of alcohol per 100 millilitres of blood

**Figure 3  
Blood Alcohol Levels of Fatally Injured Drivers by Hour of Day**



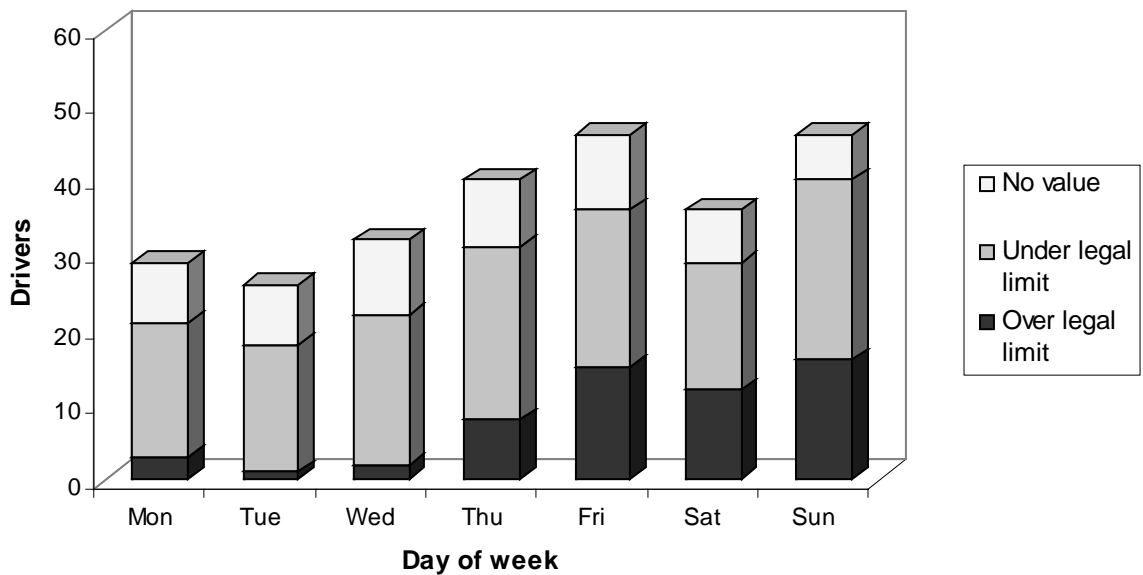
**Table 3**

**Blood Alcohol Levels of Fatally Injured Drivers by Day of Week  
Year ending 31 December 2004**

Day of Week	Blood Alcohol levels (1)												Total
	No Value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	
Monday	8	18	-	-	-	-	-	1	2	-	-	-	29
Tuesday	8	17	-	-	1	-	-	-	-	-	-	-	26
Wednesday	10	20	-	-	-	1	1	-	-	-	-	-	32
Thursday	9	23	-	1	-	-	2	1	2	2	-	-	40
Friday	10	21	-	-	-	1	2	6	4	1	1	-	46
Saturday	7	17	-	-	-	1	3	5	1	1	-	1	36
Sunday	6	24	-	-	-	1	1	8	4	1	1	-	46
<b>Total</b>	<b>58</b>	<b>140</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>9</b>	<b>21</b>	<b>13</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>255</b>

(1) In milligrams of alcohol per 100 millilitres of blood

**Figure 4  
Blood Alcohol Levels of Fatally Injured Drivers by Day of Week**



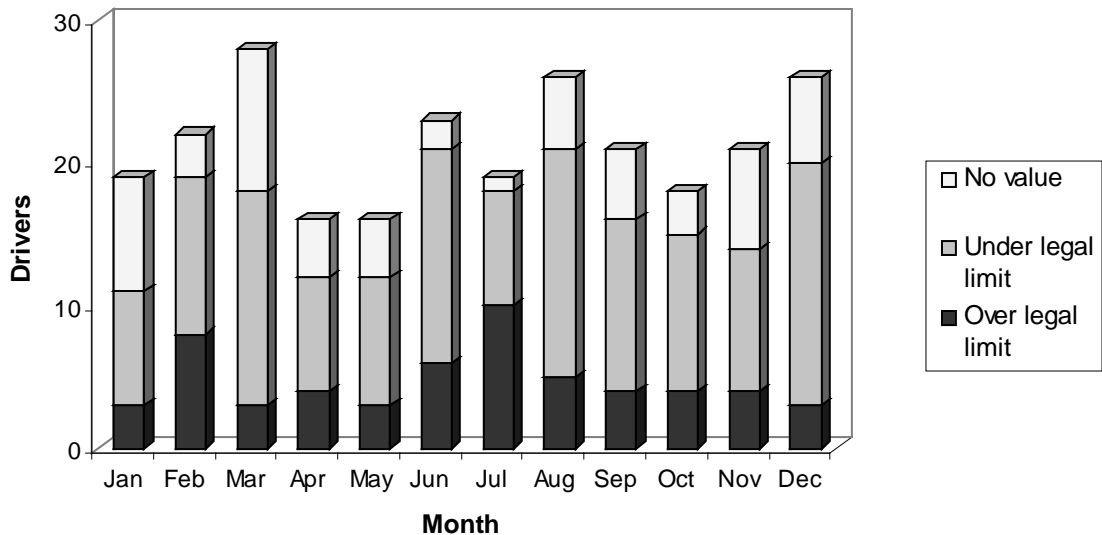
**Table 4**

**Blood Alcohol Levels of Fatally Injured Drivers by Month  
Year ending 31 December 2004**

Month	----- Blood Alcohol levels (1) -----												Total
	No Value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	
January	8	8	-	-	-	-	1	2	-	-	-	-	19
February	3	11	-	-	-	2	1	2	2	1	-	-	22
March	10	15	-	-	-	-	-	1	2	-	-	-	28
April	4	8	-	-	-	-	-	1	3	-	-	-	16
May	4	9	-	-	-	-	1	1	1	-	-	-	16
June	2	15	-	-	-	-	-	5	1	-	-	-	23
July	1	8	-	1	-	-	2	5	2	-	-	-	19
August	5	16	-	-	1	-	1	2	1	-	-	-	26
September	5	12	-	-	-	1	2	1	-	-	-	-	21
October	3	11	-	-	-	-	-	1	-	2	1	-	18
November	7	10	-	-	-	-	-	-	1	2	1	-	21
December	6	17	-	-	-	1	1	-	-	-	-	1	26
<b>Total</b>	<b>58</b>	<b>140</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>9</b>	<b>21</b>	<b>13</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>255</b>

(1) In milligrams of alcohol per 100 millilitres of blood

**Figure 5  
Blood Alcohol Levels of Fatally Injured Drivers by Month**



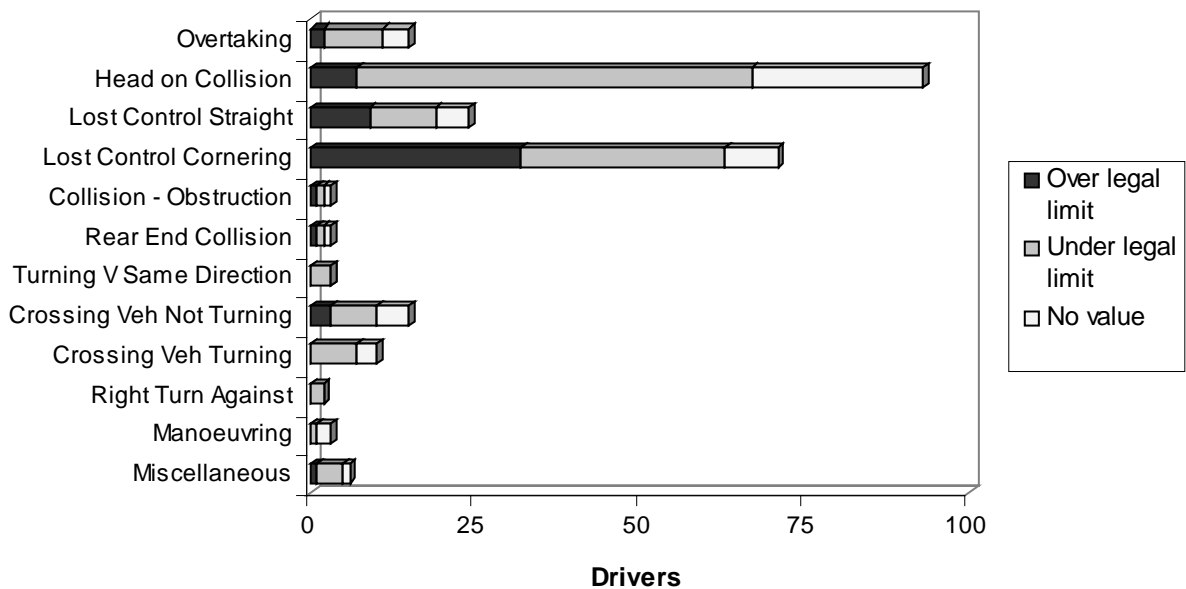
**Table 5**

**Blood Alcohol Levels of Fatally Injured Drivers by Type of Crash  
Year ending 31 December 2004**

Crash Type	Blood Alcohol levels (1)												Total
	No Value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	
Overtaking	4	9	-	-	1	-	-	1	-	-	-	-	15
Head on Collision	26	60	-	-	-	2	-	3	1	-	1	-	93
Lost Control Straight	5	10	-	-	-	-	3	4	2	-	-	-	24
Lost Control Cornering	8	31	-	1	-	1	5	12	7	5	-	1	71
Collision - Obstruction	1	1	-	-	-	-	-	1	-	-	-	-	3
Rear End Collision	1	1	-	-	-	-	-	-	1	-	-	-	3
Turning V Same Direction	-	3	-	-	-	-	-	-	-	-	-	-	3
Crossing Veh Not Turning	5	7	-	-	-	1	-	-	1	-	1	-	15
Crossing Veh Turning	3	7	-	-	-	-	-	-	-	-	-	-	10
Merging Traffic	-	2	-	-	-	-	-	-	-	-	-	-	2
Right Turn Against	2	1	-	-	-	-	-	-	-	-	-	-	3
Manoeuvring	1	4	-	-	-	-	1	-	-	-	-	-	6
Miscellaneous	2	4	-	-	-	-	-	-	1	-	-	-	7
<b>Total</b>	<b>58</b>	<b>140</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>9</b>	<b>21</b>	<b>13</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>255</b>

(1) In milligrams of alcohol per 100 millilitres of blood

**Figure 6  
Blood Alcohol Levels of Fatally Injured Drivers by Crash Type**



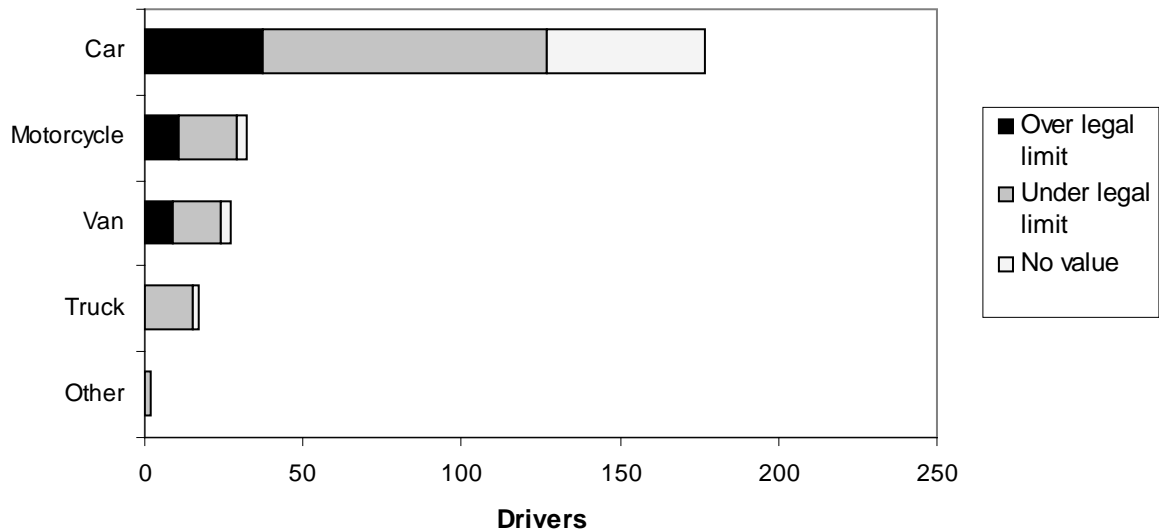
**Table 6**

**Blood Alcohol Levels of Fatally Injured Drivers by Type of Vehicle  
Year ending 31 December 2004**

Vehicle Type	Blood Alcohol levels (1)												Total
	No Value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	
Car	50	90	-	1	-	1	7	15	9	3	-	1	177
Motorcycle	3	18	-	-	1	2	1	5	2	-	-	-	32
Van	3	15	-	-	-	1	1	1	2	2	2	-	27
Truck	2	15	-	-	-	-	-	-	-	-	-	-	17
Other	-	2	-	-	-	-	-	-	-	-	-	-	2
<b>Total</b>	<b>58</b>	<b>140</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>9</b>	<b>21</b>	<b>13</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>255</b>

(1) In milligrams of alcohol per 100 millilitres of blood

**Figure 7  
Blood Alcohol Levels of Fatally Injured Drivers by Vehicle Type**



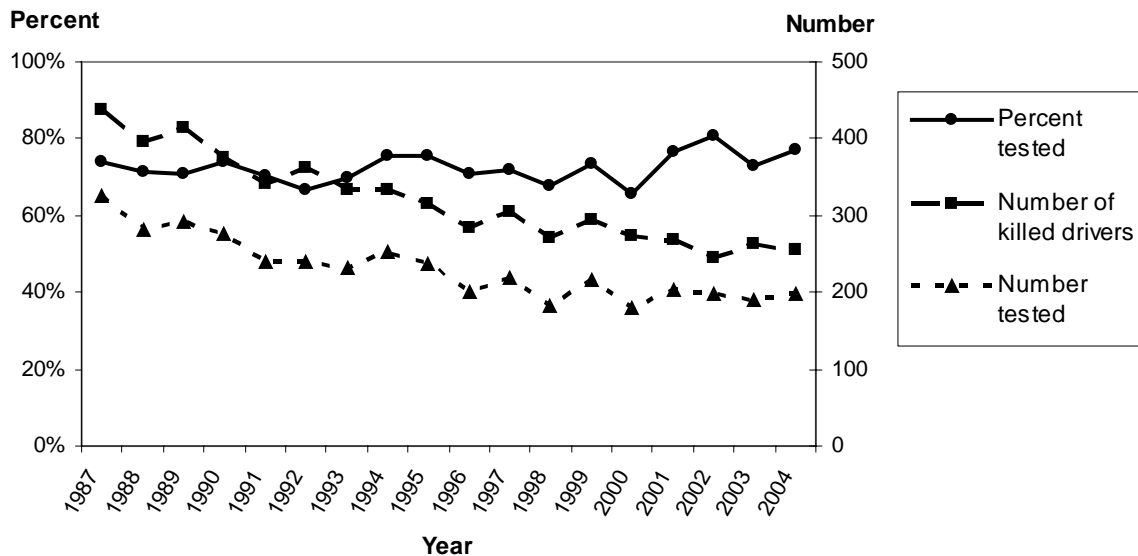
**Table 7**

**Blood Alcohol for Fatally Injured Drivers  
Historical**

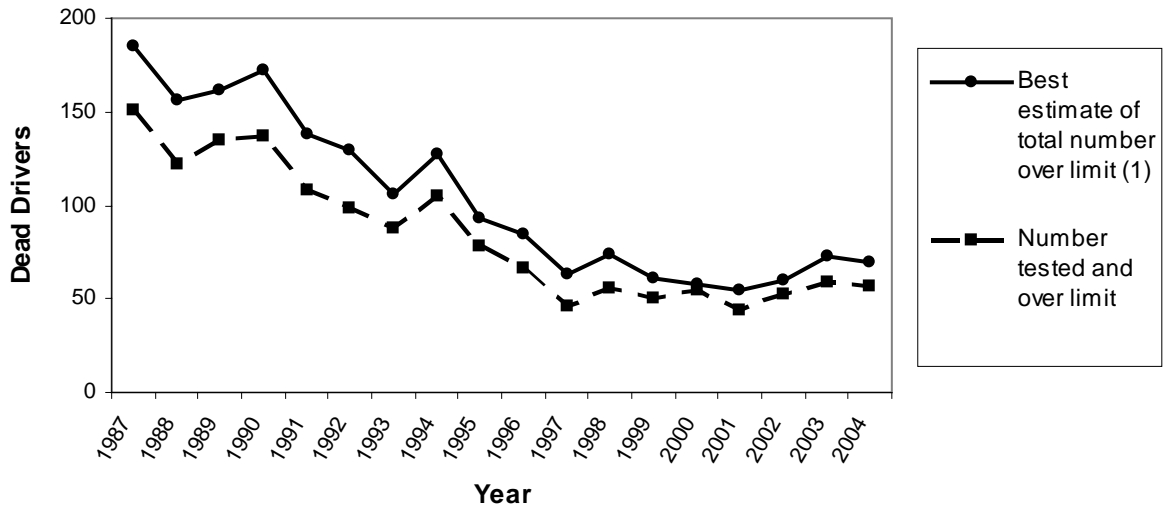
Year	Number of killed drivers (A)	Number tested (B)	Percent tested	Number over legal limit (C)	Percent of drivers over legal limit (C/A)	Percentage of those tested over the limit (C/B)	[--- Adjusted for non-testing # ---]	
							Best estimate of number over the limit	Best estimate of percent over the limit
1987	438	325	74%	151	35%	47%	185	42%
1988	395	282	71%	122	31%	43%	156	40%
1989	413	292	71%	135	31%	44%	162	39%
1990	374	277	74%	137	37%	50%	172	46%
1991	342	240	70%	108	32%	45%	138	40%
1992	361	240	67%	98	27%	41%	129	36%
1993	333	233	70%	88	26%	38%	106	32%
1994	333	252	76%	105	32%	42%	127	38%
1995	314	237	76%	78	25%	33%	93	30%
1996	283	201	71%	66	23%	33%	84	30%
1997	304	218	72%	46	15%	21%	63	21%
1998	271	183	68%	56	21%	31%	74	27%
1999	293	215	73%	50	17%	23%	61	21%
2000	273	179	66%	55	20%	31%	58	21%
2001	267	204	76%	44	17%	22%	55	21%
2002	246	198	81%	52	21%	26%	60	24%
2003	262	191	73%	59	23%	31%	73	28%
2004	255	197	77%	57	22%	29%	69	27%

# This gives the best estimate of the number and percentage of all killed drivers likely to have a blood alcohol level over the legal limit after adjusting for the 20% or so of drivers that are not tested. See note 3 in the summary for more detail.

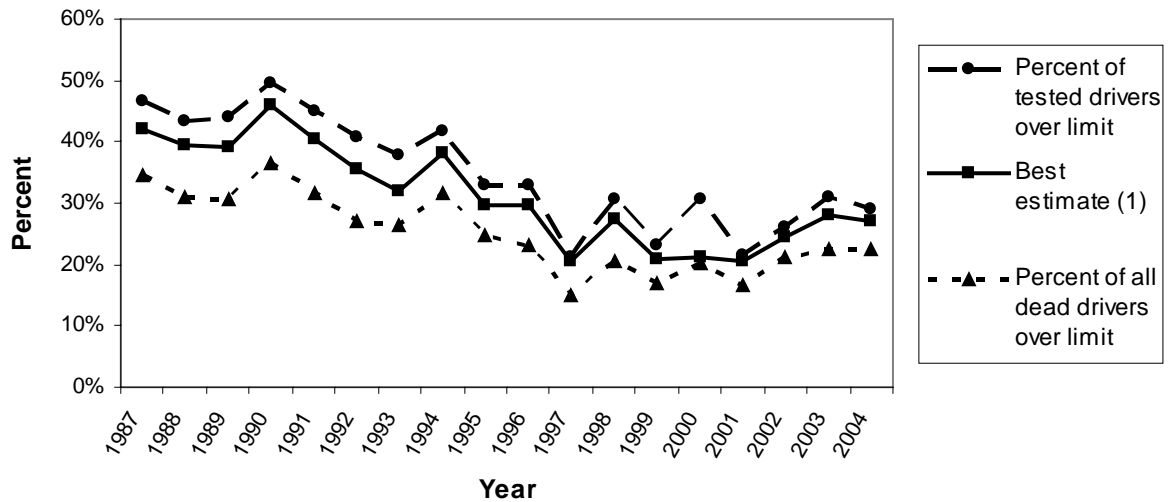
**Figure 8  
Number of Drivers, Number Tested for Alcohol and  
Percent Tested for Alcohol**



**Figure 9**  
**Number of Dead Drivers who had a Blood Alcohol Level above the Legal Limit**



**Figure 10**  
**Percent of Dead Drivers who had a Blood Alcohol Level above the Legal Limit**



(1) After adjusting for those drivers who were not tested but may have been over the limit. See note 3 in the summary for more detail.