

**BLOOD ALCOHOL LEVELS
FOR FATALLY INJURED DRIVERS**

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NOTES

1. The data in this section is derived by matching LTSA'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 262 drivers/riders who were killed in road crashes in 2003, 191 (73%) were given a blood test to detect the presence of alcohol.
2. 59 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, 31% of those tested and at least 23% 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 23%. 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 2003 this estimate gives a further 14 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 28% of all the drivers killed were above the legal blood alcohol limit.
4. In addition, 9 adult (15 years and over) pedestrians had blood alcohol levels above 80 mg of alcohol per 100 mls of blood. Of the 48 adult pedestrians killed 21 were tested for alcohol and of the 3 adult cyclists killed 2 were tested.

TABLE 1

**BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY AGE GROUP
Year ended 31 December 2003**

| Age Groups | 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 years | 4 | 16 | 1 | - | 1 | - | 2 | 3 | 5 | - | - | - | 32 |
| 20 to 24 years | 6 | 12 | 2 | 3 | 5 | - | 2 | 3 | 2 | - | - | - | 35 |
| 25 to 29 years | 9 | 10 | 1 | 1 | - | 1 | 2 | 3 | - | 1 | - | - | 28 |
| 30 to 34 years | 10 | 17 | - | - | 1 | 3 | 1 | 2 | - | 1 | 1 | - | 36 |
| 35 to 39 years | 9 | 9 | 1 | - | 1 | - | - | 2 | 1 | 1 | - | - | 24 |
| 40 to 44 years | 8 | 9 | - | - | 1 | - | 1 | 1 | 1 | 1 | - | - | 22 |
| 45 to 49 years | 5 | 10 | - | - | - | - | - | 3 | - | - | - | - | 18 |
| 50 to 54 years | 3 | 9 | - | - | - | - | - | 1 | - | 1 | - | - | 14 |
| 55 to 59 years | 2 | 7 | - | - | - | - | - | 1 | 1 | - | - | - | 11 |
| 60 and over | 14 | 23 | - | 1 | - | - | - | - | 1 | 1 | - | - | 40 |
| Unknown age | 1 | 1 | - | - | - | - | - | - | - | - | - | - | 2 |
| Total | 71 | 123 | 5 | 5 | 9 | 4 | 8 | 19 | 11 | 6 | 1 | - | 262 |

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

TABLE 2

BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY TIME OF DAY
Year ended 31 December 2003

| 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 | 1 | 2 | - | - | - | - | 1 | 4 | 2 | 1 | - | - | 11 |
| 1am to 1.59am | - | - | - | - | 1 | 1 | 2 | 1 | 1 | 1 | - | - | 7 |
| 2am to 2.59am | 2 | 2 | - | - | - | 1 | 1 | 1 | 1 | - | - | - | 8 |
| 3am to 3.59am | 5 | - | - | - | 1 | - | 1 | - | - | - | - | - | 7 |
| 4am to 4.59am | 1 | 2 | - | 1 | 1 | - | - | - | - | 2 | - | - | 7 |
| 5am to 5.59am | 3 | - | - | - | - | - | - | 1 | 2 | - | - | - | 6 |
| 6am to 6.59am | 5 | 4 | 1 | - | - | - | - | 2 | 1 | - | - | - | 13 |
| 7am to 7.59am | 2 | 5 | 1 | - | 1 | - | - | - | - | - | - | - | 9 |
| 8am to 8.59am | 2 | 2 | - | - | - | - | - | - | - | - | - | - | 4 |
| 9am to 9.59am | 2 | 12 | - | - | - | - | 1 | - | - | - | - | - | 15 |
| 10am to 10.59am | 2 | 6 | - | - | - | - | - | - | - | - | - | - | 8 |
| 11am to 11.59am | 2 | 8 | - | - | - | - | - | - | - | - | - | - | 10 |
| Noon to 12.59am | 3 | 9 | - | - | - | - | - | 2 | - | - | - | - | 14 |
| 1pm to 1.59pm | 3 | 7 | - | - | - | - | - | - | - | - | - | - | 10 |
| 2pm to 2.59pm | 6 | 12 | 1 | - | 1 | - | - | 1 | - | - | - | - | 21 |
| 3pm to 3.59pm | 2 | 10 | - | - | - | - | - | - | - | - | - | - | 12 |
| 4pm to 4.59pm | 4 | 7 | - | 1 | 1 | - | - | 1 | - | 1 | - | - | 15 |
| 5pm to 5.59pm | 7 | 9 | - | - | - | - | - | - | - | - | - | - | 16 |
| 6pm to 6.59pm | 5 | 4 | 1 | 1 | - | 1 | - | - | 2 | - | - | - | 14 |
| 7pm to 7.59pm | 6 | 4 | - | - | - | - | - | 3 | - | - | - | - | 13 |
| 8pm to 8.59pm | 2 | 3 | 1 | 1 | 1 | 1 | - | 2 | - | 1 | - | - | 12 |
| 9pm to 9.59pm | 2 | 2 | - | - | 1 | - | 1 | - | - | - | - | - | 6 |
| 10pm to 10.59pm | 3 | 10 | - | 1 | - | - | 1 | - | 1 | - | 1 | - | 17 |
| 11pm to 11.59pm | 1 | 3 | - | - | 1 | - | - | 1 | 1 | - | - | - | 7 |
| Total | 71 | 123 | 5 | 5 | 9 | 4 | 8 | 19 | 11 | 6 | 1 | - | 262 |

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

TABLE 3

**BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY DAY OF WEEK
Year ended 31 December 2003**

| Day of Week | 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 | |
| Monday | 8 | 24 | - | - | 1 | - | - | - | 1 | - | 1 | - | 35 |
| Tuesday | 4 | 13 | - | 2 | - | 1 | - | 2 | - | 1 | - | - | 23 |
| Wednesday | 13 | 16 | 2 | 1 | 2 | - | - | 2 | - | - | - | - | 36 |
| Thursday | 8 | 12 | 1 | - | 1 | - | - | 2 | 1 | - | - | - | 25 |
| Friday | 17 | 23 | - | 1 | 4 | - | 3 | 2 | 1 | - | - | - | 51 |
| Saturday | 10 | 21 | - | - | 1 | 1 | 2 | 8 | 4 | 2 | - | - | 49 |
| Sunday | 11 | 14 | 2 | 1 | - | 2 | 3 | 3 | 4 | 3 | - | - | 43 |
| Total | 71 | 123 | 5 | 5 | 9 | 4 | 8 | 19 | 11 | 6 | 1 | - | 262 |

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

TABLE 4

BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY MONTH
Year ended 31 December 2003

| Month | 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 | |
| January | 4 | 8 | - | - | 1 | - | - | 2 | - | 1 | - | - | 16 |
| February | 4 | 12 | - | - | - | - | 1 | 1 | - | - | - | - | 18 |
| March | 8 | 7 | - | - | 2 | 1 | 2 | 3 | 2 | 1 | - | - | 26 |
| April | 4 | 11 | 1 | 1 | 2 | - | 1 | 3 | 1 | - | - | - | 24 |
| May | 3 | 13 | - | - | - | - | - | 2 | 2 | - | - | - | 20 |
| June | 8 | 8 | 1 | - | - | 1 | - | 2 | 1 | - | - | - | 21 |
| July | 13 | 8 | 2 | - | 1 | - | 1 | - | 1 | - | - | - | 26 |
| August | 4 | 12 | - | - | - | 1 | 1 | 1 | 2 | 2 | - | - | 23 |
| September | 4 | 13 | - | - | - | 1 | - | - | 1 | 1 | 1 | - | 21 |
| October | 5 | 10 | - | 1 | 1 | - | 1 | 2 | 1 | 1 | - | - | 22 |
| November | 6 | 10 | - | - | - | - | 1 | 2 | - | - | - | - | 19 |
| December | 8 | 11 | 1 | 3 | 2 | - | - | 1 | - | - | - | - | 26 |
| Total | 71 | 123 | 5 | 5 | 9 | 4 | 8 | 19 | 11 | 6 | 1 | - | 262 |

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

TABLE 5

BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY TYPE OF CRASH
Year ended 31 December 2003

| Crash Type | 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 | |
| Overtaking | 7 | 11 | - | - | - | - | 1 | - | - | - | - | - | 19 |
| Head on Collision | 23 | 58 | - | 1 | 3 | - | - | 6 | 1 | - | - | - | 92 |
| Lost Control Straight | 10 | 10 | 3 | 1 | 1 | 1 | 3 | 2 | 3 | 1 | - | - | 35 |
| Lost Control Cornering | 15 | 29 | 1 | 3 | 3 | 3 | 4 | 10 | 6 | 5 | 1 | - | 80 |
| Collision - Obstruction | 1 | 1 | - | - | 1 | - | - | - | - | - | - | - | 3 |
| Rear End Collision | - | - | - | - | - | - | - | 1 | - | - | - | - | 1 |
| Turning V Same Direction | 2 | 4 | - | - | - | - | - | - | - | - | - | - | 6 |
| Crossing Veh Not Turning | 5 | 2 | 1 | - | - | - | - | - | - | - | - | - | 8 |
| Crossing Veh Turning | 1 | 2 | - | - | - | - | - | - | - | - | - | - | 3 |
| Right Turn Against | 2 | 2 | - | - | 1 | - | - | - | 1 | - | - | - | 6 |
| Manoeuvring | 3 | 3 | - | - | - | - | - | - | - | - | - | - | 6 |
| Miscellaneous | 2 | 1 | - | - | - | - | - | - | - | - | - | - | 3 |
| Total | 71 | 123 | 5 | 5 | 9 | 4 | 8 | 19 | 11 | 6 | 1 | - | 262 |

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

TABLE 6

**BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY TYPE OF VEHICLE
Year ended 31 December 2003**

| Vehicle Type | 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 | |
| Car | 58 | 97 | 3 | 4 | 7 | 2 | 7 | 12 | 9 | 4 | 1 | - | 204 |
| Motorcycle | 6 | 10 | 1 | 1 | 1 | 2 | 1 | 3 | 2 | - | - | - | 27 |
| Van | 2 | 8 | 1 | - | 1 | - | - | 3 | - | 2 | - | - | 17 |
| Truck | 4 | 8 | - | - | - | - | - | - | - | - | - | - | 12 |
| Other | 1 | - | - | - | - | - | - | 1 | - | - | - | - | 2 |
| Total | 71 | 123 | 5 | 5 | 9 | 4 | 8 | 19 | 11 | 6 | 1 | - | 262 |

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

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) | Percentage 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 | 74.2% | 151 | 34.5% | 46.5% | 185 | 42.0% |
| 1988 | 395 | 282 | 71.4% | 122 | 30.9% | 43.3% | 156 | 39.5% |
| 1989 | 413 | 292 | 70.7% | 135 | 30.5% | 43.9% | 162 | 39.0% |
| 1990 | 374 | 277 | 74.1% | 137 | 36.6% | 49.5% | 172 | 46.0% |
| 1991 | 342 | 240 | 70.2% | 108 | 31.6% | 45.0% | 138 | 40.4% |
| 1992 | 361 | 240 | 66.5% | 98 | 27.1% | 40.8% | 129 | 35.7% |
| 1993 | 333 | 233 | 70.0% | 88 | 26.4% | 37.8% | 106 | 31.8% |
| 1994 | 333 | 252 | 75.7% | 105 | 31.5% | 41.7% | 127 | 38.1% |
| 1995 | 314 | 237 | 75.5% | 78 | 24.8% | 32.9% | 93 | 29.6% |
| 1996 | 283 | 201 | 71.0% | 66 | 23.3% | 32.8% | 84 | 29.7% |
| 1997 | 304 | 218 | 71.7% | 46 | 15.0% | 21.1% | 63 | 20.7% |
| 1998 | 271 | 183 | 67.5% | 56 | 20.7% | 30.6% | 74 | 27.3% |
| 1999 | 293 | 215 | 73.4% | 50 | 17.1% | 23.3% | 61 | 20.8% |
| 2000 | 273 | 179 | 65.6% | 55 | 20.1% | 30.7% | 58 | 21.2% |
| 2001 | 267 | 204 | 76.4% | 44 | 16.5% | 21.6% | 55 | 20.6% |
| 2002 | 246 | 198 | 80.5% | 52 | 21.1% | 26.2% | 60 | 24.4% |
| 2003 | 262 | 191 | 72.9% | 59 | 22.5% | 30.9% | 73 | 27.9% |

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.

