ALCOHOL AND ROAD FATALITIES IN AUSTRALIA 1996

This monograph provides information on the incidence of alcohol consumption amongst drivers, motor cycle riders and pedestrians fatally injured in road crashes during 1996.

Drivers and motor cycle riders 1981-96

Over the past 16 years, the incidence of drink driving has been substantially reduced (Table 1). During 1981, 44 per cent of all drivers and motor cycle riders who were killed had a blood alcohol concentration (BAC) of 0.050 gm/100ml or greater. This has been reduced to 29 per cent during 1996.

This reduction in alcohol-related road trauma has come about as a result of strengthened legislation and enforcement in concert with high profile media and public education activities. These efforts have had a significant impact on public attitudes towards drink driving. Specific activities have included:

- introduction of random breath testing,
- adoption of lower and nationally consistent BAC limits,
- adoption of zero BAC limits for certain road user groups,
- toughening of penalties for drink driving, and
- legislation in some jurisdictions for compulsory blood testing on crash participants who attend hospital.

However, as Table 1 shows, there has been relatively little overall improvement this decade. During 1994, the percentage of fatally injured drivers and motor cycle riders with a BAC of 0.050 gm/100ml or greater dropped to 28 per cent, the lowest level since 1981. The proportion has increased slightly in recent years.

Table 1 Percentage of fatally injured drivers and motor cycle riders with a BAC of 0.050 gm/100ml or greater, by State/Territory, 1981 to 1996

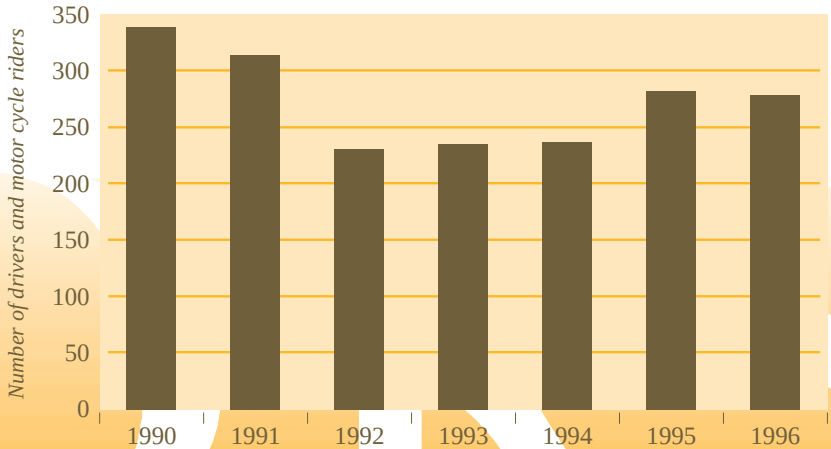
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
1981	41	38	50	44	48	43	71	23	44
1982	40	37	48	39	51	29	57	41	42
1983	36	37	47	32	55	19	70	57	40
1984	33	33	44	51	40	51	55	14	37
1985	33	38	47	44	45	37	64	12	39
1986	35	38	45	48	48	28	53	13	40
1987	32	38	39	40	47	39	45	17	37
1988	31	38	38	42	32	31	33	16	35
1989	33	32	34	37	37	44	57	25	34
1990	35	30	31	43	33	24	69	..	34
1991	33	29	31	35	34	21	65	..	32
1992	26	21	33	36	42	21	61	36	29
1993	28	28	28	51	36	32	77	67	32
1994	23	26	31	31	33	38	50	29	28
1995	29	22	33	27	35	44	56	50	29
1996	24	24	36	31	34	28	78	33	29

Note: (a) Percentages relate to persons tested for blood alcohol concentration
(b) Figures for Australia are based on the total numbers, rather than an average of the other States and Territories
(c) .. denotes that figures were not available

A similar pattern is apparent if one examines recent movements in the actual count of fatally injured drivers and motor cycle riders with a BAC of 0.050 gm/100ml or greater. Whereas a significant reduction occurred during the early 1990s, numbers have crept back up since 1992.

This suggests that additional measures are required. This is particularly the case for recidivist drink drivers. One measure under consideration for this group is the introduction of vehicle ignition interlocks to prevent the use of a vehicle by an intoxicated driver.

Figure 1 Number of fatally injured drivers and motor cycle riders with a BAC of 0.050 gm/100ml or greater, 1990 to 1996



Federal Office of Road Safety

Drivers and motor cycle riders, 1996

Table 2 shows that fatally injured drivers and motor cycle riders who had consumed alcohol tend to have quite extreme BACs. During 1996, 199 (21%) of all fatally injured drivers and motor cycle riders who were tested had BACs of 0.150 mg/100ml or greater. This compares with only 80 (8%) with BACs between 0.050 and 0.149 mg/100ml.

Table 3 shows the BAC profile of all drivers and motor cycle riders involved in fatal road crashes in 1996 in each State and Territory, excluding South Australia for which data were unavailable. Some 23 per cent of involved drivers and motor cycle riders who were tested had an illegal BAC.

Extent of testing

Interpretation of this result is, however, clouded by the low level of blood alcohol testing conducted on surviving drivers and motor cycle riders in some States and Territories. In general, BAC results based on low levels of testing tend to overstate the incidence of drink driving. This is because in jurisdictions with low levels of blood alcohol testing the obviously intoxicated drivers and riders are the ones who tend to be tested rather than those with a legal BAC.

Table 4 indicates the extent of testing undertaken in each State and Territory. Testing is generally done on fatally injured drivers and motor cycle riders (91% Australia-wide). In some jurisdictions, however, testing is much less frequent amongst the surviving drivers and motor cycle riders. Overall, only 77 per cent of drivers and riders involved in fatal crashes were tested Australia-wide.

Canadian research indicates that a minimum of 80 per cent testing is required to base a reasonable estimate of alcohol involvement in crashes. The ability of road safety agencies and police to monitor the effectiveness of their drink driving countermeasures is therefore greatly reduced in some juridictions.

Table 2 Number of fatally injured drivers and motor cycle riders by BAC, State and Territory, 1996

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
0.000	185	156	102	66	77	24	2	6	618
.001-.049	18	13	7	3	6	2	3	0	52
.050-.149	17	18	19	9	11	3	3	0	80
.150 or above	46	34	41	22	31	7	15	3	199
Untested or unknown (a)	20	12	44	7	2	2	7	0	94
Total	**286**	**233**	**213**	**107**	**127**	**38**	**30**	**9**	**1043**

Table 3 Number of drivers and motor cycle riders involved in a fatal road crash by BAC, State and Territory, 1996

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
0.000	335	172	115	..	233	61	7	8	931
.001-.049	20	90	34	..	11	3	3	1	162
.050-.149	33	32	23	..	18	3	6	0	115
.150 or above	57	44	47	..	33	8	18	3	210
Untested or unknown (a)	55	237	91	..	11	3	20	0	417
Total	**500**	**575**	**310**	**..**	**306**	**78**	**54**	**12**	**1835**

Table 4 Percentage of drivers and motor cycle riders tested for alcohol by State and Territory, 1996

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
Fatally injured drivers and motorcycle riders									
Tested	93%	95%	79%	93%	98%	95%	77%	100%	91%
Untested or unknown	7%	5%	21%	7%	2%	5%	23%	0%	9%
All involved drivers and motorcycle riders									
Tested	89%	59%	71%	..	96%	96%	63%	100%	77%
Untested or unknown	11%	41%	29%	..	4%	4%	37%	0%	23%

Table 5 Number of pedestrians fatally injured in a road crash by BAC, State and Territory, 1996

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
0-.049	80	44	19	12	29	3	2	0	189
.050-.149	10	6	3	1	2	1	0	0	23
.150 or above	24	12	7	7	11	2	5	0	68
Untested or unknown (a)	16	14	26	4	4	2	2	3	71
Total	**130**	**76**	**55**	**24**	**46**	**8**	**9**	**3**	**351**

Note: .. denotes that figures were not available
(a) Excluded when calculating the proportion of cases with illegal BAC.

Pedestrians

Table 5 shows that during 1996 there were 91 fatally injured pedestrians who had a BAC of 0.050 gm/100ml or greater, when tested. This represents 33 per cent of all those fatally injured pedestrians who were tested.

See also monographs 10, 14 and 15.