

DOCUMENT RESUME

ED 298 418

CG 021 100

**AUTHOR** Berger, Dale E.; Berger, Peggy M.  
**TITLE** Detering Drinking and Driving: The Australian Approach.  
**PUB DATE** Apr 88  
**NOTE** 20p.; Paper presented at the Annual Meeting of the Western Psychological Association (68th, Burlingame, CA, April 28-May 1, 1988).  
**PUB TYPE** Reports - Descriptive (141) -- Speeches/Conference Papers (150)  
**EDRS PRICE** MF01/PC01 Plus Postage.  
**DESCRIPTORS** \*Alcohol Abuse; Civil Rights; Death; \*Drinking; Foreign Countries; Identification; \*Laws; Prevention; State Programs; \*Traffic Accidents; \*Traffic Safety  
**IDENTIFIERS** Australia; \*Drinking Drivers; \*Random Breath Testing

**ABSTRACT**

This paper begins by noting that recent efforts in the United States to reduce the incidence of alcohol-impaired driving have not been very effective and suggests that for efforts to be effective, they must raise the actual risk of punishment to a level that cannot be ignored by potential offenders. It then describes an effective system of controls on alcohol-impaired driving begun in Australia which includes extensive use of random breath testing for all drivers. Discussion is focused on efforts in three Australian states where 70% of the population resides. Approaches adopted by Victoria, New South Wales, and Queensland are described and data on fatal road crashes in each state over the past 15 years are presented. It is noted that when the program was implemented in New South Wales in 1982, road crash fatalities dropped 20% and the rate has remained at this lower level for the past 5 years. An important factor in the success of the program is the perception of increased risk of arrest for alcohol-impaired driving. Public agreement with the policy of random breath testing is discussed and a rise in agreement from 70% of drivers in 1979 to the current level of about 95% agreement is described. Legal problems to initiating programs of random breath testing in the United States are considered and the Australian experience with random breath testing is presented a potentially valuable source of guidance for American efforts to improve the credibility and effectiveness of laws dealing with alcohol-impaired driving. (NB)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED298418

Detering Drinking and Driving:

The Australian Approach

Dale E. Berger

The Claremont Graduate School

and

Peggy M. Berger

California Polytechnic University, Pomona

CG 021100

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Dale E. Berger

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Address for correspondence:

Dale E. Berger, Ph.D.  
Psychology Department  
241 E. Eleventh Street  
The Claremont Graduate School  
Claremont, CA 91711

Running head: Deterrence of drinking and driving in Australia

Abstract

Australia has developed a remarkably effective system of controls on alcohol-impaired driving. In New South Wales, the most populated state, the centerpiece of the program is random breath testing on a massive scale. When the program was implemented in 1982, road crash fatalities dropped 20% and the rate has remained at this lower level for the past five years. An important factor in the success of the program is the perception of increased risk of arrest for alcohol-impaired driving. Agreement with the policy of random breath testing has risen from 70% of drivers in 1979 to the current level of about 95% agreement. Several economic analyses indicate the program is highly cost effective. Encroachment on civil liberties is carefully contained, and the benefits to society are seen to outweigh the costs. We believe the Australian experience with random breath testing could provide valuable guidance for American efforts to improve the credibility and effectiveness of laws dealing with alcohol-impaired driving.

## Deterring Drinking and Driving:

## The Australian Approach

In recent years there has been a dramatic surge of new laws in the United States aimed at reducing the incidence of alcohol-impaired driving. Spurred by MADD and other activist groups, state legislators enacted 478 new drunk driving laws from 1981 to 1985 (National Commission Against Drunk Driving, 1985). However, when Ross reviewed the effects of a large number of drinking-driving laws that had been introduced in some eight Western countries over the past fifty years, his findings were not very encouraging (Ross, 1984). Ross concluded that increasing the severity of penalties or the speed with which penalties are applied has no deterrent effect. On the other hand, increasing the perceived likelihood of arrest did reduce the rate of violations in some cases, but this effect was only temporary at best. Within a few months or years, violation rates were back at the levels observed before the law was implemented. Ross concluded that "the main limitation of attempts to deter drunk driving lies in the failure of all jurisdictions to date to raise the actual risk of punishment to a level that cannot be overlooked by potential violators" (Ross, 1984, p. xxvii).

Since Ross' review, an apparent exception to this bleak pattern has appeared in Australia. Fatal accidents in the state

of New South Wales fell by about 20% following implementation of a new law in 1982, and there has been no evidence of a return to prior levels in the five ensuing years. In this paper we will describe the legal changes in New South Wales and neighboring states, and also relate some of our impressions gained from living in Australia for five months while on a sabbatical leave during Fall 1987.

The major feature of the Australian approach in several states has been extensive use of random breath testing for all drivers. While constitutional restrictions on random breath testing have been imposed in some states in the United States, there is much to be gained by a close look at what the Australians have done.

Overall, from 1965 to 1985 Australia has reduced the number of road fatalities from about 6.6 to 2.1 per 100 million kilometers driven. This compares very favorably to a drop from 3.3 to 1.5 in the USA and from 5.2 to 2.4 in Canada over the same time period (Department of Transport and Communications, 1988).

-----  
Insert Figure 1 about here  
-----

We will focus our attention on the three large east coast states in Australia, which include 70% of the national population.

been conducted on a "blitz" basis, especially around holidays, and tests are concentrated in areas where they are expected to maximize the impact on the population of high violators. An evaluation showed a drop of 24% in serious night time crashes in the areas of heavy testing (Cameron & Strang, 1982).

In 1976 there were 828 fatal accidents in Victoria. Although the population continued to increase, by 1982 the number of fatal accidents dropped to 633, a reduction of 23%. Meanwhile, in neighboring New South Wales, the number of fatal accidents held roughly steady, at 1119 in 1976 and 1115 in 1982 (see Figure 2). During the same period, the number of fatal accidents in Queensland increased from 497 to 522.

-----  
Insert Figure 2 about here  
-----

#### New South Wales

By 1982 it became clear that the policies practiced by New South Wales to control alcohol-impaired driving were ineffective compared to the rather impressive gains made by Victoria. The neighboring states of Victoria and New South Wales have a long history of competition and rivalry. It seems likely to us, based on our experience living in Australia, that this rivalry was a factor in generating political support necessary for drastic

been conducted on a "blitz" basis, especially around holidays, and tests are concentrated in areas where they are expected to maximize the impact on the population of high violators. An evaluation showed a drop of 24% in serious night time crashes in the areas of heavy testing (Cameron & Strang, 1982).

In 1976 there were 828 fatal accidents in Victoria. Although the population continued to increase, by 1982 the number of fatal accidents dropped to 633, a reduction of 23%. Meanwhile, in neighboring New South Wales, the number of fatal accidents held roughly steady, at 1119 in 1976 and 1115 in 1982 (see Figure 2). During the same period, the number of fatal accidents in Queensland increased from 497 to 522.

-----  
Insert Figure 2 about here  
-----

#### New South Wales

By 1982 it became clear that the policies practiced by New South Wales to control alcohol-impaired driving were ineffective compared to the rather impressive gains made by Victoria. The neighboring states of Victoria and New South Wales have a long history of competition and rivalry. It seems likely to us, based on our experience living in Australia, that this rivalry was a factor in generating political support necessary for drastic

action in New South Wales.

On December 17, 1982 New South Wales introduced several changes in the drink-driving laws, but the change that had the greatest impact was introduction of random breath testing on a massive scale. In the first year of operation, police carried out 900,000 tests, and they have continued at the level of about a million tests each year. With a population of around three million licensed drivers in New South Wales, this amounts to about one test for every three drivers each year.

-----  
Insert Figure 3 about here  
-----

The effects of the new laws were felt immediately (see Figure 3). The number of fatal crashes dropped from 1115 in 1982 to 877 in 1983 and has remained down in the range of 850 to 950 for each succeeding year through 1987 (Australian Bureau of Statistics, personal communication to Ross Homel, November, 1987; Homel, 1988). There is ample evidence that a reduction in drunk driving was a major factor in the reduction in fatalities. The greatest decline in crashes has been observed in the type of crashes that are associated with alcohol, such as late-night and weekend crashes (Arthurson, 1985). At the same time there has been a drop in convictions for alcohol-impaired driving (Cashmore, 1985). As



shown in Figure 4, the proportion of dead drivers with BAC over .05% dropped rapidly from 40% in 1982 to 33% in 1984 (Department of Transportation and Communication, 1988).

-----  
Insert Figure 4 about here  
-----

Fifty-eight percent of 517 drivers in a 1983 survey indicated that they had changed some aspect of their lifestyle as a direct impact of random breath testing (Homel, 1986). Changes included less driving to places where alcohol is served, having someone else drive, drinking away from home less often, and limiting drinking when driving. It is important to note that young men were especially responsive to the new law, with changes in driving more popular than changes in drinking (Homel, 1986). An important factor in accounting for behavior change was the perception that the chances of arrest had increased with the new law. This perception was strengthened by exposure to testing, (either personally or through acquaintances who had been tested) and by exposure to media publicity (Homel, in press).

Several analyses of the economic impact of random breath testing in New South Wales weighed the direct costs (including advertising and police equipment) against the economic benefits (of lives saved and injuries and crashes avoided), and reached the

conclusion that the net savings to society have been substantial (cited in Department of Transport and Communications, July 1986).

The goal of random breath testing as it is applied in New South Wales is deterrence, not apprehension of violators. Police have a natural inclination to want to "catch the bad guys," and have at times objected to random breath testing on the grounds that it does not produce a high rate of arrests. Conducting random breath testing is rather boring, with arrest rates as low as one in 200. Patrols for drunk drivers produce a much higher arrest rate. Nevertheless, New South Wales recently rejected a request by police to be allowed to use roving patrols to pull people over "at random." The argument of the government was that the current mode of highly visible random breath testing at unpredictable times and locations is effective in raising the perception of risk for all drivers (Homel, in press).

#### Queensland

As of January 1988, Queensland has not adopted random breath testing. Instead, police use patrols for drunk drivers, taking into account time and location. They also may test drivers who drive badly or are involved in traffic violations or accidents. At about the same time that New South Wales introduced random breath testing, Queensland lowered the legal BAC limit from .08% to .05%. The number of fatal accidents in Queensland has declined

substantially in the last ten years, but the percent of dead drivers with BAC over .05% is still very high compared to Victoria and New South Wales (see Figure 4).

Could random breath testing work in the United States?

The Fourth Amendment to the American Constitution guarantees due process in conducting search and seizure. The limits of this restriction on random breath testing are still being tested in the courts. Some states have prohibited random testing in any guise, while others allow virtually unimpeded testing (Aizenberg, 1986).

Prior to implementation of random breath testing in Australia, the Council for Civil Liberties opposed the proposed law on the grounds that allowing police to stop and question citizens without any evidence of a violation was characteristic of a police state (Homel, in press). Yet in a memo to politicians, the Council recognized that a civil liberty might be set aside if it could be demonstrated that road fatalities were reduced as a consequence of the law (cited in Homel, in press). The fact that the law was introduced for a three year trial period helped to make it acceptable.

As practiced in New South Wales, random breath testing seems less intrusive than security checks at airports. Motorists who test negatively are delayed for only a minute or two. If the testing is truly random, there is no bias in selection of people

to be tested. There is a sense of fairness in that everyone using the public roads is equally at risk of being tested.

Public support for random breath testing in New South Wales has increased markedly with publicity and exposure to the law. In 1979 when motorists were asked if they agreed with random breath testing of drivers, 70% expressed agreement. Support jumped from 80% in December 1982 when random breath testing was introduced to 91% in March 1983 (Cashmore, 1985). Currently about 95% of the driving population agrees with the law (Carseldine, 1985; Carseldine, personal communication, October 1987). A 1986 study by the Federal Office of Road Safety found that public approval of random breath testing had risen to 81% in Queensland where there is no random breath testing (cited in Department of Transport and Communications, July 1986).

Current mechanisms for deterring alcohol impaired driving in the United States leave much to be desired. In general, American drivers do not know the relevant laws, they do not believe they are likely to be caught if they do drive after drinking, and they believe they will be able to avoid most penalties if they are caught (Sportum & Berger, 1988). For many drivers, the perceived risk of punishment is too low to deter them from driving after drinking. American drunk driving laws lack credibility.

The success of the random breath testing program in New South

Wales deserves our attention. The Australians have demonstrated that it is possible to deter alcohol-impaired driving on a continuing basis with a program that is cost effective and strongly endorsed by drivers. The incursion on civil liberties is carefully circumscribed, and the benefits are seen to outweigh the costs. While there is no assurance that a similar testing program in the United States would be as successful, we are persuaded that it is worth trying, particularly if it were combined with a program to increase consistency in enforcement of penalties.

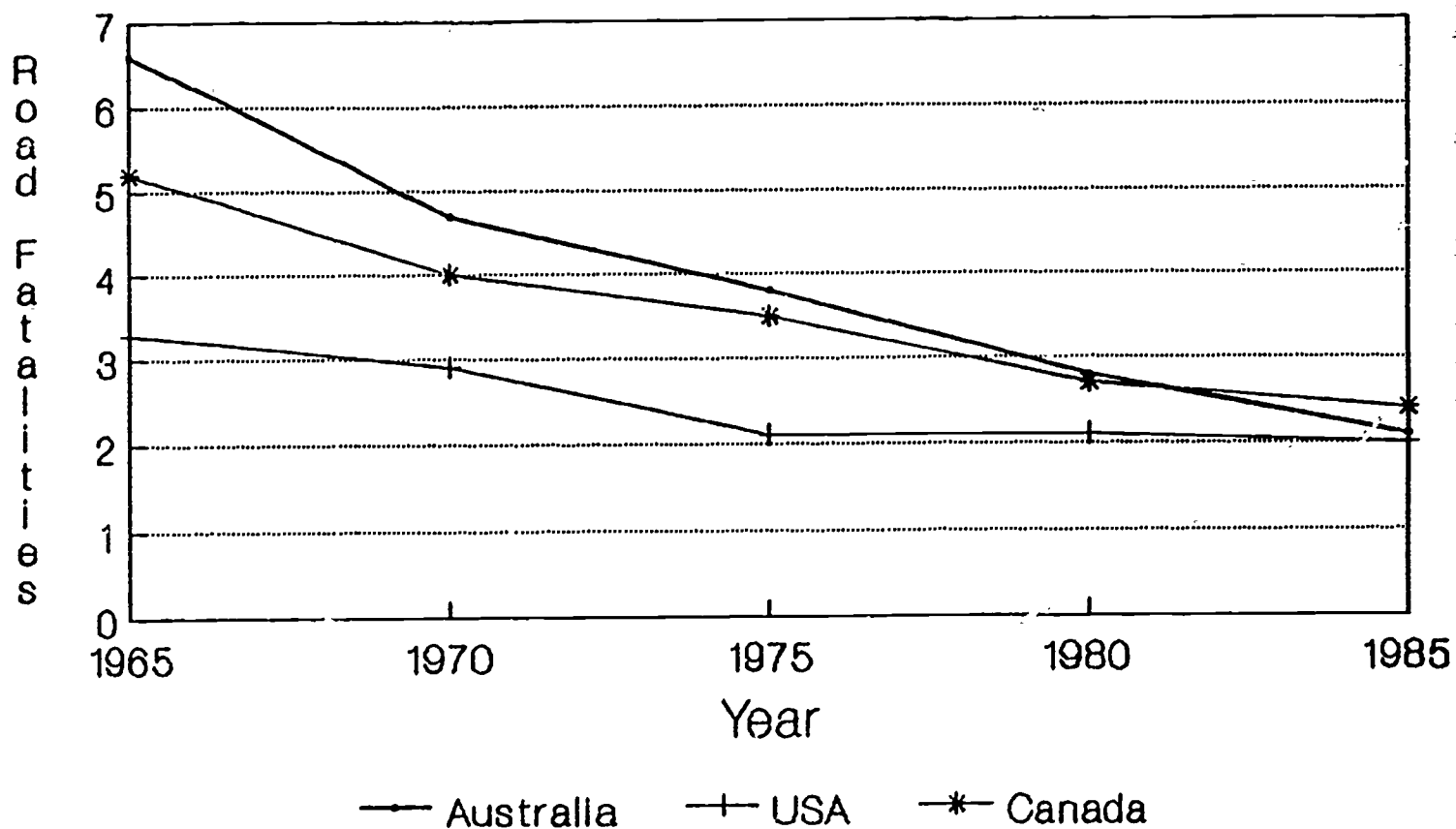
## References

- Aizenberg, R. (1986). Sobriety checkpoints as a deterrent to drinking and driving. Journal of Traffic Safety Education, 33, 6-7,20.
- Arthurson, R. (1985). Evaluation of random breath testing: Research Note RN 10/85. Sydney: Traffic Authority of New South Wales.
- Cameron, M. H., & Strang, P. M. (1982). Effect of intensified random breath testing in Melbourne during 1978 and 1979. Australian Road Research Board Proceedings, 11, 1-12.
- Carseldine, D. (1985). Surveys of knowledge, attitudes, beliefs and reported behaviours of drivers on the topic of drink-driving and random breath testing. Research Note RN 12/85. Sydney: Traffic Authority of New South Wales.
- Cashmore, J. (1985). The impact of random breath testing in New South Wales. Sydney: Bureau of Crime Statistics & Research.
- Department of Transport and Communications. (1988). Road crash statistics Australia. (February). Canberra, Australia: Federal Office of Road Safety.
- Department of Transport and Communications. (1986). Road crash statistics Australia. (July). Canberra, Australia: Federal Office of Road Safety.

- Homel, R. J. (in press). Policing and punishing the drinking driver: A study of general and specific deterrence. New York: Springer-Verlag.
- Homel, R. J. (1986). Policing the drinking driver: Random breath testing and the process of deterrence. Canberra: Federal Office of Road Safety.
- National Commission Against Drunk Driving. (1985). A progress report on the implementation of recommendations by the Presidential Commission on Drunk Driving. Washington, DC: U.S. Department of Transportation.
- Ross, H. L. (1984). Deterring the drinking driver: Legal policy and social control (revised and updated edition). Lexington, MA: Lexington Books.
- Snortum, J. R. & Berger, D. E. (1988). Drinking-driving compliance in the United States: Perceptions and behaviors in 1983 and 1986. Unpublished manuscript, Claremont McKenna College, Claremont, CA.

Figure 1

# Fatalities per 100 Million Kms Australia, USA, and Canada

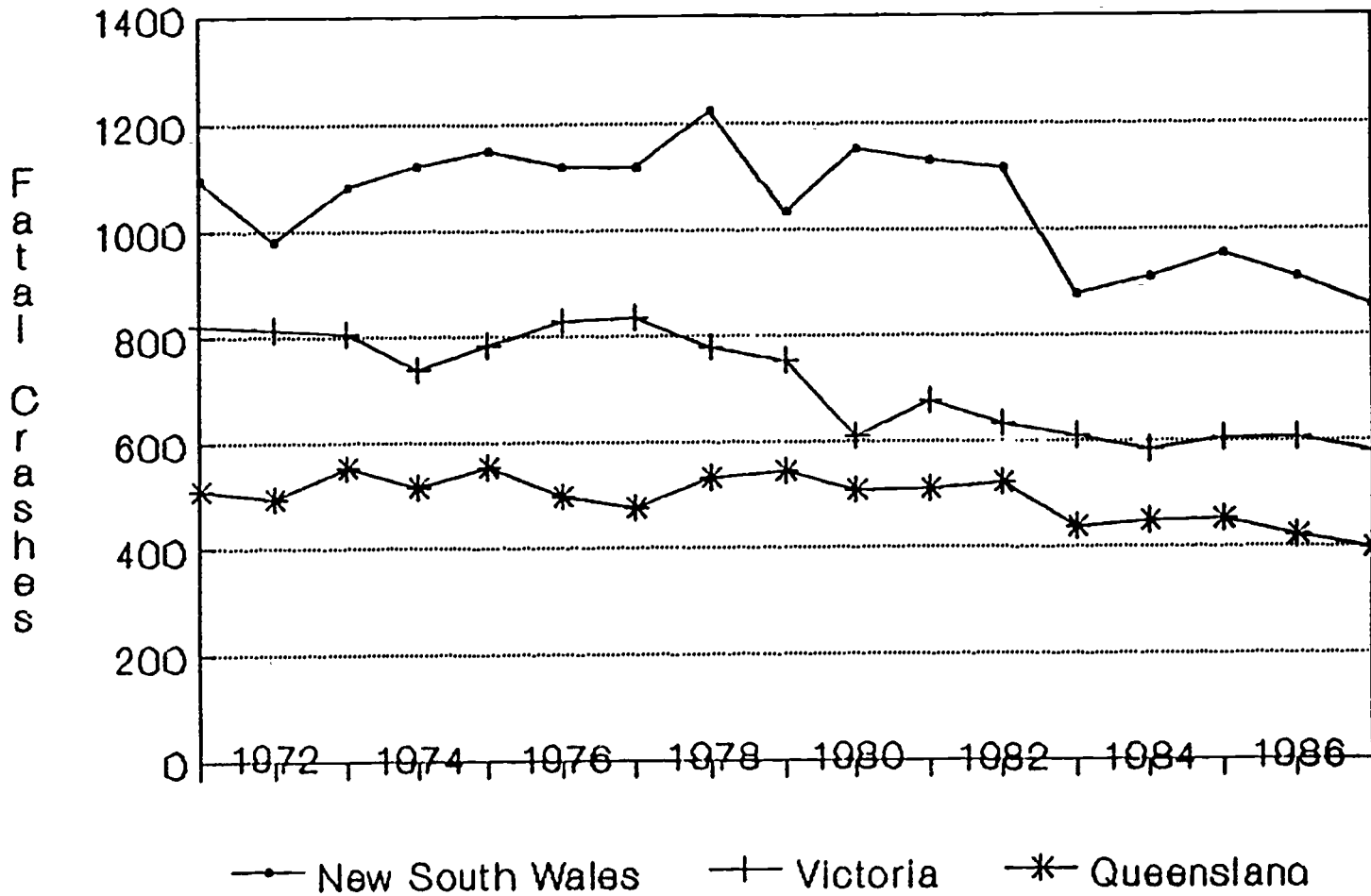


(Road Crash Stat. Aust., Jan 1988)



Figure 2

# Fatal Crashes by State



NEW SOUTH WALES

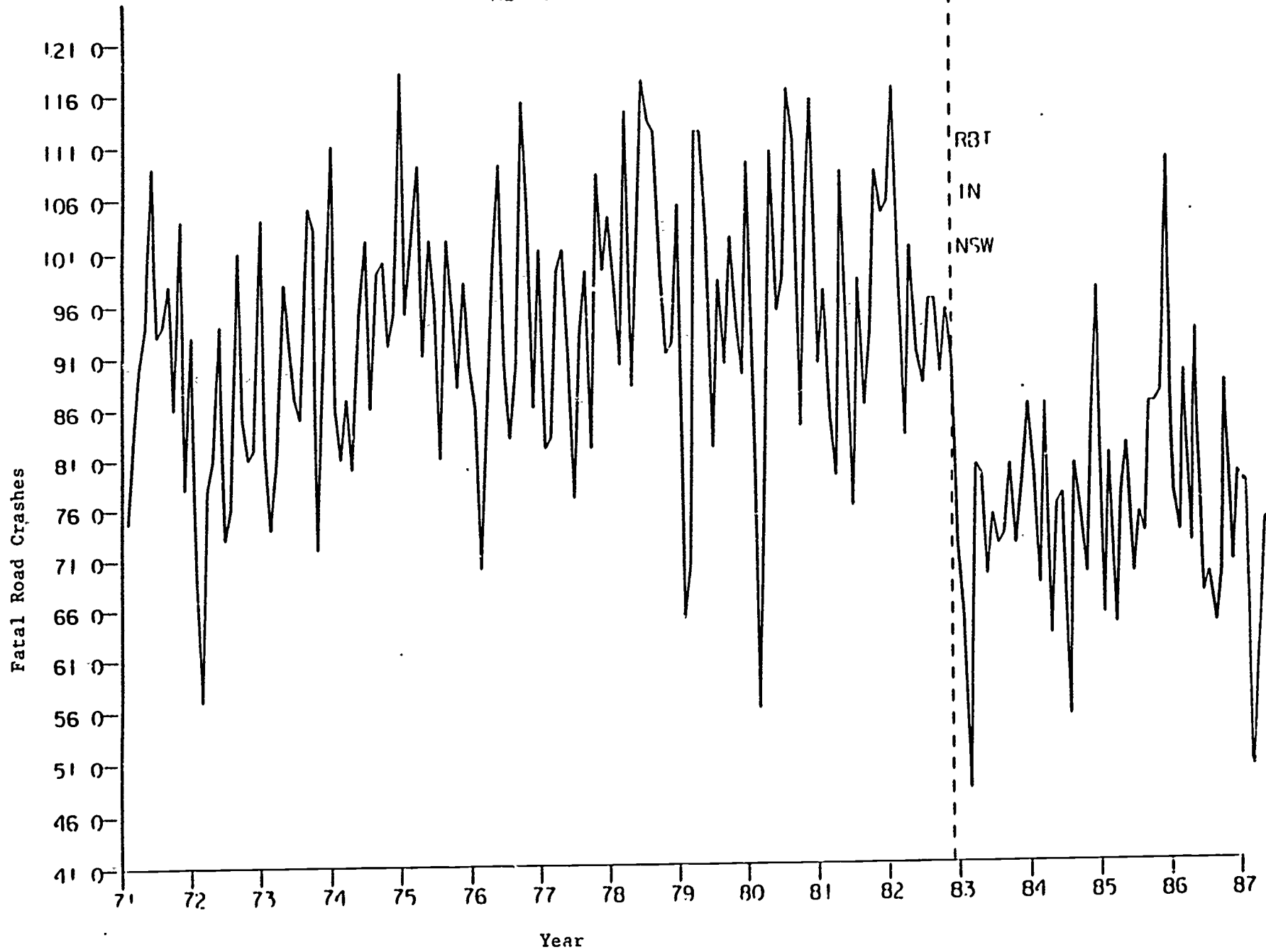
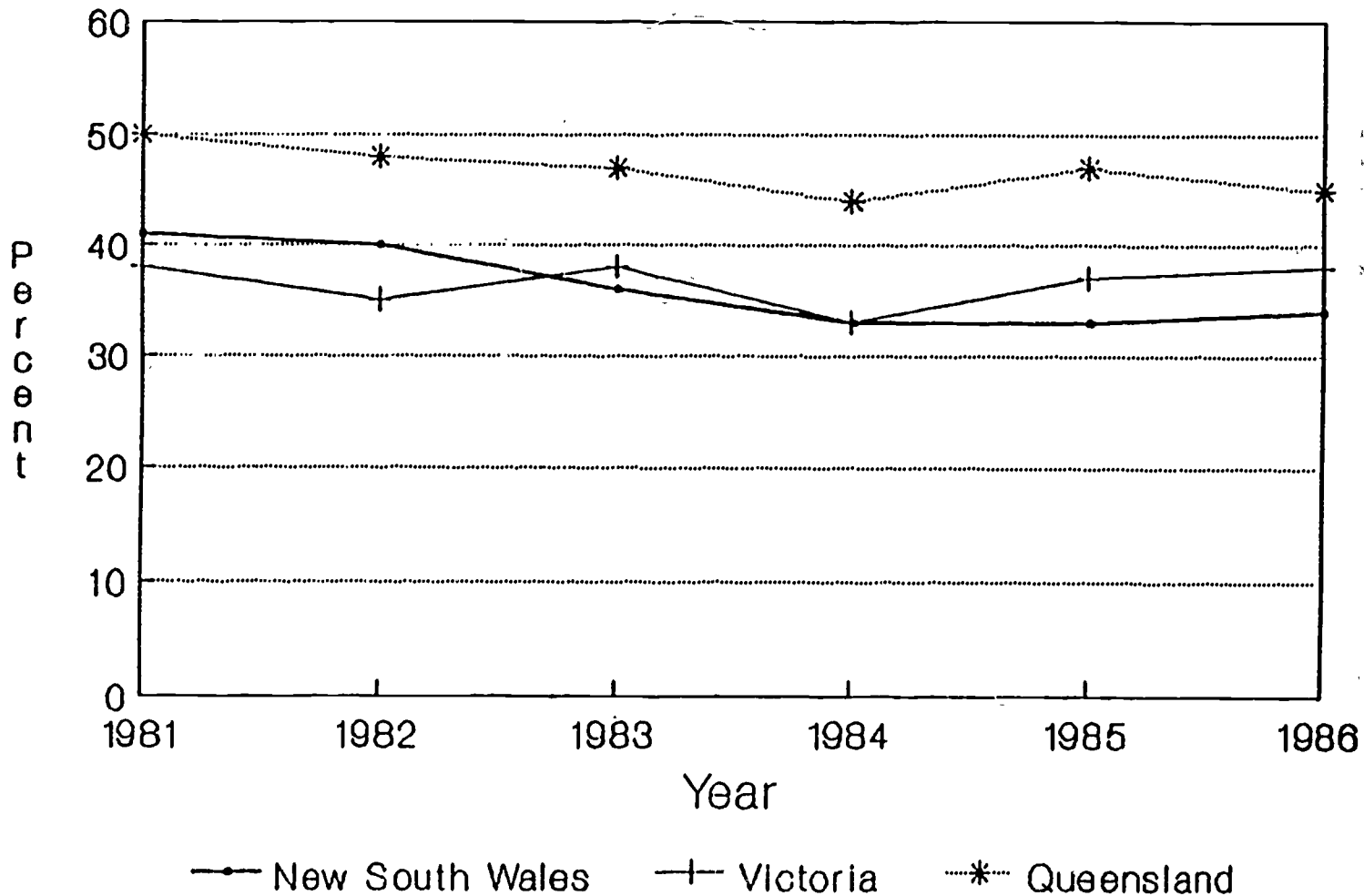


Figure 3

Figure 4

# Percent of Dead Drivers with BAC > .05



(Road Crash Stats, Aust., Feb. 1988)