

CHAPTER 4

THE LEGISLATION SUB-SYSTEM

The law which makes it illegal to drive with a blood alcohol concentration over .05 g/100 mls was first introduced into Victoria in December 1966. It is now contained in S.80, 80A, 80B, 80DA, 80E, 80F, 80G, 81A and 82 of the Motor Car Act 1958 and in S.318 of the Crimes Act 1958.

The legislation firstly provides a basis for changing social norms and values towards drink driving, as most people value obedience to the law. Secondly, it provides for the detection of transgressions and the imposition of sanctions on offenders. The ability of the legislation to change social norms and deter those who may transgress the law is however dependent upon the community's knowledge that the act is illegal, that the chance of detection is real, and that the punishment is non-trivial.

The RoSTA (1978/79) survey estimated that over 90 per cent of drivers who had driven with a blood alcohol concentration of over 0.05 g/100 mls knew that the legal limit was 0.05 g/100 mls. Eighty-two per cent of these drivers knew that disqualification from driving for the offence was from three to six months. (During the survey, the minimum period of disqualification was changed from three to six months). (95)

The legislation provides authority for the blood alcohol concentration testing of drivers, the prosecution of and the imposition of penalties on drink-drivers as well as for specific licence restoration procedures. These laws may be described under six headings:

1. Legislation which covers drink-driving offences where the blood alcohol level has not necessarily been measured.
2. Blood test legislation which requires the hospital medical officer who treats those who enter or are brought into a hospital for examination or treatment following a motor vehicle crash, aged fifteen or above to take a blood sample for alcohol analysis.
3. Breath test legislation which provides power for the police to use breath test procedures for measuring blood alcohol concentration.
4. Minimum penalties which must be imposed by the Magistrate's Court on all those convicted of drink-driving offences.
5. Culpable driving legislation which provides criminal sanctions for cases where someone has been killed.
6. Licence restoration procedures which apply after a period of licence disqualification has elapsed.

No comparison with other Australian legislation has been made since this has been fully reviewed elsewhere (56).

LEGISLATION NOT REQUIRING EVIDENCE OF BLOOD ALCOHOL CONCENTRATION

Two offences; Driving Under the Influence, and Drunk in Charge, do not require evidence of blood alcohol concentration for conviction.

An offence of Driving Under the Influence is contained in S.80B of the Motor Car Act 1958. The Motor Car Act 1909, contained the first substantive law of

this type in Victoria and in 1949 it was extended to provide specifically for impairment by drugs or liquor. This charge must be supported by proof that the defendant was incapable of having proper control of a motor vehicle which can be attributed to alcohol or drugs. A blood alcohol reading over .05 g/100 ml may be used as part of the evidence which supports a Driving Under the Influence charge.

A person may be charged with the offence of Drunk-In-Charge if he is found under the influence of alcohol while intending to drive a non-moving vehicle (S.82(1) Motor Car Act 1958) (Leach v Evans, 1952, All E.R.) (71).

BLOOD TEST LEGISLATION

Laws which provide statutory provision for blood test evidence to be used in support of serious driving charges were enacted in Victoria in 1955 and contained in Sections 408 and 408A of the Crimes (Driving Offences) Act 1955. These Sections were transferred to S.80D of the Motor Car Act in 1971.

On 3 April 1973, legislation was introduced into the Legislative Assembly which required the medical officer responsible for the examination of any person of or over the age of fifteen years who entered, or was brought into hospital because of injury received in a motor vehicle crash to take a blood sample for alcohol analysis.

Unless the medical officer responsible believed on reasonable grounds that the taking of blood was prejudicial to the care and treatment of the patient, a penalty of \$100 was imposed. This was increased to \$180 in 1978. Subsection 4 of this section was later included, specifying that the medical officer forward a statutory declaration to the Chief Commissioner within three days stating the medical grounds for not taking a blood sample. A penalty of \$20, increased to \$36 in 1978 was imposed for failure to do so.

This legislation resulted from the need to legislate against those road-users who were avoiding breath-testing procedures by going to hospital after a crash. The Chief Secretary, in his Second Reading Speech put forward three reasons for the amendment.

- * To provide evidence supporting drink-driving charges under Sections 80A, 80B, 81A and 82 of the Motor Car Act 1958.
- * To provide for diagnosis, treatment and management of casualties.
- * To provide reliable statistical data.

Two principal arguments were raised against this legislation: the infringement of civil liberties and of the doctor-patient relationship, and the possibility of injured drivers not attending hospital in order to avoid enforcement procedures.

Sub-Sections 2 and 3 of Section 80 DA were included later to rigorously protect the medical practitioner's right to use discretion in his involvement, and to minimise the possibility of penalties being imposed on him if he did violate S80 DA (1).

Sub-Section 2 provides that the medical officer may defend his actions of not taking a sample of blood in the reasonable belief that:

- (i) the person was under 15 years of age, or
- (ii) the person was not involved in a motor vehicle accident.

Sub-Section 3 also provided as a defence for not taking a blood sample that the person from whom the blood sample was to be taken prevented the medical officer from doing so. Sub-Section 7 was included, in 1977 to protect the medical officer from court action with respect to his actions in taking a blood sample.

Regulations governing the administration of the Act were drawn up by representatives of involved groups. Overall administration was allocated to the Breath Analysis Section of the Police Department which was already responsible for supplying breath analysis evidence to support charges under Sections 80A, 80B, 81A and 82 of the Act. At first, two blood samples were collected, one for the police and one for the patient. Peripheral venous blood was to be collected, and responsibility for administration and maintenance of the blood samples and related paperwork within each hospital was placed on the safe-keeper who is usually the senior casualty administrator. Evidentiary blood samples were to be analysed by the Medico-Legal Laboratory according to one of two methods:

* Kozelka & Hine (66)

* Gas Chromatography

Problems arose in several areas. For example, the Medico-Legal Laboratory was within the responsibility of the Law Department and the Police were responsible to the Chief Secretary's Office. As well, the Medico-Legal Laboratory quickly became overloaded and analyses were found to be not reproducible between different laboratories. Safe-keepers and medical practitioners made errors in completing the forms and this often prevented blood analysis results from being admitted in Court. However, since 1974 several amendments have been made to the legislation and to the regulations governing its administration.

- (1) The blood sample was divided into three to allow initial screening to be carried out at the Medico-Legal Laboratory and analysis of evidentiary samples to be performed at the Forensic Science Laboratory (August 1974).
- (2) A simpler version of the medical form (Schedule 6) was introduced (August 1976).
- (3) Forensic Science Laboratory took over all analyses (February 1977).
- (4) New bottles were introduced (mid 1977).

There are still anomalies in the blood-test legislation and its regulations:

* Hospitals outside the jurisdiction of the Health Commission are not required to take blood samples. For example, Repatriation and General Hospital, interstate hospitals, and private hospitals.

- * Blood samples taken more than two hours after the accident are not automatically admissible in court under S80F of the Motor Car Act 1958. There is considerable divergence of opinion regarding the appropriate time period for taking blood samples. However, convictions on longer time periods have been upheld (Heywood v Robinson, S.C., 1970; Woodward v McNab, Unreported, 1978; Regina v Cheer, S.C., 1979; Wright v Bastin, Unreported, 1978).

Additionally, some problems still exist in the implementation of some provisions of this legislation.

- * Acceptability of the evidence for drink-driving cases depends on establishing that the sample tested was the same sample that was taken from the person charged (samples have often been rejected because the forms have not been correctly completed).
- * Many insurance policies have a non-payment clause which operates if the driver can be shown to have a blood alcohol concentration over 0.1 g/100 ml. Some insurance companies (e.g. State Insurance Office) use a level of .05 g/100 ml. This means that the results of the analysis of a driver's blood sample may be used to prove the company's liability and this could encourage people who depend on insurance payments such as tow-truck operators, to dissuade their clients from hospital treatment. Further, while the Motor Accident Board pays out on a no-fault basis at present, any change in this policy could be expected to directly affect the patient's willingness to accept hospital treatment. It is interesting to note, however, that compensation is not given to cover loss of income if the claimant is proven to have been driving under the influence of alcohol or drunk in charge of a motor vehicle.
- * It is difficult to determine the extent to which medical practitioners do not take blood samples, and penalties for not doing so are unlikely to be effective deterrents.
- * The law places emphasis on proof of the identity of the driver from whom the sample was taken. Proof of its safekeeping and of other procedures, however, is not a requirement for conviction under S80DA, of the Act (Woodward v McNab, Unreported 1978).
- * The legislation requires hospital casualty department staff to take blood samples from a large number of people. No action results from most of this workload. It would be desirable if the workload could be reduced.

BREATH TEST LEGISLATION

In 1961, legislation which provided statutory provision for the measurement of breath alcohol levels to be admitted as evidence of blood alcohol concentration in serious cases was introduced to the Victorian Parliament in the Crimes (Breath Test Evidence) Act 1961. In 1971 this provision was transferred to Section 80 F(1) of the Motor Car Act.

Under S80 F(6) of the Motor Car Act 1958, a member of the police force may require anyone to undergo an evidentiary (breathalyzer) breath test if he has reasonable grounds for believing that person to have been driving or in charge of a motor car while apparently under the influence of intoxicating liquor, or

believes that he has been driving a motor car involved in a crash in the last two hours. He may also require anyone to undergo a preliminary breath test on much the same grounds (S.80 E(1)).

In addition, a member of the police force may require a driver to take a preliminary breath test at a preliminary breath testing station identified by suitable lights, signs or other devices, without necessarily having grounds for believing he is impaired by alcohol (S.80 EA).

Provisions for using breath-screening devices are contained in S.80 E(2), whereas the 'Breathalyzer 900' instrument is authorised for evidentiary purposes under S.80F of the Motor Car Act 1958. Section 80G allows presumption that the blood alcohol reading at any time within two hours of an event is not greater than the reading at the time of the event until the contrary is proved. It is illegal to refuse to comply with breath test procedures (S.80F(11)) or with preliminary breath test procedures (S.80E(3) and S.80EA(7)) when a policeman demands compliance within the requirements of the law.

The precise details which govern the administration of breath testing procedures are covered by Regulations 225, 226, 227, 228 and 229; these may be changed by Governor-in-Council whereas the legislation can only be altered by an Act of Parliament.

Several known anomalies and inadequacies exist in the breath test legislation and these are noted briefly here since details are contained in the Case Law determinations quoted.

- * The definition of 'reasonable grounds' as used in S80F(6) for requiring a defendant to furnish a breath test is open to different interpretations (Randall v Nickelson, Unreported, 1967; Rush v Fleming, Unreported, 1977).
- * Alcohol consumption prior to breath analysis will disallow the assumption that the reading up to two hours after the event is less than that at the time of the event, when upheld by expert evidence. (Holdworth v Fox, Unreported, 1973, Caughey v McClear, Unreported, 1977). It is an offence in Tasmania and New South Wales to alter one's B.A.C. level before analysis.

There have been problems with the legislation since its introduction and some cases do not proceed or are dismissed on technical grounds. However, these problems do not seem to affect as many people as the problems in the blood test legislation.

PENALTIES

The penalties which must be imposed on drivers who have been convicted of a drink-driving offence involve licence cancellation, a monetary fine, and a minimum period of disqualification from driving. These penalties are greater for second or subsequent drink-driving offences as well as for higher blood alcohol readings.

Sub-section 3A of Section 81A of the Motor Car Act 1958 provides that when someone is convicted of exceeding a blood alcohol concentration of .05 g/100 mls, a previous conviction for Driving Under the Influence is deemed to be a prior conviction for the purpose of imposing penalties. However, the reverse

does not apply. Furthermore, a person with a previous conviction for refusing a breath test, refusing a preliminary breath test or drunk-in-charge is only liable to the penalty and licence disqualification for first offence upon subsequent conviction for exceeding .05 g/100 ml or driving under the influence.

Minimum penalties for drink-driving convictions were first introduced in 1963 in an attempt to counter the leniency of penalties believed to be imposed by some courts (45). In 1978 the Government further withdrew magistrates' discretionary power: heavier minimum penalties were introduced and the power to adjourn the case on a bond under the Magistrates' Summary Proceedings Act 1975 was restricted to first offenders with a blood alcohol reading .1 g/100 mls and below (Bakker v Stewart, Wilson v Kerr; Unreported 1979).

Under the Motor Car Act 1958, the following penalties apply to drink-driving convictions in 1981.

(a) Driving Under the Influence: Section 80B

In the case of a first conviction: a maximum fine of \$1000 or imprisonment for a maximum of 6 months, and licence cancellation for a minimum of 2 years.

In the case of a second or subsequent conviction: imprisonment for a maximum of 2 years and licence cancellation for a minimum of 2 years.

(b) Drunk-In-Charge: Section 82(1)

In the case of a first conviction: a maximum fine of \$500. In the case of a first second or subsequent conviction: a maximum fine of up to \$2000 or imprisonment for a maximum of 6 months, and licence cancellation for a minimum of 12 months.

(c) Exceeding .05 g/100 mls: Section 81A

In the case of a first conviction: a maximum fine of \$500 and, in addition, licence cancellation for a minimum of 6 months if the blood alcohol concentration is over .05 g/100 mls but less than .1 g/100 mls for a minimum of 12 months if the blood alcohol concentration is .1 g/100 mls but less than .15 g/100 mls; and for a minimum of 2 years if the blood alcohol concentration is .15 g/100 ml or above.

In the case of a second or subsequent conviction: a maximum fine of \$1000 or imprisonment for a maximum of 6 months and, in addition, licence cancellation for a minimum of 2 years if the blood alcohol concentration is over .05 g/100 mls but less than .15 g/100 mls; and for a minimum of 4 years if the blood alcohol concentration is .15 g/100 ml or above.

(d) Refusing a Breath Test: Section 80F and Refusing a Preliminary Breath Test: Section 80E

In the case of a first offence: a maximum fine of \$500 and licence cancellation for a minimum of 2 years.

In the case of a second or subsequent offence: a maximum fine of

\$1000 or imprisonment for a maximum of 6 months, and licence cancellation for a minimum of 4 years.

- (e) Hindering or Obstructing a Doctor taking a Blood Sample: Section 80 DA

A maximum fine of \$180 may be imposed for any conviction.

CULPABLE DRIVING LEGISLATION

Culpable driving is an indictable offence and is therefore contained in the Crimes Act 1958 (Section 318). The offence is stated in S.318(1).

'Any person who by the culpable driving of a motor car causes the death of another person shall be guilty of a misdemeanour and shall be liable to imprisonment for a term of not more than seven years or to a fine of not more than \$1000 or to both such imprisonment and fine'.

This sub-section further states that:

'the court shall cancel his licence and/or disqualify him from driving for not less than 12 months'.

In legal terms, culpable driving is defined as driving a motor car 'recklessly', that is, consciously and unjustifiably disregarding a substantial risk to someone else's life; or 'negligently', which is unjustifiably and to a gross degree failing to observe the standard of care which a reasonable man would have observed; or whilst under the influence of alcohol or a drug to such an extent as to be incapable of having proper control of the motor car. Alcohol does not always form part of the offence of culpable driving.

When an offender is charged with culpable driving, other lesser charges may also be made against him, for example, Driving in a Manner Dangerous or Driving Under the Influence of Alcohol. These lesser charges are withdrawn if the offender is convicted of Culpable Driving and may be heard in a Magistrate's Court if the Culpable Driving charge is dismissed.

CHAPTER 5

THE ENFORCEMENT SUB-SYSTEM

The enforcement sub-system of the drink-driving countermeasure system consists of the procedures used to enforce the drink-driving laws already described in Chapter 4. Its main functions are to contribute to general deterrence effects in the community, and to identify people with whom a specific deterrence effect might be achieved. The role of enforcement in generating a general deterrence effect is to persuade members of the general community who may drive after drinking that the chances of detection are too high for them to take the risk of being caught. (The role of sanctions is to convince them that 'getting caught' leads to consequences sufficiently undesirable that they should avoid that outcome).

There are various factors that may influence the general public's subjective estimate of the probability of conviction for a drink driving offence.

1. Enough people must be being detected for the chance to be seen to be a real one.
2. Police enforcement should be highly visible.
3. The method of detection must be seen by members of the community as likely to be applicable to them.
4. The chances of escaping conviction once detected should be low, and everyone should know this.

1. NUMBERS DETECTED

The number of drivers detected and convicted for a drink-driving offence is relevant to general deterrence only in so far as it influences a driver's belief that he will be caught. He may read reports of people being convicted, or he may know someone who has been convicted.

There are three main systems operating to detect alcohol affected drivers. Figure 2 shows the sequence in which these main procedures operate and an estimated number of the drivers involved. Detailed information about the drivers who follow each alternative pathway has been collected and is presented below.

Approximately 48,385 drivers were tested in 1977. This number comprises about 1.7 per cent of the adult population of Victoria (4) and 2.5 per cent of licensed drivers (82). Fourteen thousand drivers were detected over .05 g/100 ml. This is an average of 267 per week. Assuming that 200,000 drivers each week drove with a blood alcohol concentration over .05 g/100 ml, then one in 750 people who drive each week are detected. It should be noted that this figure is very approximate.

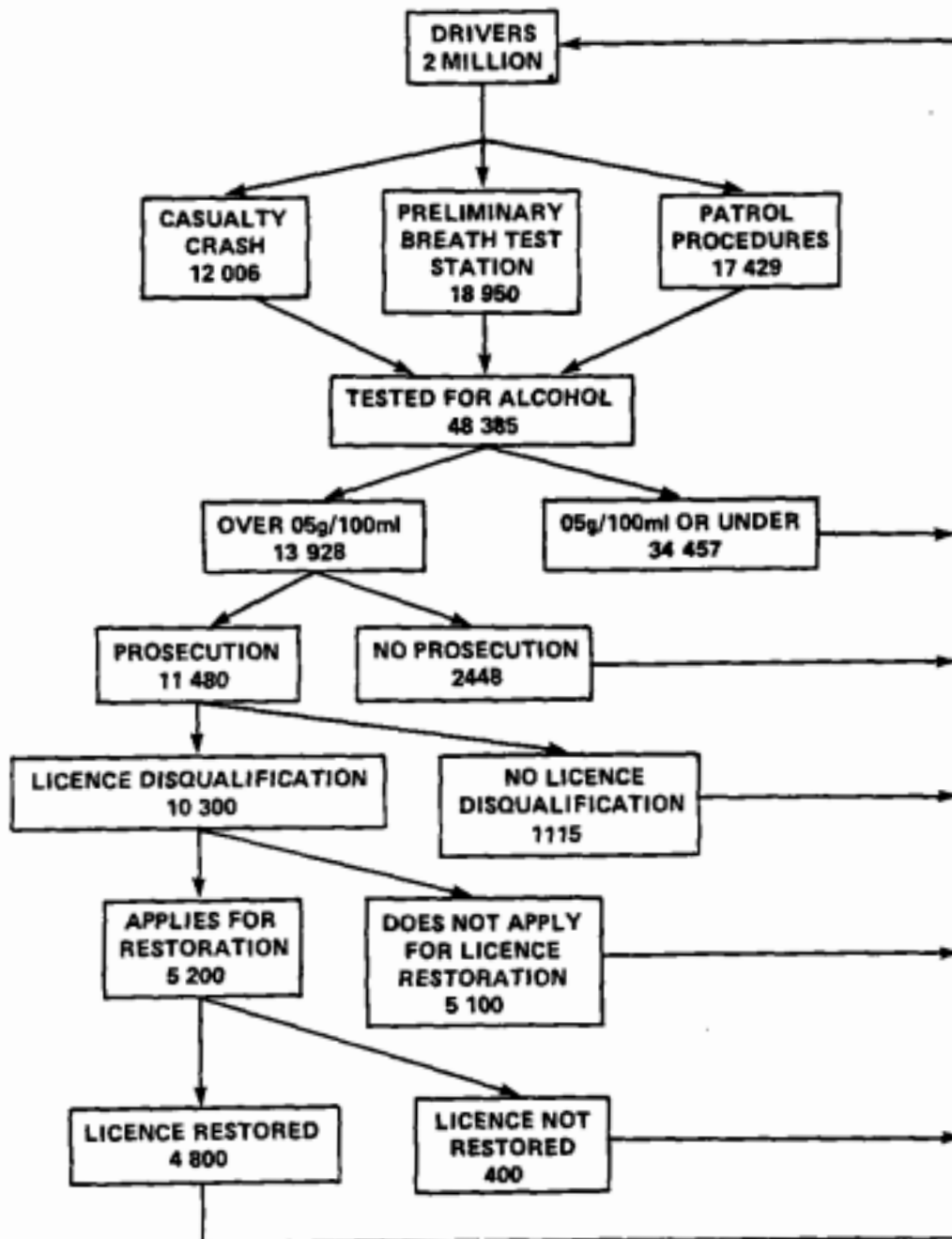
Procedures Involved in the Identification of Drivers Liable for Alcohol Testing

(a) Casualty Crash Procedures

Information about casualty crashes is collected by seven largely independent organisations in Victoria. Interpretation of this information is made difficult by the fact that these organisations use different selection criteria. Although this problem was

publicised as long ago as 1973 (103), there are still no published estimates about the influence which this selection has on the statistics derived from the different sources.

FIG. 2: FLOW DIAGRAM OF ALL DRIVERS TESTED



(I) Police Accident Records System

Thirty five per cent of metropolitan crashes in which a driver was taken to hospital were not reported to police. This percentage increased to 47 per cent for those crashes in which drivers did not have a blood sample taken in hospital (Table E-1, Appendix E).

(II) Ambulance Service

Information is collected by ambulance officers about all drivers whom they transport to hospital. These drivers represent about two-thirds of those taken to hospital from city crashes who have medical expenses over \$100 paid by the Motor Accident Board (80). Based upon an analysis of the metropolitan component of a group which comprised some 55 per cent of all driver claimants upon the board who were treated at hospital, the drivers taken by ambulance were not found to be significantly different in terms of age, sex, licence status of vehicle type or occupation from those taken to hospital by other means (Table E-2, Appendix E).

(III) Coroner's Court

Records relating to fatal crashes are compiled at the Coroner's Court and include all evidence presented at the inquest into the death. No information is available about drivers for whom no inquest is held. (That is, for those whom the Coroner has determined to have died of natural causes.) Information collected by the Coroner is not routinely collated.

(IV) Motor Accident Board

The Motor Accident Board of Victoria meets all medical expenses incurred as the result of a motor vehicle crash except when the injured person is covered by the Workers Compensation Act (139), or is a non-Victorian resident injured in an accident in which none of the motor vehicles involved was required to be registered in Victoria. An unidentified vehicle is treated as being one which is registered in Victoria. Edited statistical information is collated and published about people who cost the Motor Accident Board over \$100.

(V) Breath Analysis Section, Victoria Police

Some information about those road users who are treated in hospital and have a blood sample taken is collated by Victoria Police.

(VI) Hospital Computer Service

Information about those admitted to most hospitals in Victoria is stored by the Hospitals Computer Service at Monash University. It is subject to medical confidentiality arrangements and is not normally

released in a form which relates to road safety.

(vii) Statistics Section, Traffic Department, Victoria Police

This section records information about all drivers killed in motor vehicle crashes. Fatality data excludes those people who die over thirty days after the crash or those whom the Coroner has determined to have died from natural causes.

In 1977 there were 831 fatal crashes and 14,364 injury crashes reported to police (128). The number of alleged drivers who were taken to hospital is in the range of 10,000 to 12,000 (128) and 424 to 448 drivers were killed, depending on the definitions used by different data collecting organisations. As well, it has been estimated that about 56 per cent of those drivers involved in casualty crashes were not taken to hospital, that is, about 13,600 drivers. Figure 3 is a simple flow diagram of the number of drivers involved in casualty crash procedures.

Twenty five per cent of all drivers involved in metropolitan crashes were ascertained to have been drinking either by having blood samples taken or in the opinion of the ambulance officers attending the crash.

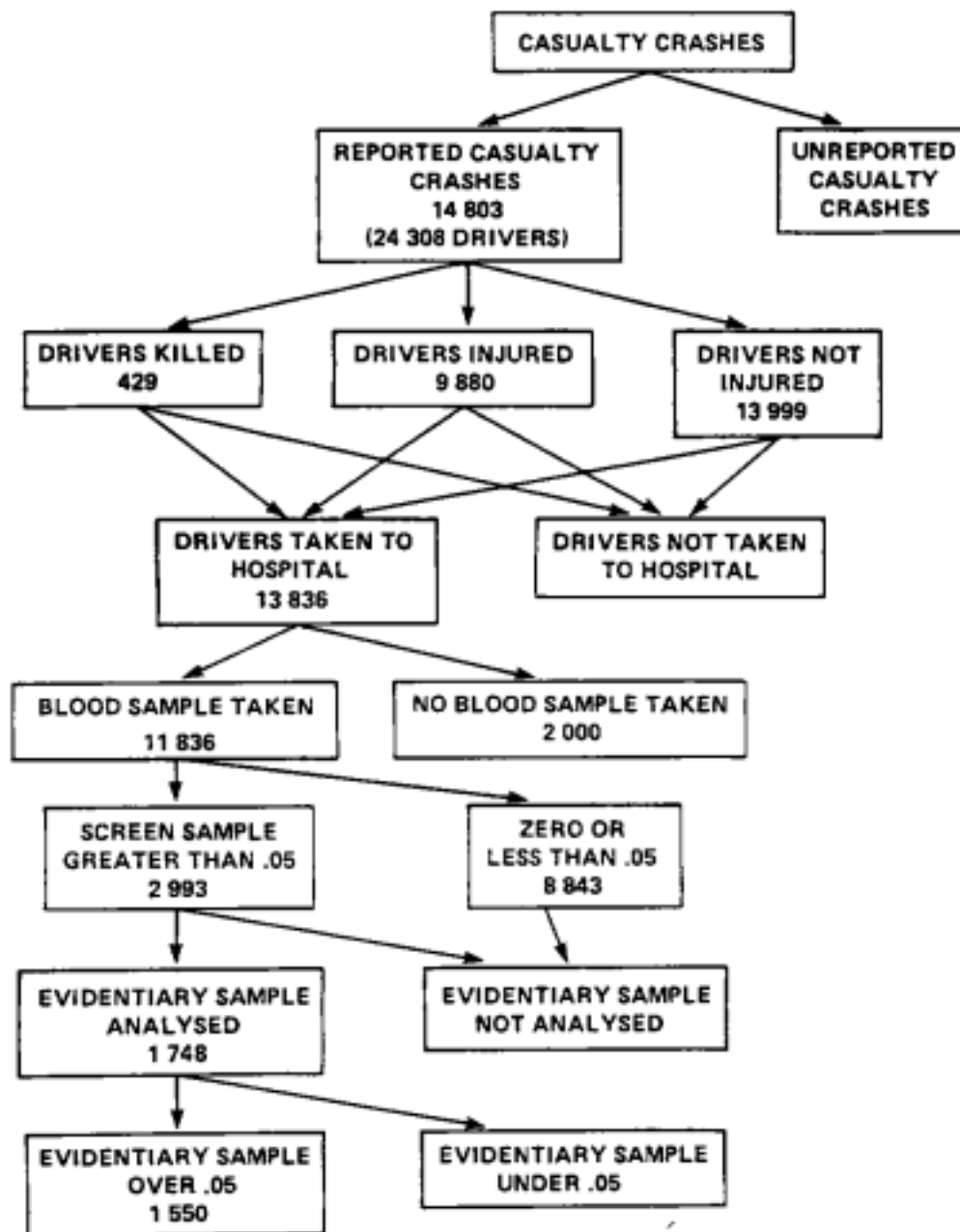
Tested and Untested Drivers Involved in Metropolitan Casualty Crashes

Among drivers taken to hospital, those who were blood tested were significantly different from those who were not blood tested only in terms of residence and occupation. Thirty four per cent of blood-tested drivers lived in the eastern suburbs compared with only 14 per cent of those who were not blood tested. A higher proportion of drivers blood tested were employed in blue-collar occupations (38 per cent compared with only 9 per cent). Definitions of suburban areas and occupational status are given in Appendix E-16.

Among drivers not taken to hospital, those who were breath-tested differed significantly from those who were not breath-tested in terms of alcohol use, sex, licence status and type of vehicle driven. Compared with those who were not tested, there was a significantly greater likelihood for breath-tested drivers to have the following characteristics:

- * drinking prior to the crash (of the group tested, 98 per cent had been drinking; of the group not tested 16 per cent had)
- * male (96 per cent compared with 81 per cent)
- * not hold a current full driver's licence (41 per cent compared with 19 per cent)
- * not ride a motor cycle (97 per cent compared with 89 per cent)
- * not drive a heavy truck (100 per cent compared with 95 per cent).

FIG. 3: FLOW DIAGRAM OF DRIVERS TESTED BY CASUALTY CRASH PROCEDURES



No significant differences were found between tested and untested drivers with respect to their history of prior convictions. (Table E-3, Appendix E).

The three groups of drivers involved in casualty crashes: killed drivers, injured drivers taken to hospital, and drivers not taken to hospital, differed significantly from one another in terms of alcohol use, age, sex, occupation, licence status and vehicle type. No differences, however, were found in relation to residence, previous traffic, drink-driving or criminal convictions. (It should be noted that comparisons in this section are based on a study of metropolitan drivers only.)

Killed and injured drivers tended to have similar characteristics, with the main differences occurring between drivers not taken to hospital and these two groups.

There is some indication that many drivers not taken to hospital were injured and refused ambulance transport. The ambulance survey found that nearly 9 per cent of drivers, who were in the opinion of ambulance officers injured, refused transportation. This was approximately 3 per cent of all drivers involved in casualty crashes. While reasons for refusal were not surveyed, it is apparent that some of these drivers refused transportation for fear of being tested for alcohol. Nineteen per cent of drivers not taken to hospital, that is, thirty per cent of drivers who refused to be taken to hospital, had, in the opinion of ambulance drivers attending the crash, been drinking prior to the crash. Compared with drivers not taken to hospital there was a significantly greater likelihood for drivers killed or who attended hospitals to have the following characteristics:

- to have been drinking prior to the crash. This finding may however be confounded with:
 - (i) the finding that a significantly greater proportion of professional drivers and those people driving trucks who may be less likely to have been drinking, not being taken to hospital, and
 - (ii) ambulance drivers may have underestimated the proportion of drivers not taken to hospital who may have been drinking.
- aged under twenty six years. On the one hand this may suggest that young people are involved in more severe accidents than other groups. On the other hand the over-representation of young drivers being killed or attending hospitals may be caused by:
 - (i) young drivers being more willing to attend hospitals, and
 - (ii) being under-represented in the categories of people who are driving trucks and who are less likely to be injured and over-represented as motorcyclists, where probability of injury requiring hospitalisation is higher.

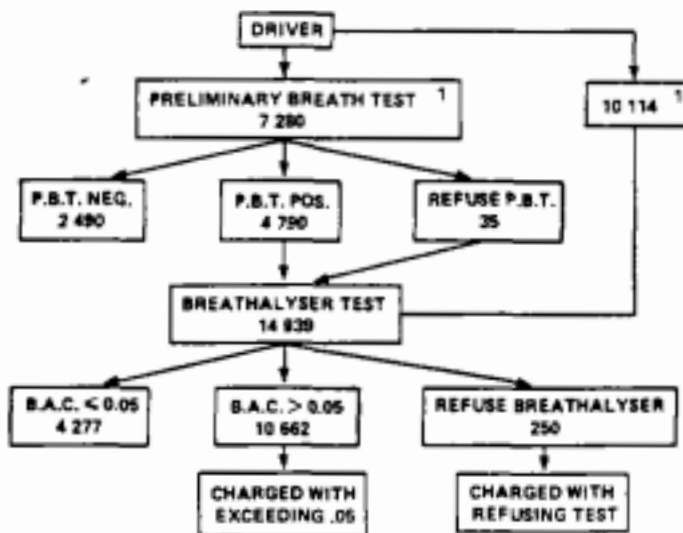
Table E-4, Appendix E, contains a comparison between these groups of drivers.

That some injured drivers refuse to be taken to hospital has two implications. Firstly some drivers are avoiding the alcohol countermeasures system, and secondly, it highlights the biases inherent in attempting to estimate alcohol involvement in crashes.

b) No Crash or Property Damage Only Crash Procedures (Patrol Procedures)

Approximately 17,400 drivers were tested because police believed their driving to be impaired or that they had been drinking. Figure 4 is a simple flow diagram of the number of drivers involved in these patrol procedures.

FIGURE 4: FLOW DIAGRAM OF DRIVERS TESTED BY PATROL PROCEDURES



1. Total number required to submit to a breath-test (or analysis without an initial test) - 17,400.

(c) Preliminary Breath Test Station Procedures

Any motorist may be required to be tested for alcohol when he is stopped by a uniformed member of the police force in the vicinity of a marked Preliminary Breath Test Station. During 1977, 18,950 drivers were screened using this procedure. 2.4 per cent of these drivers were further detained for evidentiary testing (128), and 1.4 per cent found to have a blood alcohol concentration above .05 g/100 ml on a breathalyser. Figure 5 is a simple flow diagram of the number of drivers involved in this procedure.

Insofar as a general deterrence effect is generated by the detection of a large number of drinking drivers, then of the three enforcement techniques, patrol activity is clearly the best. In 1977, 10,662 drinking drivers were detected by police patrols, 1,550 by compulsory hospital blood testing, and 273 by Preliminary Breath Test Stations.

FIGURE 5: FLOW DIAGRAM OF DRIVERS TESTED BY PRELIMINARY BREATH TEST STATIONS

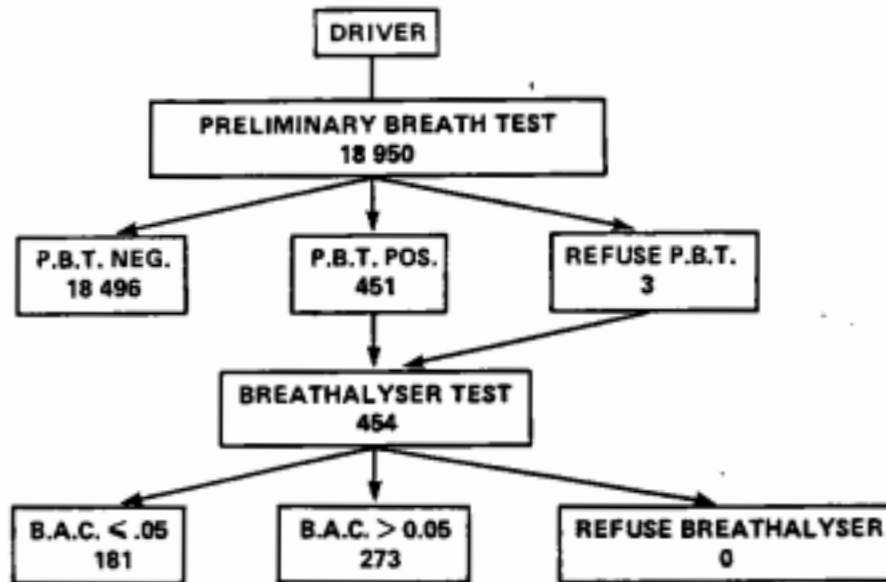
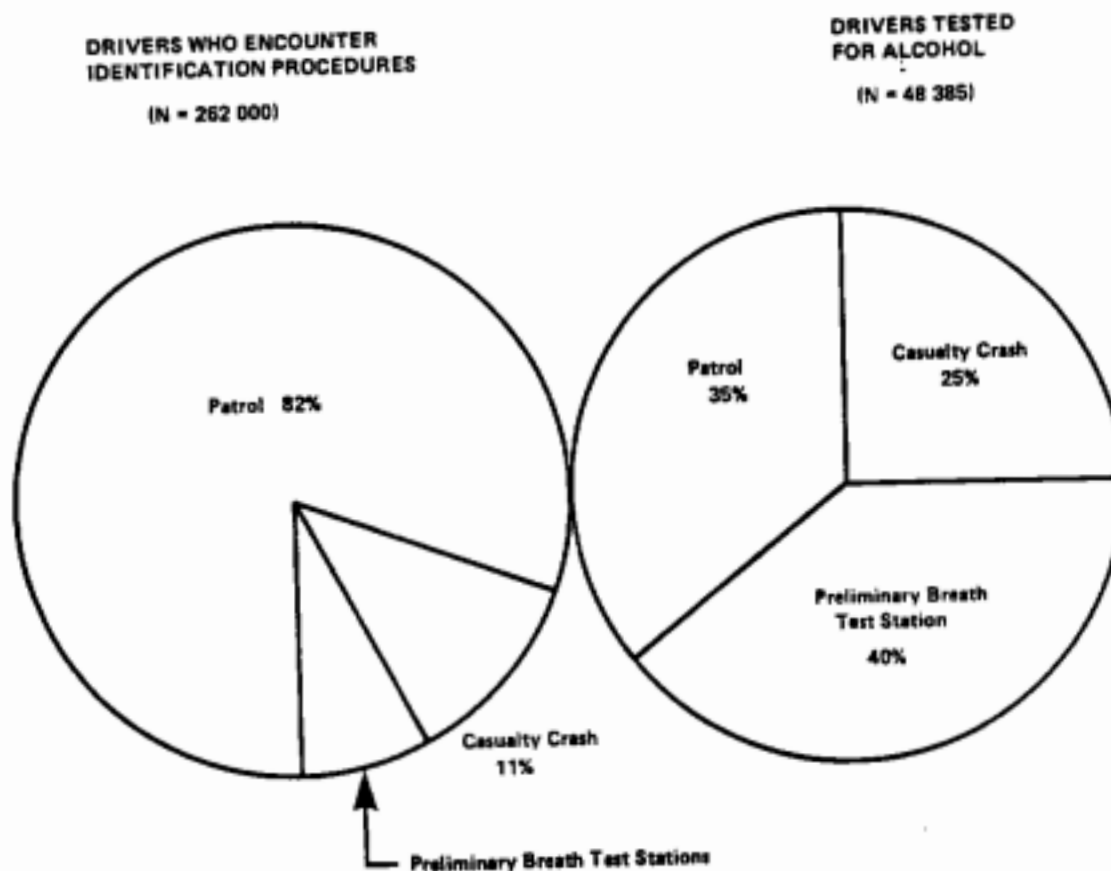


FIGURE 6: DISTRIBUTION OF IDENTIFICATION PROCEDURES IN IDENTIFIED AND TESTED DRIVER POPULATIONS



2. POLICE VISIBILITY

Driver perceptions of the chances of detection will be increased if they frequently come into contact with members of the Police Force, in situations where they are driving, and could be subject to a test for alcohol.

Of interest, then, is the total number of drivers who encountered procedures whereby they could have been tested, and the total number who were tested.

In 1977, five times as many drivers encountered procedures whereby they could have been tested for alcohol as were in fact tested. The likelihood of being tested was found to be dependent on the kind of identification procedure encountered (Fig. 6).

Involvement in casualty crash attended by police

Police reports show that in 1977 24,308 drivers were involved in casualty crashes (8). At the discretion of the police, all of these drivers may have been required to undergo a breath test.

Apprehension by a member of the police force who detected a driving impairment or traffic infringement

In 1977 there were 214,000 driving offences or infringements in which a member of the police force came into contact with the driving public. At the discretion of the police, a breath test could have been taken. If the member of the police force had reason to believe the offender had been drinking, and that his driving was impaired.

Apprehension at a Preliminary Breath Test Station

Preliminary Breath Test Stations are set up specifically to test drivers for alcohol and it seems that they test between 8 and 40 per cent of drivers who pass the station, depending on traffic density and the number of alcohol-involved drivers detected at the site. Assuming that a driver only passes a site once, this means that between 49,000 and 245,000 drivers will have passed a Preliminary Breath Test Station in 1977; that is, between 2 and 12 per cent of the licensed drivers in Victoria. Since 57 per cent of the drivers tested at Preliminary Breath Test Stations knew why they had been stopped, it may be estimated that between 1 and 7 per cent of licensed drivers were made aware of these procedures in 1977 through direct contact with them. Up to 30th June, 1979, a total of 111,404 drivers had been tested at Preliminary Breath Test Stations and, using the same calculations, between 26 and 40 per cent of licensed drivers would at that time have been made aware of the procedure through having seen it in operation.

Insofar as a general deterrence effect is generated by drivers seeing police in situations where they could have been tested, then police patrols and preliminary breath testing stations are both relatively effective, compared to compulsory hospital blood sampling.

3. DRIVER PERCEPTION OF THE RISK OF DETECTION - RELEVANCE TO THE INDIVIDUAL

Discussions with drinking drivers consistently show that most estimate their chances of detection for drink driving as less than the average drink-drivers chance. It is clear that a third factor is relevant in the determination of any individual drink driver's perception of the risk of detection. The three

factors could be summarised as:

- (a) perception of the number of people detected;
- (b) perception of the risk of coming into contact with a police officer when driving after drinking; and
- (c) perception of the likelihood of being subjected to a test for alcohol if coming into contact with a police officer.

A test for alcohol ideally follows as a matter of course if drivers are taken to hospital following an accident. The perception of the probability of detection for drink driving by this procedure would therefore be related to the individual driver's perception of the probability that he will be involved in an accident.

This is known to be low. It is quite likely, therefore, that drivers perceive the compulsory blood alcohol testing at hospitals as not particularly relevant to them.

A test for alcohol also follows as a matter of course when drivers are stopped at a Preliminary Breath Test Station. The probability of detection by this procedure is therefore probably related solely to factors (a) and (b) above.

It is known that police on patrol test for alcohol when they have some reason to believe the driver may have been drinking. Drinkers who feel their driving is not obviously affected may assess the risk of detection by police patrol as low. It is known that most drinking drivers believe their driving is not obviously affected.

This theoretical analysis would suggest that preliminary breath testing stations would be seen as most relevant by drinking drivers.

Also relevant to a drinking driver's estimate of the relevance of detection procedures to him would be knowledge of the characteristics of those who are detected, and his estimate of how similar he is to such people.

Whilst there is no data available on drivers' perception of the chance of being tested once placed in a position where a test may occur, there is some data available relating to the characteristics of drivers detected. (Table 3, Table E-5, Appendix E.)

As the figures presented in these tables give a picture of drivers actually tested rather than the driver's perception of that reality, it is largely a matter of speculation as to how much driver perception is influenced by who is actually tested. Given the apparent importance of this area to the creation of a general deterrence effect further research is required.

Tested Drivers and the Victorian Population

Comparisons have been made between tested drivers and the population of driver licence holders and the general Victorian population over fifteen years of age.

It can be seen from Table 3 that tested drivers are significantly more likely to be:

TABLE 3

CHARACTERISTICS OF DRIVERS TESTED FOR ALCOHOL IN VICTORIA 1977
 - COMPARED WITH DRIVER'S LICENCE HOLDERS AND THE ADULT POPULATION

	DRIVERS TESTED FOR ALCOHOL %	DRIVER'S LICENCE HOLDERS %	VICTORIAN POPULATION (Aged over 15 years) %
Total Number in 1977	48,385 ¹	1,987,000 ²	2,750,000 ³
Sex	(n=2175)	(n=1197) ⁴	(n=2,649,313) ³
- Male	93 ⁰ *	63 ⁰ Δ	50*Δ
- Female	7	37	50
Age	(n=2089)	(n=1197) ⁴	(n=2,649,313) ³
- Less than 26 years	46 ⁰ *	21 ⁰	21*(15-24 years)
- 26 to 40 years	34 ⁰ *	36 ⁰ Δ	25*Δ(25-39 years)
- Over 40	20*	44 ⁰	56 ⁰ *(40+ years)
Residential Address	(n=2019)	(n=825) ⁸	(n=2,650,261) ⁵
- Central Melbourne	5	2	5
- Northern Suburbs	9 ⁰	10	11 ⁰
- Eastern Suburbs	20 ⁰	29	21 ⁰
- South Eastern Suburbs	23 ⁰	18	17 ⁰
- Western Suburbs	14 ⁰	9	13 ⁰
- Rural Victoria	27 ⁰	32	33 ⁰
- Interstate & Overseas	3 ⁰	0	0 ⁰
Occupation	(n=1571)	(n=820)	(n=2,649,313)
- White Collar	25.5	40	25.5
- Blue Collar	61 ⁰	28	30 ⁰
- Pensioner ⁹	7 ⁰	14	17 ⁰
- Other (including Housewife)	17 ⁰	18	28 ⁰

NOTES

The use of similar symbols indicates a statistically significant difference between the two groups at the 0.1% level of significance ($p < 0.0001$).

Statistical significance of the difference between two driver samples in terms of the proportion of drivers in a particular category (e.g., driver sex - male) was judged by the Normal distribution approximation for the difference of two proportions. The finite population correction was employed in estimating the sample variance for each proportion, and where a sample proportion was based on samples from more than one stratum (i.e., driver identification procedure), the sample variance was calculated from Cochran's approximation for the variance of a proportion from a stratified sample.

1. Calculated from the number of drivers reported in source references: 73, 125, 127, 128
2. Source reference: 81
3. Source reference: 4
4. Source reference: 95
5. Source reference: 4
6. Source reference: 10
7. Source reference: 9
8. Source reference: 95
9. Includes pensioners, students, unemployed and retired people.

- * male (93 per cent as compared with 63 per cent of licence holders and 50 per cent of the Victorian population.)
- * ages less than twenty-six years (46 per cent as compared with 21 per cent and 20 per cent),
- * living in the western or south eastern suburbs; (37 per cent as compared with 27 per cent and 30 per cent)
- * blue collar workers (61 per cent as compared with 28 per cent and 30 per cent).

Table 4 shows the general characteristics of drivers tested for blood alcohol concentration. It compares the percentage of drivers of given biographical characteristics with the methods of identification procedures used and with those found with a blood alcohol concentration over or under the 0.05 g/100 ml level. In comparing the three identification procedures, extreme caution must be exercised in interpreting the data. Significant differences may reflect either the selection procedures used or reflect the underlying drink-driving patterns in Victoria. For example, people aged 26 years or less were identified significantly more over .05 g/100 ml in casualty crash and patrol procedures than through preliminary breath test station procedures. If it is assumed that preliminary breath test stations are random, this phenomenon suggests:

- (i) there is an interaction effect between youth and drink-driving as evidenced by high crash involvement,
- (ii) patrol procedures result in more young drivers vis-a-vis other age groups being tested, or
- (iii) the high casualty crash figures reflect the fact that significantly more young people attend hospital than other age groups (p.34).

Because of these difficulties in interpreting the table, only the more salient features of the table will be discussed.

The 'Casualty Crash' group and the 'Preliminary Breath Test Station' group tended to have similar characteristics with the main differences occurring between the 'Patrol' group and these two groups. Discussion will therefore focus on those characteristics of the Patrol group which differentiate it from the other two groups.

Compared with the 'Casualty Crash' and 'Preliminary Breath Test Station' groups of drivers, there was a significantly greater likelihood for the 'Patrol' group to have the following characteristics:

- * a measurable blood alcohol concentration (93 per cent compared with 34 per cent of the Casualty Crash group and 13 per cent of the Preliminary Breath Test Station group).
- * male (in fact, 41 per cent of identified men were identified by patrol procedures compared with only 6 per cent of identified women - Figure 7);

TABLE 4

GENERAL CHARACTERISTICS OF DRIVERS WHO EITHER WERE BREATHALYSED
OR HAD A BLOOD SAMPLE TESTED

	CASUALTY CRASH (METRO. ONLY) ¹		NO CRASH OR PROPERTY DAMAGE CRASH ONLY		PRELIMINARY BREATH TEST STATIONS	
	Over ² .05g/100ml %	.05g/100ml ³ or Under %	Over ⁴ .05g/100ml %	.05g/100ml ⁵ or Under %	Over ⁴ .05g/100ml %	.05g/100ml or Under %
Number in 1977 (N=48385)	2,993 ⁸	9,013 ⁸	10,662 ⁹	6,767 ⁹	273	18677
Proportion of Drivers	24%	76%	61%	39%	1.5%	97.5
Sex (n=182)	(n=224)	(n=233)	(n=490)	(n=266)	(n=630)	
- Male	88 ⁰ ▽ ▽	74 [▽] Δ	98 [▽]	95 ⁺ Δ	97 ⁰ Δ	81 ⁺ Δ
- Female	12	26	2	5	3	19
Age (n=180)	(n=218)	(n=216)	(n=488)	(n=266)	(n=622)	
- Less than 26 years	53 ⁰	50	46 ⁰	58 ^Δ	19 ⁺ 0 Δ	37 ^Δ Δ
- 26 to 40 years	31 ⁰	26	35	28	42 ⁰	37
- Over 40 years	16 ⁰	24	20	14 ⁰	29 ⁰	25 ⁰
Residence (n=181)	(n=217)	(n=216)	(n=461)	(n=263)	(n=618)	
- Central Melbourne	7	8	4	7	7	5
- Northern Suburbs	12 ⁰	11	6 ⁺	11	19 ⁺ 0	16
- Eastern Suburbs	29	39 ⁰	18	18 ⁺	27	22
- S/Eastern Suburbs	30 ^Δ Δ	14 ^Δ	25 ⁰	12 ⁺ 0	16 ^Δ	21 ⁺
- Western Suburbs	16	11 ⁰	13	10 ⁺	21	22 ⁰ +
- Rural Victoria	7 ^Δ	17 [▽]	29 ⁺ 0 Δ	41 ⁰ Δ ▽	9 ⁺	12 ^Δ
- Interstate	0 ⁺	1	4 ⁺	2	1	2

TABLE 4 Cont'd

GENERAL CHARACTERISTICS OF DRIVERS IDENTIFIED WITH BLOOD
ALCOHOL CONCENTRATIONS OVER OR UNDER THE LEGAL LIMIT

	CASUALTY CRASH (METRO. ONLY)		NO CRASH OR PROPERTY DAMAGE ONLY CRASH		PRELIMINARY BREATH TEST STATIONS	
	Over .05g/100ml %	.05g/100ml or under %	Over .05g/100ml %	.05g/100ml or under %	Over .05g/100ml %	.05g/100ml or under %
Occupation	(n=57)	(n=121)	Not Known	(n=457)	(n=264)	(n=617)
White Collar	28	37 ^Δ		23 ^Δ	35 ⁰	42 ^Δ
Blue Collar	58 ^Δ	36 ^{ΔΔ}		65 ^Δ	58 ⁰	46 ^Δ
Other (including Housewife)	9	17 ^{0Δ}		5	5 ^Δ	9 ^Δ
Pensioner	5	10 ⁰		7	2	3 ⁰
Blood Alcohol Concentration	(n=179)	(n=224)	(n=234)	(n=490)	(n=266)	(n=627)
Nil ¹⁰	0	65 ^{0Δ}	0	28 ^Δ	0	87 ^Δ
.001 to ¹¹ .050	0	35	0	72	0	13
.050 to .100	22 ⁰	0	18 [*]	0	49 ^Δ	0
.101 to .150	29	0	27	0	28	0
.151 .200	49 ^Δ	0	55 ^Δ	0	17 ^{0Δ}	0
Over . 200	0	0	0	0	6	0

TABLE 4 Cont'd

DRIVING CHARACTERISTICS OF DRIVERS IDENTIFIED WITH BLOOD
CONCENTRATIONS OVER OR UNDER THE LEGAL LIMIT

	CASUALTY CRASH (METRO ONLY)		NO CRASH OR PROPERTY DAMAGE ONLY CREASH		PRELIMINARY BREATH TEST STATIONS	
	Over .05g/100ml %	.05g/100ml or under %	Over .05g/100ml %	.05g/100ml or under %	Over .05g/100ml %	.05g/100ml or under %
Licence status	(n=179)	(n=106)	(n=218)	(n=461)	(n=254)	(n=499)
- Current	53 [▽]	66 [*]	57 ^Δ	50 ^{*Δ}	89 ^{0Δ▽}	70 ^{0Δ}
- Learner	6 ^{*0}	4	0	2	0 ⁰	1
- Probation- ary	26 [*]	25 ^Δ	27 ^{0▽}	40 ^{0ΔΔ}	6 ^{*▽}	23 ^Δ
- Cancelled	6 ⁰	1	1	1	0 ⁰	0
- Never Licenced	6	3	10 [*]	2 [*]	4 ⁰	0 ⁰
- Conditional	2	2	1 [*]	5 [*]	0 ⁰	6 ⁰
- Expired	1	0	4	0	1 [*]	0 [*]
Vehicle Type	(n=182)	(n=163)	(n=218)	Not Known	(n=266)	Not Known
- Car or Station Wagon	83 [*]	73	85 ⁰		97 ^{*0}	
- Utility	0	1	6 [*]		0 [*]	
- Panel Van	5 ^{*0}	1	6 ⁰		2 [*]	
- Motorcycle	12	20	3		1	
- Heavy Truck	1	1	0		0	
- Other	0	4	0		0	
Driving Occupation	(n=57)	(n=121)	Not	(n=457)	(n=263)	(n=617)
- Full time	14 [*]	38 ^{*ΔΔ}		8 ^Δ	13 ⁰	5 ^{0Δ}
- No	86	62		92	87	95

TABLE 4 Cont'd

PRIOR CONVICTIONS OF DRIVERS IDENTIFIED WITH BLOOD ALCOHOL
CONCENTRATION OVER OR UNDER THE LEGAL LIMIT

	CASUALTY CRASH (METRO ONLY)		NO CRASH OR PROPERTY DAMAGE ONLY CRASH		PRELIMINARY BREATH TEST STATIONS	
	Over .05g/100ml %	.05g/100ml or under %	Over .05g/100ml %	.05g/100ml or under %	Over .05g/100ml %	.05g/100ml or under %
Traffic Convictions	(n=174)	(n=155)	(n=172)	(n=461)	(n=261)	(n=604)
Nil	59	60	51	54 ⁰	60	66 ⁰
1	13	23	16	17	18	14
2 to 5	24	15	27	22	21	18
Over 5	4	2	6 ⁰	7	1 ⁰	2
Criminal Convictions	(n=179)	(n=213)	Not Known	(n=490)	(n=266)	(n=630)
Nil	73 ^{*Δ}	88 ^{*▽}		68 ^{Δ▽}	52 ^{0Δ}	89 ^{0Δ}
1	9 [*]	7		10	31 ^{*0}	5 ⁰
2 to 5	12 [*]	5 ^{*Δ}		15 ^{ΔΔ}	12 ⁰	4 ^{0Δ}
Over 5	6 [*]	0 ^{*Δ}		8 ^{ΔΔ}	5 ⁰	1 ^{0Δ}
Drink- Driving Convictions	(n=174)	(n=156)	(n=172)	(n=461)	(n=261)	(n=606)
Nil	90	96 ^Δ	81	87 ^{*Δ}	86 [▽]	96 ^{*▽}
1	6	3 ^{*Δ}	15	9 ^{*Δ}	11 ⁰	4 ⁰
2 to 3	4	1	4	3 ⁰	3 [*]	0 ^{*0}

NOTES

- ¹ Excludes drivers who were breath tested.
- ² Driver Sub-set C, Appendix A, BAC over .05 g/100 ml.
- ³ Calculated from the equation (Sub-set C, BAC less than .05 g/100ml x .305 + Sub-set D, BAC less than .05 g/100ml x .695).
- ⁴ Driver Sub-set G, BAC greater than .05 g/100ml. Casualty crash drivers not included.
Calculated from the equation (Relative frequency G Metro x .65) + (Relative frequency G Rural x .35).
- ⁵ Driver Sub-set H (Casualty Crash drivers not included).
- ⁶ Driver Sub-set E BAC over .05 g/100ml.
- ⁷ Driver Sub-sets E and F.
- ⁸ Traffic Department, Victoria Police Annual Report, 1977 (128).
Note ABS figure slightly different.
- ⁹ Refusals not included. From Traffic Department, Victoria Police, Annual Report, 1977. (128)
- ¹⁰ Taken as Nil on Preliminary Breath Test Cards.
- ¹¹ Taken as "under .05" on Preliminary Breath Test Cards.

- * employed in blue-collar occupations (however, people who lived in areas associated with lower socioeconomic status were not more predominant in this group);
- * did not hold a current driver's licence;
- * had never been licensed before;
- * had prior traffic and drink-driving convictions.

Certain differences were also found in the vehicle driven by drivers in the three groups: the Casualty Crash group tended to drive motor cycles to a greater extent (reflecting the likelihood of injury resulting from crashes involving these vehicles), and as well, a greater proportion were professional drivers; more drivers in the Patrol and Preliminary Breath Test Station groups tended to drive panel vans and more drivers in the Patrol group drove utilities. No significant differences were found in the age distribution of the three groups of drivers.

Comparison Between Those Over .05 and Those Not Over .05

Compared with drivers whose readings were .05 g/100 ml and under, drivers in the over .05 group who were identified in casualty crashes and Preliminary Breath Test Station procedures were much more likely to be men. In fact, over all three selection procedures, 28 per cent of men who were tested were found to be over .05 g/100 ml compared with only 8 per cent of women (Fig. 7).

Figure 8 shows the proportions of males and females tested by enforcement procedures.

Looking at the results obtained from Casualty Crash drivers only, compared with drivers whose readings were .05 g/100 ml and under, those drivers in the Over .05 g/100 ml group were significantly more likely to have at least one of the following characteristics:

- * male
- * employed in blue-collar occupations
- * live in the south-eastern suburbs
- * had prior criminal convictions

Furthermore, they were significantly less likely to be professional drivers.

Results for drivers identified by patrol procedures showed that drivers in the Over .05 g/100 ml group were significantly more likely to be unlicensed and to live in the south-eastern suburbs than the Under .05 g/100 ml group, and less likely to live in the country, and to hold a probationary or conditional driver's licence.

Similarly for drivers identified by Preliminary Breath Test - Station procedures, the over .05 g/100 ml group was significantly more likely to have the following characteristics:

FIGURE 7: DISTRIBUTION OF MEN AND WOMEN INTO
UNDER AND OVER .05 g/100 ml

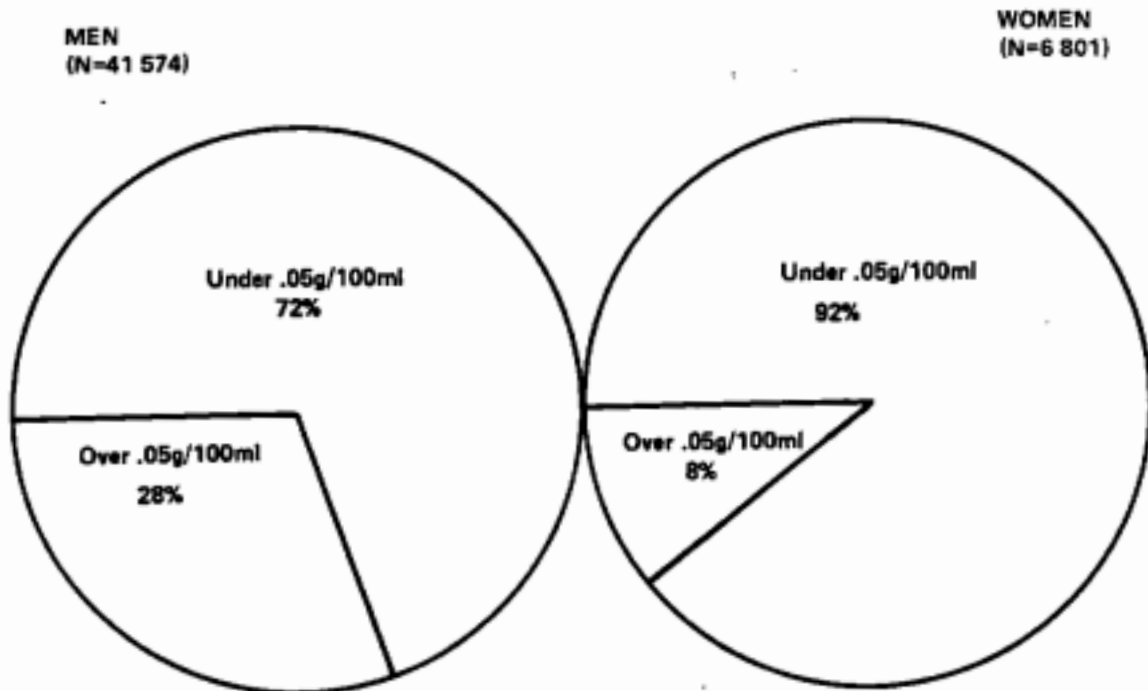
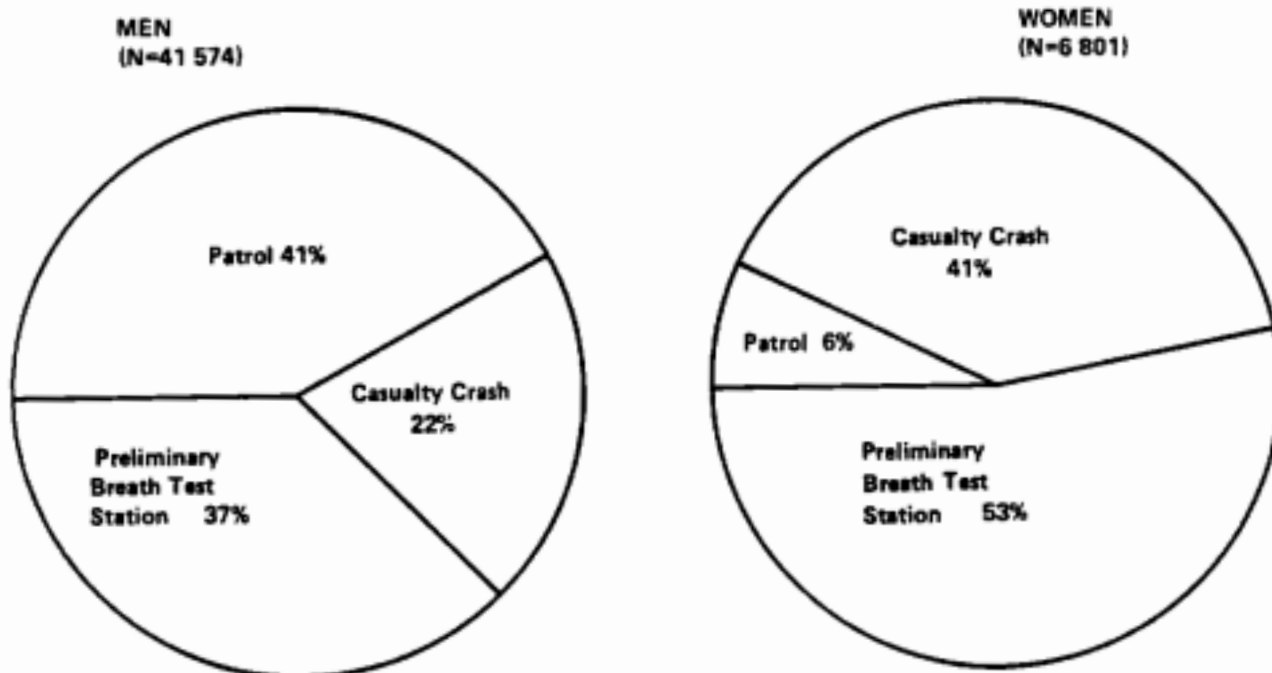


FIGURE 8: PROPORTIONS OF MALES AND FEMALES TESTED
BY ENFORCEMENT PROCEDURES



- * male
- * employed in blue-collar occupations
- * employed as professional drivers
- * held an expired driver's licence
- * had never been licensed before
- * had prior criminal convictions
- * had prior drink-driving convictions

They were significantly less likely to be under 26 years of age than those in the Under .05 g/100 ml group.

Looking at differences across the three selection procedures, drivers involved in casualty crashes and those detected by police patrols were significantly younger than Over .05 g/100 ml drivers detected by preliminary breath test stations (29 per cent of drivers detected by preliminary breath test stations were under 26 years of age compared with 53 per cent of those involved in casualty crashes and 46 per cent of those detected by patrol.) In addition, they had significantly higher blood alcohol levels than those detected by preliminary breath test stations. Forty-nine per cent of those involved in casualty crashes and 55 per cent detected by police on patrol had a reading between .15 and 0.20 g/100 ml, compared to only 17 per cent of those detected by preliminary breath test stations.

From these results it is apparent that being male, being employed in a blue-collar occupation, having a conviction history, and being unlicensed are characteristics of drink-drivers who come to official notice.

Based on the proportion of 'unlicensed/driving while disqualified drivers' found in this study, it may be estimated that there were 2022 unlicensed drivers identified with a blood alcohol reading over .05 g/100 ml in 1977, representing 15 per cent of all drivers over .05 g/100 ml. A sample of 316 of these unlicensed drink-drivers was obtained as part of this study. Almost 20 per cent were found to have been driving while disqualified whilst the remainder were not licensed at the time of their drink-driving offence. (Table E6 Appendix E).

A comparison between convicted drink drivers who did not have a current licence at the time of the offence and a sample of convicted drink-drivers who did showed that the most marked differences between these two groups occurred in relation to their prior conviction history (Table E-7, Appendix E). Sixty-four per cent of unlicensed drink-drivers had a traffic record and 30 per cent had more than 5 prior convictions. By comparison, corresponding figures for the licensed groups were 45 per cent and 5 per cent respectively. In regard to drink-driving convictions, 43 per cent of unlicensed drivers had a prior record compared with only 15 per cent of licensed drivers. Differences in their criminal records were especially marked: 69 per cent of unlicensed drivers had a criminal record and 20 per cent had more than 5 prior convictions; corresponding figures for the licensed group were 22 per cent and 3 per cent respectively.

Further analysis of the data revealed that drink-drivers detected driving while disqualified (DWD) were more deviant than those driving without a

licence in terms of prior convictions. Ninety-eight per cent of these DWD drivers had a traffic record, 82 per cent of these DWD drivers had a drink-driving record and 78 per cent had a criminal record (Table E-8, Appendix E).

These results strongly suggest that unlicensed drink-drivers, particularly those driving while disqualified, comprise a deviant sub-group. Given their prior traffic and drink-driving records, they would appear to be frequent offenders. In fact, 20 per cent of these drivers had been convicted of driving while disqualified or unlicensed driving at least once before. In view of their criminal records these people obviously engage in anti-social behaviour in situations other than on the road. Homel (54) came to similar conclusions in a recent New South Wales Study.

Overview of Drivers' Perception of the Probability of Detection

It is suggested that three factors must be taken into account when assessing the impact of different enforcement procedures.

- (a) Numbers detected. If the actual number of drinking drivers detected is the most important factor contributing to drivers' perception of the probability of detection then police patrol procedures contribute most to general deterrence.
- (b) Visibility. If contact with police in a situation where a breath test could be required is the most important factor, then police patrol procedures and preliminary breath test stations contribute most.
- (c) Relevance. If the critical factor is that drinking drivers believe that they are more likely to be detected by some procedures than others, then it may be that preliminary breath test stations are most important.

There is little scientifically collected research evidence relevant to the question of which factor is most important.

One study that has been conducted in Melbourne suggests that preliminary breath testing stations are effective, at least in the short term. Intensified random breath testing has been shown to have positive effects in terms of reducing fatalities, night-time serious casualty crashes and the proportion of drivers in single vehicle casualty crashes with a blood alcohol concentration over .05 g/100 ml, as well as increasing perceived probability of detection (23).

DRIVER PERCEPTION OF THE PROBABILITY OF CONVICTION IF DETECTED

Some drivers go to considerable trouble to avoid conviction once charged. Clearly, they perceive some chance of avoiding a conviction. Drivers' perception of the certainty of conviction is known to be relevant to the generation of a general deterrence effect. (99).

The determinants of such perception are the actual certainty of conviction, and how widely this is publicised.

ALCOHOL TESTING OF IDENTIFIED DRIVERS

There are two different body samples used for alcohol testing in Victoria, namely, blood and breath samples.

(a) Blood Samples

Drivers who are taken to hospital from a casualty crash must have a blood sample taken for alcohol analysis. Nearly 82 per cent of drivers taken to hospital by metropolitan ambulance had a blood sample taken by the doctor who treated them and 74 per cent of these drivers (e.g. 61 per cent of all drivers taken to hospital) had a blood sample taken within two hours of the crash.

(b) Breath Samples

Drivers who are not taken to hospital from a casualty crash may be required by police to undergo a breath test. Figures obtained from this study indicate that only 3 per cent of drivers who were not taken to hospital from metropolitan casualty crashes were in fact breath tested. Drivers identified by Patrol procedures and Preliminary Breath Test procedures are also breath tested.

MEASUREMENT OF BLOOD ALCOHOL CONCENTRATION

Analytical Procedures Used For Measuring Blood Alcohol Concentration

Two different methods of measuring blood alcohol concentration are used in Victoria.

(a) Blood Test

During 1977, 8,390 blood samples were taken in hospital from drivers and alleged drivers. Each sample was divided into three, and two of these three were provided to the Forensic Science laboratory. One sample was screen-tested using an Alcolmeter, a fuel cell device which performs Head Space Analysis of the gas above the blood sample. All samples with an Alcolmeter reading below .05 g/100 ml are labelled 'N'. A gas chromatograph analysis using isopropanol as the internal standard was performed on the second sample where the first sample showed an Alcolmeter reading over .05 g/100 ml. Gas Chromatographic analysis takes 2.5 minutes plus dilution time, and no replication of analysis was performed. This analysed second sample is referred to as the evidentiary sample and was the one used for prosecution purposes in court.

On 137 blood samples, comparing both methods over the whole alcohol concentration range 0 - 0.35 g/100 ml there was a high correlation between the two set of readings ($r=.905$).

Any sample that the analyst feels any doubt about is not analysed. These doubts may derive from problems with identification, or from integrity of the specimen (for example, the label is not attached, the sample is leaking or the bottle is not sealed). In 1977, 43 per cent of evidentiary blood samples taken from drivers with a blood

alcohol concentration over .05 g/100 ml on the Screening Test were not analysed (Table 5). Efforts have now been made to overcome these problems.

TABLE 5: PROPORTION OF EVIDENTIARY BLOOD SAMPLES NOT ANALYSED

	1977*	1978**
TOTAL NUMBER OF SAMPLES	2001	2963
TOTAL NUMBER NOT ANALYSED	862 (43%)	410 (14%)
<u>Reason for not analysing sample:</u>		
SAMPLE NOT SEALED CORRECTLY	628	38
LEAKING BOTTLE	64	6
LABEL NOT ATTACHED	128	325
OTHER	42	41

• Bottle changed November, 1977

* Proportions based on a sample of 283 drivers from the Positive Screening Sample Book

** Taken from the 1978 Annual Report of the Traffic Department, Victoria Police.

(b) Breath Test

Drivers who are breath-tested may first undergo a preliminary test (Aicotest) which gives some indication about the alcohol concentration in the driver's breath. This equipment is used at all preliminary breath test stations as well as for 46 per cent of drivers breath-tested as the result of other police activities. In 1977, 61 per cent of Aicotests administered by police patrol and 2.4 per cent administered at Preliminary Breath Test Stations were determined to be positive and the offender required to take an evidentiary Breathalyzer test administered by a skilled Breathalyzer Operator. As well, thirty-five drivers refused an Aicotest in 1977 and were charged with Refusing a Preliminary Breath Test.

The Aicotest device can sometimes give an inaccurate reading (42) and the decision about whether to ask a driver to take an evidentiary breath test essentially lies with the police informant.

LEGAL ACTION AGAINST DRINK-DRIVERS

When a driver has been identified with a blood alcohol level over .05 g/100 ml, he is liable for:

- (i) prosecution on a drink-driving charge;
- (ii) subsequent hearing of this charge in a Magistrate's or County Court.

The procedures involved in these different activities are illustrated in Fig. 9.

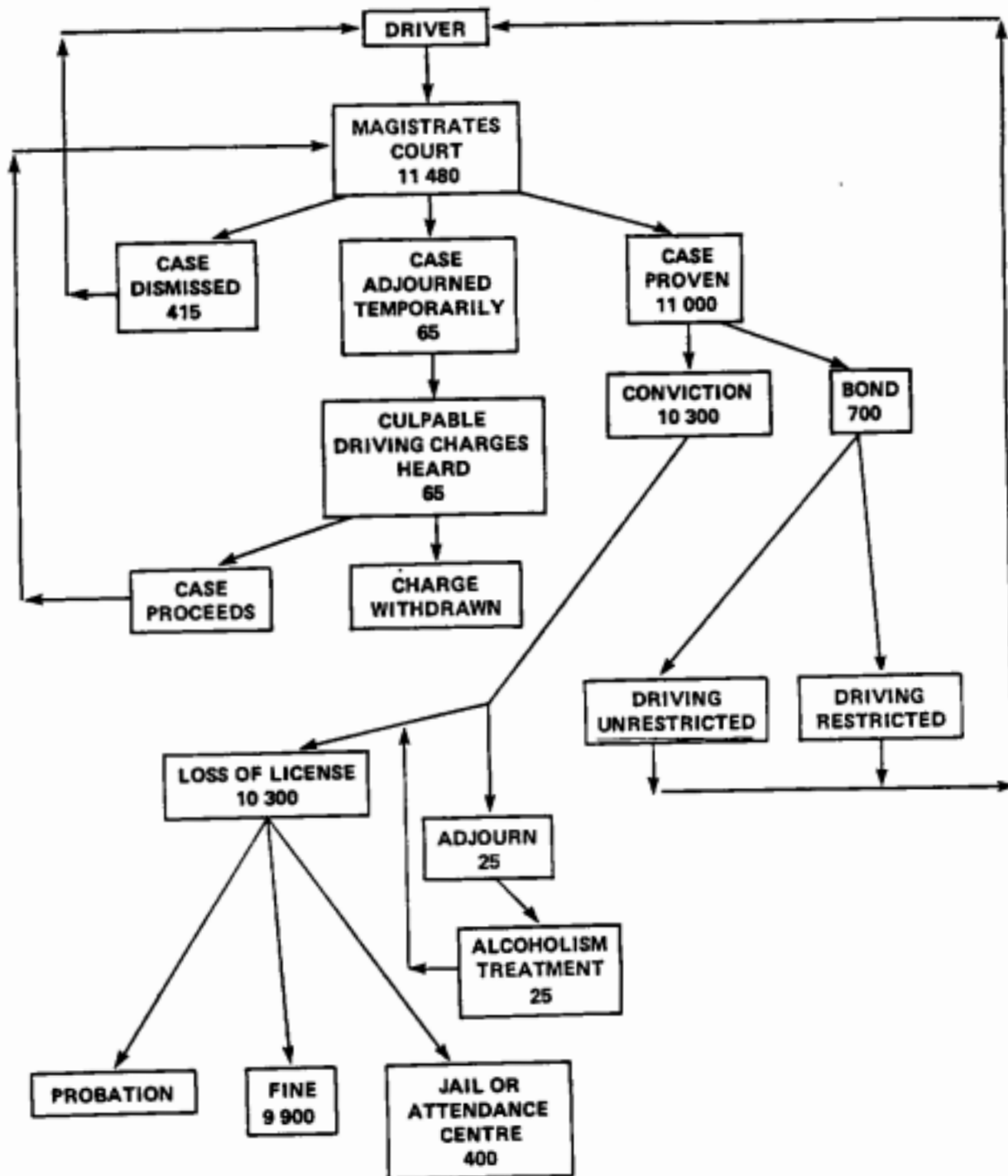
(a) Prosecution on a Drink-Driving Charge

After a driver has been identified with a blood alcohol level over .05 g/100 ml he may be charged under either arrest or summons procedures. Of drivers charged all who were blood tested, 56 per cent of drink-drivers who were identified by patrol procedures and 96 per cent of those detected at Preliminary Breath Test Stations were charged under summons. In these cases, police prepare a brief containing all the evidence which relates to the driver's identification and to his prosecution; the decision as to whether or not to authorise the informing policeman to proceed with the case depends on the evidence in this brief.

Arrested drivers may apply for release on bail and this is usually granted under S 10(b) of the Bail Act 1977. A surety and bail money may be required in some cases. Although information is not available concerning the proportion of arrested drivers released on bail, data about convicted drink-drivers showed that 47 per cent presented in court under arrest procedures (71).

In 1977, about 12,500 drivers were found to have a blood alcohol concentration over the legal limit (37, 73, 128); this represents 1 per cent of licensed drivers in Victoria and 0.5 per cent of the total adult population of Victoria. Of these drivers, 90 per cent (128) were prosecuted. That is, a brief was authorized and the driver was brought before the court on a drink-driving charge. A break-down of this prosecution rate for drivers with B.A.C.'s over .05 g/100 ml shows that patrol procedures have the highest rate (99 per cent), followed by Preliminary Breath Test Stations (74 per cent) and then Casualty Crash procedures with the lowest rate (29 per cent). This low prosecution rate of drink-drivers involved in casualty crashes reflects problems in the administration of the blood test legislation during the study period. For example, 43 per cent of those with positive blood screening samples did not have their evidentiary sample analysed because of technical problems and 21 per cent of blood briefs received at Breath Analysis Section were not authorised because the blood sample was taken over 2 hours after the crash and at that time, inadmissible as evidence in court (128). Several of these factors have now been remedied by changing the type of bottle used for blood samples and by recent case law handed down by the Supreme Court (*Regina v Cheer*, S.C., 1979).

FIGURE 9: THE PROSECUTION SUB-SYSTEM
(Magistrates Court Procedures)



A comparison between prosecuted and non-prosecuted drink-drivers is contained in Table E-9, Appendix E. Given that the total population of non-prosecuted drivers following patrol procedures was only 149 in 1977, only 3 such drivers were obtained in the study.

In the case of casualty crashes, few significant differences were found between prosecuted and non-prosecuted drink-drivers. Blood alcohol levels and sex were the only variables which differentiated between these two groups of drivers. Females were less likely to be prosecuted than males and drivers with a blood alcohol concentration in the range of .051 - .100 g/100 ml were less likely to be prosecuted than those with higher blood alcohol levels. No comparison was made for the patrol group of drivers due to the small sample size of non-prosecuted drivers. As for Preliminary Breath Test Stations, however, drivers with lower blood alcohol levels, current driver's licences and no criminal record were less likely to be prosecuted.

Prosecution did not appear to be related to age, occupation, or traffic and drink-driving conviction history.

Any driver whose brief is not authorised for prosecution may be cautioned or asked to attend the motorist education session run by the Police Force which has been described in Chapter 3. Although it would appear that the caution procedure is rarely used in drink-driving cases, 90 per cent of drivers not prosecuted after being detected by patrol or preliminary breath test station procedures were asked to attend the motorist education session.

b) Hearing of Drink-Driving Charges in the Magistrate's Court

Law Department records show that 13,485 drink-driving charges were heard in the Magistrate's Court in 1977 (71). This figure, however, includes about 650 cases which were 'struck out'. That is, they were heard in the previous year and adjourned for 12 months, during which time the driver was placed on a Good Behaviour Bond. If no breach of the bond occurred, the case was 'struck out' at the end of the 12 months' period in 1977. When these 650 cases are subtracted the figure is reduced to 12,835 cases heard in 1977. It is further reduced by subtracting charges for breach of a Good Behaviour Bond or Breach of Probation, re-hearings and other various charges contained in the 'other' category in Table 6.

On the evidence before him, the magistrate may dismiss the charge or find it proved. If the charge is proved, the magistrate must make one of the following decisions:

- the case is adjourned pending an assessment report of the defendant's drinking habits and, in a few cases, a pre-sentence report of his character form, for example, Probation Services.

At the resumed hearing, the sentence of imprisonment may be suspended and the defendant given a Bond under S 13 of the Alcohol and Drug Dependent Person's Act on condition that he undergo treatment for a period fixed by the court. Only 25 drink-drivers were placed on such a bond in 1977.

- * the defendant is not convicted but rather, given a Good Behaviour Bond and the case is adjourned for usually one year.

An amendment to the Motor Car Act in December 1978, limited the use of a bond to a first offence for exceeding .05 g/100 ml where the blood alcohol reading is less than .1 g/100 ml.

- the defendant is convicted of the charge.

If convicted, the defendant's driver's licence is cancelled and/or he is disqualified from driving for a period of time. In addition, he is fined or sentenced to jail, or permitted to serve the sentence at an attendance centre, or he is released on probation.

In 1977, about 90 per cent of drivers were convicted, 4 per cent were dismissed or withdrawn and 6 per cent were adjourned on a bond (excluding 'struck out' cases and those not specified) (Table 6). Brown found comparable figures in 1973 (20); 7 per cent of cases found proven for Exceeding a Blood Alcohol Concentration of .05 g/100 ml were adjourned with or without a bond in that year.

TABLE 6 : DRINK-DRIVING CHARGES HEARD IN MAGISTRATE'S COURTS
IN 1977, 1978 AND 1979

	DRINK DRIVING CHARGES		
	1977	1978	1979
Fined	9,896	14,216	12,977
Imprisoned	396	638	465
Good Behaviour Bond*	700	N/A	N/A
Dismissed	415	N/A	N/A
Struck Out*	650	700	N/A
Other	1,428	652	462
TOTAL	13,485	17,053	15,487

Source: Derived from Law Department statistics

• Estimates only

N/A Figures not available

A sample of 490 drivers found guilty of a drink-driving charge was compared with 207 dismissed drivers on a range of variables. (Appendix E, Table E-10).

Results showed that compared with drivers found guilty of a drink-driving charge, dismissed drivers were significantly more likely to have the following characteristics:

- * a low blood alcohol reading - .1g /100 ml or under (28 per cent compared to 17 per cent)
- * a very high blood alcohol reading - .2 g/100 ml (20 per cent compared to 2 per cent).
- * Live in the city (69 per cent compared to 51 per cent)
- * charged with refusing a preliminary breath test (4 per cent compared to 0 per cent).
- * arrested (70 per cent compared to 41 per cent)
- * legally represented in court (91 per cent compared to 39 per cent).

No significant differences were found with respect to age, sex, or prior convictions.

A breakdown of the reasons which magistrates gave for dismissing a case is presented below. Almost 20 per cent were dismissed because the time of the crash was not precisely known by the police. The second major reason for dismissal was faults in the relevant forms, for example, Schedules 6, 6A, 7 and 8.

<u>Reason for Dismissal (n=207)</u>	<u>Per Cent (%)</u>
Time of Crash Doubted	17
Faulty Forms	14
No evidence of driving	11
Identity of driver doubted	11
B.A.C. reading disputed	10
Other points of proof lacking	8
Driver drank after crash or apprehension	6
Informant or witness failed to appear	2
Other	14
Don't know	6
	100%

It is also interesting to note that 11 per cent of these dismissed drivers had an expert witness at their court hearing.

Results of this study (Table E-11, Appendix E) showed that the procedure whereby the drink-driver was identified was associated with the likelihood of disqualification. Most disqualified drivers (92 per cent) had been identified by patrol procedures whereas most drivers who avoided disqualification had been involved in a casualty crash or were detected at a Preliminary Breath Test Station. This result may reflect problems with the blood test legislation which existed at the time and the increased likelihood of a case being withdrawn or dismissed on technical grounds. As well, it probably reflects the lower blood alcohol levels (below .1 g/100 ml) of drink-drivers detected by Preliminary Breath Test Stations.

Two-thirds of convicted drink-drivers were disqualified from driving for between one and two years and only 7 per cent were disqualified for three months - the minimum period which existed at the time. In addition to this penalty, 1.4 per cent were sentenced to a term of imprisonment and 98.4 per cent paid a fine (average \$105). Drivers identified by patrol procedures were significantly more likely to receive a jail sentence and to pay a heavier fine than those identified by other procedures.

Compared with drivers who avoided disqualification, disqualified drivers were more likely to be working in a blue-collar occupation and living in Central Melbourne or the western suburbs. Seventy-three per cent of disqualified drivers were in fact blue-collar workers compared with only 41 per cent of non-disqualified drivers. In addition, learner drivers and those who had been driving while disqualified or whose licence had expired were more likely to be disqualified.

Overall, almost 20 per cent of disqualified drivers were unlicensed at the time of the offence compared with 11 per cent of the non-disqualified group.

Drivers charged with refusing a breath test or charged with more than one drink-driving offence were more likely to be disqualified from driving. It is interesting to note that drivers with a blood alcohol concentration over .2 g/100 ml were less likely to be disqualified. One possible reason for this apparent inconsistency could be that these drivers with very high blood alcohol concentrations were represented by a barrister and possibly had an expert witness giving evidence on their behalf. Prior conviction history was not significantly associated with the likelihood of disqualification from driving.

County Court Procedures for Hearing Culpable Driving Charges

Culpable driving is an indictable offence in Victoria and is heard in the County Court before a judge and jury. The general conduct of a culpable driving case is similar to any criminal case heard in the County Court. In 1977, 63 cases of Culpable Driving were heard in Victoria; of these people, five were involved in a crash in which another road user was killed. In 1977, about 70 per cent of Culpable Driving cases were dismissed; most of the drivers found guilty were sentenced to imprisonment (Table 7).

PROVISION OF INFORMATION ABOUT PREVIOUS OFFENCES

Unless a magistrate can be informed of the details of previous offences, cases that are really second offences will be treated as though they were first offences. The Motor Registration Branch is involved in the provision of extracts for drivers' histories for police, courts and other authorities, and the recording of convictions on the index cards of licensed drivers.

Provision of Extracts from Driver's Histories Prior to Sentencing: As discussed in Chapter 4, the sentence imposed by the magistrate upon conviction for a drink-driving offence depends on the driver's prior convictions for alcohol-related offences. The police obtain this report of a driver's record from the Motor Registration Branch.

TABLE 7: PENALTIES IMPOSED ON PEOPLE CONVICTED OF
CULPABLE DRIVING (71)

PENALTY*	NUMBER OF PERSONS 1977	NUMBER OF PERSONS 1978
Fine	2 (Average \$750)	0
Bond	1 (3 years)	0
Attendance Centre	2 (Average 1 year)	0
Imprisonment	13 (Average 2.1 years)	12 (Average 2-3 years)
TOTAL	18	12

*The penalty is for the principal offence of each person

(a) Recording of Convictions:

After a conviction for any drink-driving offence, the police prosecutor at the court forwards the result to the Motor Registration Branch for recording purposes. During 1977, 8,784 convictions were recorded by the Motor Registration Branch. Table 8 contains a percentage break-down of these drink-driving convictions.

TABLE 8: PERCENTAGE BREAK-DOWN OF DRINK-DRIVING CONVICTIONS
RECORDED AT THE MOTOR REGISTRATION BRANCH (N=8,784)

CONVICTION	PER CENT (%)
Exceeding .05 g/100ml	89.4
Drunk-in-Charge	0.3
Driving Under the Influence	7.7
Culpable Driving	0.1
Failing/Refusing a Preliminary Breath Test	0.5
Failing/Refusing a Breath Test	1.9
	100%

(b) Reliability of Conviction Records

Both the Motor Registration Branch (MRB) and Information Bureau Records (IBR) are notified of all drink-driving convictions by the Court prosecutor for recording on drivers' history cards. As well, results of all charges are documented by the Clerks of Courts in the Court Registers. These are collated quarterly and sent to the Law Department. The total figures for drink-driving convictions in 1977 published by the three organisations vary considerably. A diagram of this procedure is appended as Appendix E, Table E-12.

Number of Alcohol-Related driving Convictions Recorded, 1977
(Ex. 05 g/100 ml. and D.U.I. only)

Law Department (Actual no. of convictions 1/1/77 - 31/12/77)	10292
Motor Registration Branch (Recorded 1/1/77 - 31/12/77)	8538
Information Bureau Records (Recorded 1/1/77 - 31/1/78)	8992

It should be realised, however, that convictions handed down by courts in the latter part of the year will be recorded early the following year at the MRB and IBR. This backlog, created by the flow of information from the Clerk of Court to the recording system only partially explains the discrepancy. In January 1978, IBR recorded some 600 convictions from 1977, whereas MRB recorded only 160. Accurate and reliable recording of convictions is an important part of the countermeasure system in that a driver's conviction record as shown on the MRB extract, determines the minimum penalty to be imposed for alcohol-related driving offences. The extract also provides the necessary evidence for certain charges laid by police, for example, driving while disqualified or breach of a Good Behaviour Bond.

A comparison of the convictions recorded for 500 drivers (Driver Subset J Appendix A) at the Motor Registration Branch and Information Bureau Records was carried out to ascertain the reliability of the recording systems. The drivers' conviction histories were checked for a record of the original alcohol-related conviction, to estimate the percentage not recorded in any one year. A comparison was also made of the number of prior convictions recorded for each driver by the two different systems, to determine how the accuracy of an individual driver's record is affected over a number of years.

Of the 500 convictions in 1977, it was found that 3 per cent were not recorded at MRB, 12.5 per cent were not recorded at IBR, and 1 per cent were not recorded at either MRB or IBR. While the proportion of missing data may seem quite small, the more serious cumulative effect is revealed when drivers' records are compared for prior convictions. One-quarter of the drivers had a total of 152 prior alcohol-related driving convictions. Comparison of the records showed that 32 per cent of the convictions recorded at IBR were not recorded at MRB and 47 per cent of convictions recorded at MRB were not recorded at IBR (Fig. E-13, Appendix E). Only 38 per cent of drivers with prior drink driving convictions are recorded on both systems.

As well, there were notable differences in the number of other traffic convictions recorded. Different selection criteria operate in each case in that MRB systematically records all driving convictions, whereas the information bureau only records the more serious - Reckless Driving, Speed Dangerous, Driving While Disqualified and Manner Dangerous. Thus, more convictions should be recorded on MRB records and this was found to be the case. However, 26 per cent of traffic convictions (excluding alcohol-related) recorded at IBR were not recorded at MRB (Fig. E-14, 15, Appendix E).

Overall, 10 per cent of all drivers' records were found to be inaccurate such that the extract provided by Motor Registration Branch for the court case in 1977 would have affected the mandatory penalty imposed for the drink-driving offence, or charges laid by police (for example, no charge for driving while disqualified).

The data points clearly to a need for the records of both the Motor Registration Branch and the Information Bureau to be updated and continuously checked against each other or any other available source so that accurate information about drivers is available for court purposes. A reliable system for recording drivers' convictions is essential to the effectiveness, efficiency and fairness of the countermeasures system as a whole. While its current operation can be seen to favour the offender, the deterrent effect of heavier penalties may be being weakened.

The probability of the imposition of a period of disqualification on a drink-driving offender is influenced by the procedure with which he was identified (Fig 10). About 83 per cent of drivers identified with an illegal blood alcohol concentration were disqualified from driving. This high percentage may partly be explained by the fact that police do not proceed with a charge where there is any doubt that a conviction will be obtained. Only one-fifth of the drivers found to have an illegal blood alcohol reading as the result of blood test procedures were ultimately disqualified from driving. This low figure derives from defects in the legislation and its administration which have been documented in Chapter 4. Recent changes have been designed to improve the overall effectiveness of the system.

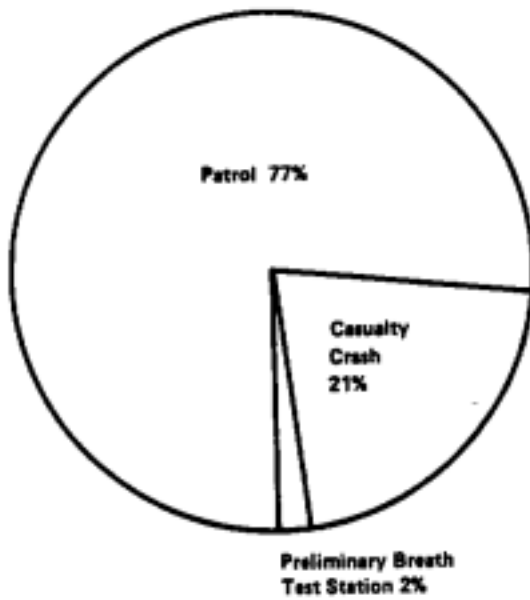
In contrast to blood-test evidence, results showed that briefs prepared to support charges laid under breath test regulations were rarely not authorised for prosecution. Again, the numbers were influenced by the selection procedures in that police on patrol appeared to be detecting mainly people who substantially exceeded a blood alcohol concentration of .05 g/100 ml. Preliminary breath test station procedures did result in drivers with lower blood alcohol concentration being detected. Drivers not prosecuted under these procedures usually attended a Motorist Education Session and thus did not totally avoid some form of attention.

Only 4 per cent of drink-driving cases brought before the Magistrates Court were dismissed and the penalties imposed by the courts were open to only minor variations in that 94 per cent of drivers found guilty of a drink-driving offence had their licence cancelled and/or were disqualified from driving and had to pay a fine.

FIG. 10: IDENTIFICATION PROCEDURES FOR IDENTIFIED AND DISQUALIFIED DRIVERS

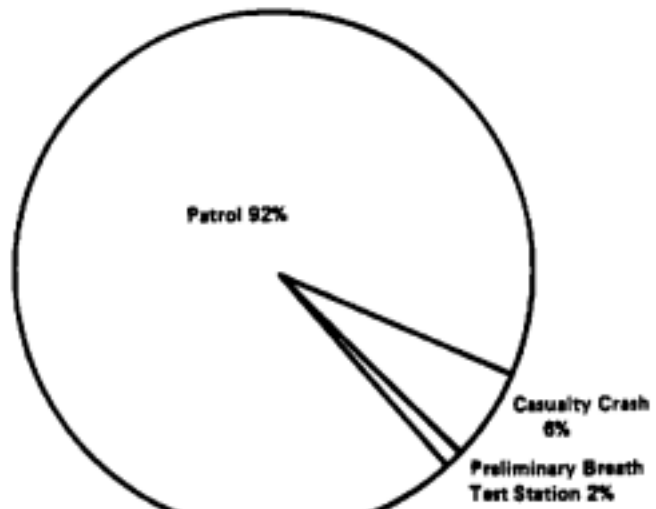
**IDENTIFIED WITH
BLOOD ALCOHOL
LEVEL OVER .05**

(N = 12500)



**DISQUALIFIED
FROM
DRIVING**

(N = 10300)



CHAPTER 6LICENCE RESTORATION PROCEDURES

Different procedures have been set down in the legislation governing the restoration or re-instating of a licence which has been cancelled as the result of a drink-driving conviction. These different procedures depend on the kind of offence for which the person was convicted and the blood alcohol reading at the time of the offence. Application for licence restoration must be made to a Magistrate if the conviction was for Exceeding a Blood Alcohol Concentration of .05 g/100 ml, Driving Under the Influence or Culpable Driving and the blood alcohol reading was .1 g/100 ml or above, or if it was a second or subsequent conviction. On the other hand, application for licence restoration may be made direct to the Chief Commissioner of Police through the Motor Registration Branch if the conviction was not for the above offences or if the disqualification period did not exceed three months and the driver held a full driver's licence at the time of conviction. The sequence of these procedures and the number of drivers involved at each point are shown in Figure 11.

(a) Application for Licence Restoration

Almost 10 per cent of disqualified drivers (N=988) were not required by law to apply to the court to have their licence re-instated. Of the 9304 disqualified drink-drivers in 1977 who were required to apply to the court, only 56 per cent had in fact made their application by August, 1979. It is interesting to note that only one characteristic differentiated drivers who applied for licence restoration from those who did not apply (Table F-1, Appendix F). This was licence status. Compared with applicants, significantly more non-applicants had been driving while disqualified or driving unlicensed at the time of the offence.

In fact, one third of the non-applicants were not licensed to drive at the time they committed the drink-driving offence. By comparison, only 5 per cent of the applicants were unlicensed. This result is not surprising since there is little reason to expect these unlicensed drivers to apply for permission to be relicensed in view of the fact that they had been driving without a licence in the first instance. In relation to this finding, a survey conducted in Melbourne in 1977 found that 36 per cent of disqualified drivers admitted to driving during their period of disqualification (99).

(b) Result of Application for Licence Restoration

Of the 5,200 drivers who applied for their licence to be re-instated, over 90 per cent were successful (Table F-2, Appendix F). Nine per cent of these successful drivers, however, had been refused at least once before. Success of an application appeared to be associated with several characteristics: blood alcohol reading, occupation, residence, whether or not the applicant was a professional driver, and number of prior traffic convictions. Compared with successful applicants, those who were unsuccessful were less likely to have had very low (less than .1 g/100 ml) or very high (over .2 g/100 ml) alcohol readings; less likely to have been employed in a white-collar occupation or to have lived in central Melbourne; less likely to have been a professional driver; and more likely to have had over 5 prior traffic convictions.

Drivers who attended a drink-driving rehabilitation course or some form of alcoholism treatment were no more successful in their application for licence restoration than those who did not attend

such a course. In 1977, 7 per cent of eligible applicants attended a drink-driving course at St Vincent's Hospital, Pleasant View Centre or a Community Health Centre. A further 4 per cent were referred to alcoholism centres or psychiatrists for alcoholism problems. Compared with those who did not receive some form of treatment, those who attended a drink-driving course were significantly more likely to be under 26 years of age (reflecting the requirement at St Vincent's Hospital that only drivers under 25 years of age be referred); more likely to have had a blood alcohol concentration in the range .2 to .25 g/100 ml; more likely to have prior traffic convictions; and less likely to have lived in the country (reflecting the metropolitan location of the rehabilitation courses). Details of the characteristics of drivers who attended a drink driving course are appended as Table F3 Appendix F.

Almost 50 per cent of disqualified drivers who required a court order to be re-licensed did not in fact apply to the court. Unlicensed drivers, who were seen to be a very high-risk group in terms of recidivism, comprised one-third of this group of non-applicants. It is reasonable to assume that many of these individuals continued to drive during the disqualification period. Moreover, 92 per cent of the drivers who did apply to have their licence re-instated were successful in their application, despite the fact that police opposed 58 per cent of the applicants. This high success rate would seem to reduce the meaningfulness of these procedures to an extent whereby the whole process may be seen as a mere formality. It would be true to say, however, that those individuals most likely to be refused, would not have subjected themselves to the court's discretion. Nevertheless, in view of the amount of time, energy and money spent on these proceedings by police and the courts, it is apparent that resources are being wasted.

Over 90 per cent of drink-drivers who attended a drink-driving rehabilitation course had a blood alcohol concentration over .15 g/100 ml - a level which now carries a 2 year licence disqualification period for a first offence and 4 years for a second offence. Since drivers attend these courses at the end of the disqualification period, a 2-year or 4-year delay between the offence and treatment would seem far too long to reasonably expect this treatment to be effective; particularly in view of the current belief that people with these high blood alcohol levels have a serious drinking problem. It is likely that this delayed treatment would have a poorer prognosis for overcoming a drinking problem than a programme offered to the driver when he first came to notice.

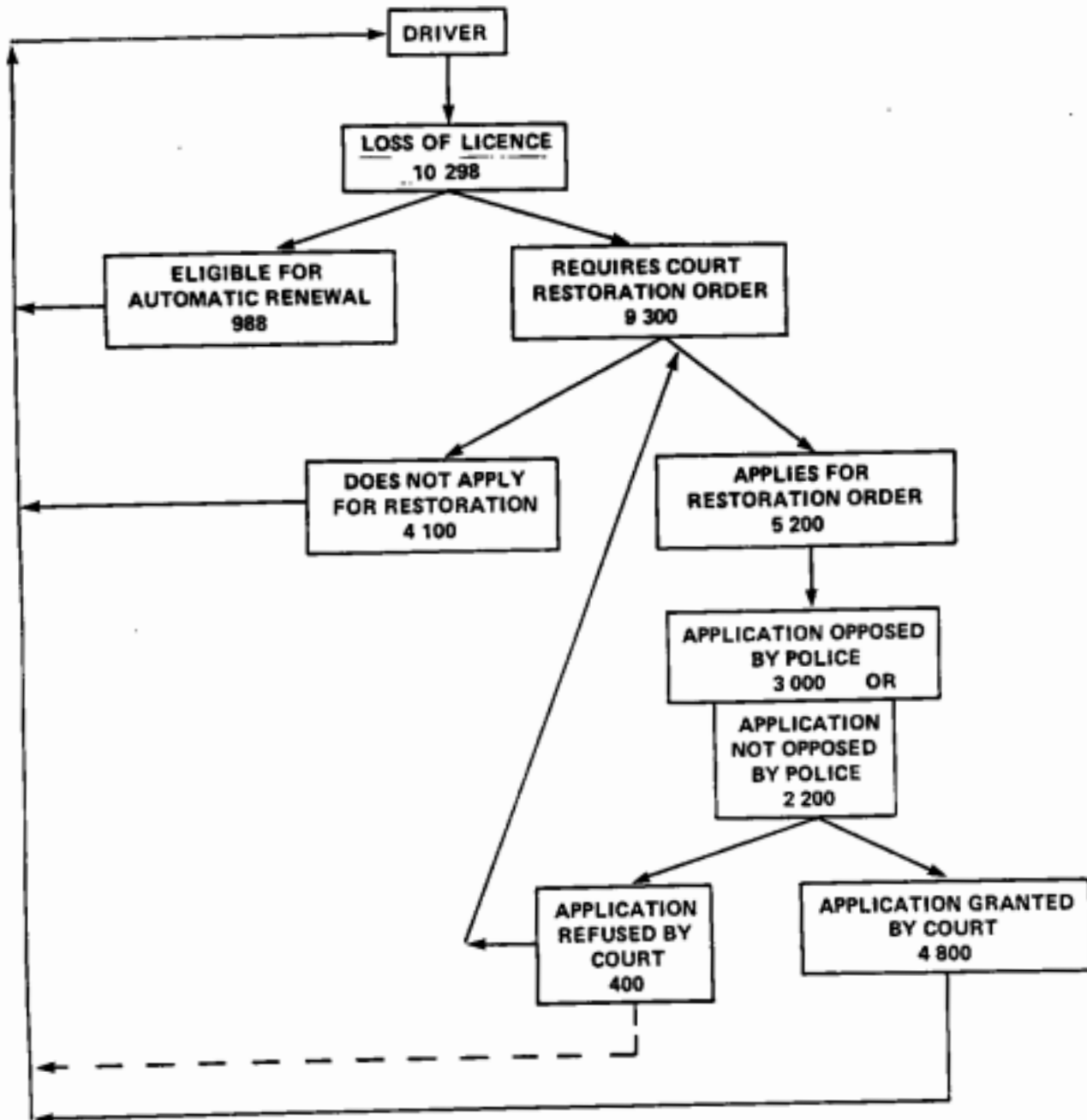
Certain anomalies still exist in the legislation governing licence restoration procedures. For example, several drink-driving convictions which carry the heaviest minimum penalties such as refusing a breath test, do not require a court order for licence restoration.

In view of these weaknesses relating to the licence restoration component of the drink-driving countermeasure system, it would seem that there is an urgent need to reconsider the rationale underlying:

- (i) the legislation governing licence restoration requirements for different drink-driving offences;

- (ii) the use of the Magistrate's Court as the authority for licence restoration;
- (iii) drink-driving rehabilitation activities as they affect the client, the court and the community.

FIGURE 11: FLOW DIAGRAM OF LICENCE RESTORATION PROCEDURES



CONCLUSION

The drink-driving countermeasure system in Victoria operates within a population of whom nearly two-thirds hold a driver's licence and drink alcohol. In Victoria Government-funded publicity campaigns were broadcast through the mass media, through schools and through business organizations. Over \$226,000 worth of publicity was generated through unpaid community service announcements and the like. Moreover, the Government has given the police powers to test for alcohol use by both breath and blood testing procedures, and has given magistrates powers to impose heavy mandatory penalties on convicted drink-driving offenders. In part, these indicators of society's concern may be self-generating in that heavy penalties attract publicity, which in turn draws Government attention to the issue. However, it is important to point out that eighty-two per cent of Victorians now know that .05 g/100 ml. is the legal blood alcohol limit, and 89 per cent agree with random breath testing of drivers (Gallup Poll, March 1979).

The best estimate available of the number of people who drive after drinking is that obtained from an interview survey in December 1978 (95). While that period may not have been representative of drink driving at other times of the year, the bias that fact introduces may well be counterbalanced by the tendency of people to under-report drinking. An estimated 200,000 Victorians drove with a blood alcohol concentration over .05 g/100 ml in each week. In 1977, approximately 48,400 drivers were tested for alcohol, and approximately fourteen thousand were detected driving over .05 g/100 ml. This is an average of 267 drivers detected per week. Almost 83 per cent of those detected over 0.5 g/100 ml were convicted.

In 1977, only 6 per cent of drink-driving cases were adjourned on a bond and only 7 per cent of convicted drivers received the minimum period of licence disqualification contained in the law. Magistrates granted 92 per cent of applications for licence restorations. Drink-driving rehabilitation programmes only reached about 7 per cent of eligible drink-drivers and attendance seemed to make little difference to the success of a licence restoration application.

A major weakness is the absence of information which may be used to evaluate the effectiveness of countermeasure activities such that they may be continuously improved. There is an urgent need to review the availability and quality of various data bases and their usefulness for road safety research. Nevertheless these data bases should be continuously monitored to detect any changes in alcohol involvement in crashes, and used for the design and implementation of countermeasures appropriate for those drink-drivers who are most at risk.