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LEGISLATIVE ASSEMBLY OF QUEENSLAND

PARLIAMENTARY TRAVELSAFE COMMITTEE

COMPULSORY BAC TESTING

**INQUIRY INTO WHETHER BLOOD ALCOHOL CONTENT (BAC) TESTING
OF PEOPLE WHO ATTEND A HOSPITAL FOR EXAMINATION OR TREATMENT AS A
RESULT OF A MOTOR VEHICLE ACCIDENT SHOULD BE COMPULSORY**

Parliamentary Travelsafe Committee Report No. 22

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(December 1997)**

PARLIAMENTARY TRAVELSAFE COMMITTEE

48TH PARLIAMENT

2ND SESSION

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RESEARCH DIRECTOR: Mr Rob Hansen

RESEARCH OFFICER: Mr Rob McBride

EXECUTIVE ASSISTANT: Miss Tania Jackman

PREFACE

This report examines whether blood alcohol content (BAC) testing of road accident casualties who attend a hospital for examination or treatment as a result of a motor vehicle accident should be made compulsory in Queensland. It is the second of a series of reports that the committee intends to produce on alcohol and other drug related road safety issues. The issue of compulsory BAC testing was raised during the committee's 1996 inquiry into Queensland's road toll.


Drink driving remains one of the top causes of mortality and morbidity on Queensland roads. In 1995, almost 40 percent of fatally injured drivers and riders who were tested were found to have a BAC above 0.05, the maximum legal limit. Of these, more than 70 percent were above 0.15, three times the maximum legal limit and 20 percent had a BAC above 0.25, more than five times the legal limit.

In recent decades, there has been a growing recognition of the serious road safety problem caused by drink driving and a greater willingness by governments to address the problem. These developments have led to the implementation of a wide range of drink driving countermeasures. In some Australian jurisdictions, compulsory BAC testing of certain road accident casualties who attend hospital has formed an integral part of their package of drink driving countermeasures.

The committee believes that compulsory BAC testing should be introduced in Queensland. It is satisfied that the existing provisions for BAC testing of road accident casualties at hospitals are inadequate and that the introduction of compulsory BAC testing in the form proposed by the committee will solve many of the problems. The committee also believes that if its proposed model for testing is adopted it will generate benefits in excess of its costs. These benefits will include: increased detection and removal of drink drivers from Queensland roads; improvements to the integrity of Queensland's data on alcohol as a factor in crashes; better casualty management at hospitals; improved identification and treatment of drink drivers; and the prevention of hospitals being used as 'safe havens' from the law.

The committee thanks all of the groups and individuals who assisted the committee during the inquiry by making submissions, appearing at public hearings, participating in the committee's public forum and providing information.

Special thanks must go to a number of people from other Australian jurisdictions who generously gave the committee many hours of their time and the benefit of their vast experience. They are: Inspector Kerry Grainger, Traffic Technology Section, New South Wales Police Service; Dr Judy Perl, a pharmacologist with the Clinical and Forensic Medicine Section of the New South Wales Police Service; Sergeant Neil Burns from the Traffic Technology Section, New South Wales Police Service; Inspector Mike Maloney, Traffic Support Department, Victoria Police; Senior Sergeant Jan Eury, from the Traffic Support Department of the Victorian Police Service; Dr David Wells, Head, Clinical and Forensic Medicine, Victorian Institute of Clinical and Forensic Medicine; Superintendent Colin Haymon, Road Safety and Accident Investigation Unit, Northern Territory Police Force; Senior Sergeant Rick Laslett, Traffic Technical Resource Section, South Australian Police Service; and Mr Trevor Bailey, Office of Road Safety, South Australian Department of Transport.

A handwritten signature in black ink, appearing to be 'John Goss', with a long horizontal stroke extending to the right.

Mr John Goss MLA
Chairman

TABLE OF CONTENTS

| | PAGE NO. |
|--|-------------------|
| TABLE OF CONTENTS..... | <i>I</i> |
| LIST OF TABLES AND FIGURES..... | <i>III</i> |
| SUMMARY OF RECOMMENDATIONS..... | <i>V</i> |
| PART 1 ~ INTRODUCTION | <i>1</i> |
| THE TRAVELSAFE COMMITTEE | <i>1</i> |
| BACKGROUND AND SCOPE OF THE INQUIRY | <i>1</i> |
| INQUIRY PROCESS..... | <i>2</i> |
| RESPONSIBILITY OF MINISTERS | <i>2</i> |
| PART 2 ~ THE PROBLEM WITH DRINK DRIVING..... | <i>5</i> |
| THE IMPACT OF ALCOHOL ON CRASH INVOLVEMENT..... | <i>6</i> |
| ALCOHOL RELATED CRASHES IN QUEENSLAND..... | <i>6</i> |
| DRINK DRIVING COUNTERMEASURES | <i>7</i> |
| PART 3 ~ PROVISIONS FOR BAC TESTING OF ROAD ACCIDENT CASUALTIES AT HOSPITALS..... | <i>12</i> |
| QUEENSLAND | <i>12</i> |
| NEW SOUTH WALES | <i>13</i> |
| SOUTH AUSTRALIA | <i>14</i> |
| THE NORTHERN TERRITORY | <i>15</i> |
| VICTORIA..... | <i>16</i> |
| THE AUSTRALIAN CAPITAL TERRITORY | <i>17</i> |
| PART 4 ~ SHOULD COMPULSORY BAC TESTING BE INTRODUCED IN QUEENSLAND?..... | <i>21</i> |
| QUEENSLAND’S COMMITMENT TO INTRODUCE COMPULSORY BAC TESTING | <i>21</i> |
| SUPPORT FOR COMPULSORY BAC TESTING..... | <i>21</i> |
| A PROPOSED MODEL FOR COMPULSORY TESTING | <i>22</i> |
| THE NATURE AND EXTENT OF THE PROBLEMS WITH THE EXISTING PROVISIONS FOR BAC TESTING | <i>23</i> |
| COSTS AND BENEFITS OF COMPULSORY BAC TESTING..... | <i>26</i> |
| <i>Benefits.....</i> | <i>26</i> |
| <i>Detection and Prosecution of Drink Drivers</i> | <i>26</i> |
| <i>Prevent Hospitals Being Used as ‘Safe Havens’ from the Law</i> | <i>27</i> |
| <i>Improve the Deterrent Impact of Drink Driving Laws</i> | <i>28</i> |
| <i>Improved Statistics</i> | <i>29</i> |
| <i>Improved Casualty Management.....</i> | <i>32</i> |
| <i>Identification and Treatment of Problem Drink Drivers</i> | <i>33</i> |

| | PAGE NO. |
|---|-----------------|
| COSTS | 35 |
| <i>Direct Costs</i> | 35 |
| <i>Civil Liberties Issues</i> | 35 |
| <i>Medical Ethics</i> | 36 |
| BREAK-EVEN ANALYSIS OF COMPULSORY BAC TESTING BY KING AND NUCIFORA FOR QUEENSLAND TRANSPORT..... | 37 |
| <i>Costs</i> | 37 |
| A REVISED COST BENEFIT ANALYSIS..... | 42 |
| <i>PART 5 ~ THE TERMS AND CONDITIONS FOR TESTING</i> | 47 |
| ROAD USER TYPE..... | 47 |
| MINIMUM AGE FOR TESTING | 48 |
| WHO SHOULD TAKE SAMPLES? | 49 |
| <i>Blood Samples</i> | 49 |
| <i>Breath Samples</i> | 50 |
| TIME LIMITS FOR SAMPLES TO BE TAKEN | 50 |
| MECHANISMS TO ENSURE SAMPLES ARE TAKEN..... | 52 |
| A BLOOD SYSTEM OR A BREATH AND BLOOD SYSTEM?..... | 56 |
| CONSUMPTION OF ALCOHOL AFTER AN ACCIDENT | 58 |
| OTHER ISSUES | 59 |
| <i>Immunity from Civil and Criminal Action</i> | 59 |
| <i>Court Appearances</i> | 60 |
| RECIPROCAL BLOOD SAMPLING LEGISLATION..... | 61 |
| BAC TESTING BY POLICE AT THE SCENE OF AN ACCIDENT | 62 |
| <i>PART 6 ~ CONCLUSION</i> | 63 |
| <i>BIBLIOGRAPHY</i> | 65 |
| <i>APPENDIX A — CALL FOR SUBMISSIONS</i> | A1 |
| <i>APPENDIX B — LIST OF SUBMISSIONS RECEIVED</i> | B1 |
| <i>APPENDIX C — WITNESSES AT PUBLIC HEARINGS AND PUBLIC FORUMS</i> | C1 |
| <i>APPENDIX D — EXHIBITS</i> | D1 |

LIST OF TABLES AND FIGURES

PAGE NO.

FIGURES

| | |
|--|-----------|
| <i>FIGURE 1: VICTORIAN ‘CODE OF PRACTICE’</i> | 54 |
|--|-----------|

TABLES

| | |
|---|-----------|
| <i>TABLE 1: DRINK DRIVING PENALTIES IN QUEENSLAND</i> | 9 |
| <i>TABLE 2: LEGISLATION ON COMPULSORY BLOOD ALCOHOL TESTING OF ROAD CRASH CASUALTIES TAKEN TO HOSPITAL</i> | 19 |
| <i>TABLE 3: DRIVERS AND MOTORCYCLISTS HOSPITALISED IN QUEENSLAND BY BAC 1990 TO 1995</i> | 25 |
| <i>TABLE 4: BAC STATUS AND LEVEL FOR HOSPITALISED DRIVERS BY STATE 1990</i> | 30 |
| <i>TABLE 5: GOVERNMENT CHEMICAL LABORATORY COSTS OF ANALYSING BLOOD SAMPLES</i> | 39 |
| <i>TABLE 6: HOSPITALISED ROAD USERS BY TYPE AND SEVERITY OF INJURY 1990</i> | 39 |
| <i>TABLE 7: NUMBER OF BLOOD SAMPLES BY TESTING OPTION</i> | 40 |
| <i>TABLE 8: ANNUAL OPERATING COST OF COMPULSORY BAC TESTING BY TYPE OF ROAD USER CASUALTY</i> | 41 |
| <i>TABLE 9: COST/BENEFIT RESULTS FOR MODELS OF COMPULSORY BAC TESTING</i> | 44 |

SUMMARY OF RECOMMENDATIONS

PAGE NO.

RECOMMENDATION 149

That the Traffic Act 1949 be amended so that all drivers, motorcycle riders and pedestrians who are 15 years of age or over and attend a hospital for examination or treatment of injuries resulting from an accident involving a motor vehicle on a road, whether in Queensland or elsewhere, be required to supply a sample of breath and/or blood when requested to do so by a certified person.

RECOMMENDATION 250

That the Traffic Act 1949 be amended so that doctors, nurses and other people who are appropriately trained and certified by a hospital be allowed by law to demand and take breath and/or blood samples from all drivers, motorcycle riders and pedestrians who are 15 years of age or over and attend a hospital for examination or treatment of injuries resulting from, or suspected to be resulting from, an accident involving a motor vehicle on a road, whether in Queensland or elsewhere.

RECOMMENDATION 352

That BAC readings from samples taken within 4 hours of the accident be accepted as prima facie evidence for a prescribed concentration of alcohol charge, and that the BAC readings from samples taken within 12 hours of the accident be acceptable as supporting evidence.

RECOMMENDATION 455

That the government consult with hospitals and relevant hospital staff to develop a 'code-of-practice' so that all drivers, motorcycle riders and pedestrians who are 15 years of age or over and attend a hospital for examination or treatment of injuries resulting from an accident involving a motor vehicle on a road, whether in Queensland, or elsewhere, have a breath and/or blood sample taken for BAC testing.

RECOMMENDATION 555

That any person who is liable to be tested, but fails to supply a breath or blood sample when requested to do so by a certified person, be guilty of an offence under the act and receive a penalty that is equivalent to that for driving a motor vehicle with a BAC reading of over 0.15.

RECOMMENDATION 656

That any person who hinders or obstructs a doctor, nurse or other certified person from taking a breath or blood sample be guilty of an offence and receive a penalty that reflects the seriousness of the act.

RECOMMENDATION 758

That compulsory BAC testing be achieved through the collection of both breath and blood samples. Wherever possible, people who are liable to be tested should, in the first instance, be tested using a preliminary breath test (PBT). All people whose PBT result indicates a positive BAC (regardless of the BAC level) and any people who cannot supply a breath sample should have a blood sample taken for analysis.

RECOMMENDATION 858

That any person who is liable to be tested and, within four hours of the accident, wilfully does anything to alter the concentration of alcohol in his/her blood (except under the direction or under the supervision of a medical practitioner or nurse and for the proper care and treatment of the person), be guilty of an offence and receive a penalty that is equivalent to that for driving a motor vehicle with a BAC of over 0.15.

RECOMMENDATION 959

That doctors, nurses and other people who are certified to take samples be indemnified from civil and criminal liability for anything they properly and reasonably do in the course of taking blood and/or breath samples for the purposes of the Traffic Act 1949.

RECOMMENDATION 1060

That the conditions under which doctors, nurses and other people who are certified to take a sample, and analysts may be called to court be the same as those within section 57 of the Victorian Road Safety Act 1986.

RECOMMENDATION 11 61

That legislation in Queensland allow for the reciprocal exchange of blood and/or breath test results with other jurisdictions, and for the results from other jurisdictions to be admissible as evidence in Queensland courts.

That the Queensland Police Service negotiates with authorities in New South Wales, the Northern Territory and South Australia to establish an agreement and protocol for cross border sampling.

RECOMMENDATION 12 61

That the Minister for Transport and Main Roads lobby the Australian Transport Council to ensure all states and territories implement legislation to allow for the reciprocal exchange of blood and/or breath test results, and the admissibility of blood test results from other jurisdictions as evidence in court.

RECOMMENDATION 13 62

That police should conduct a preliminary breath test (PBT) on all drivers, riders and pedestrians who are involved in an accident, are at the accident scene and able to supply a breath sample.

PART 1 ~ INTRODUCTION

THE TRAVELSAFE COMMITTEE

1. The Travelsafe Committee of the 48th Parliament was appointed by a resolution of the Legislative Assembly on 15 September 1995. This resolution was amended on 18 April 1996 during the second session of the 48th Parliament.
2. Under the new resolution the committee monitors, investigates and reports on:-
 - (a) issues affecting road safety including the causes of road crashes and measures aimed at reducing deaths, injuries and economic costs to the community;
 - (b) the safety of passenger transport services, and measures aimed at reducing the incidence of related deaths and injuries; and
 - (c) measures for the enhancement of public transport in Queensland and reducing dependence on private motor vehicles as the predominant mode of transport.

BACKGROUND AND SCOPE OF THE INQUIRY

3. The inquiry into compulsory blood alcohol content (BAC) testing in hospitals was called by the committee following a brief investigation of the matter during its inquiry into Queensland's road toll in 1996. After considering the evidence that was presented during the road toll inquiry, it became apparent that the matter warranted a separate investigation and that a great deal of further evidence was required before the committee could make any recommendations.
4. For the purposes of the inquiry the committee determined that its terms of reference would be to investigate:-
 - the nature and scope of problems with existing provisions for BAC testing in Queensland;
 - the extent to which the introduction of compulsory BAC testing at hospitals would address these problems;
 - whether the likely benefits from compulsory BAC testing will justify the costs; and
 - if compulsory testing is warranted, what the terms and conditions for testing should be.

INQUIRY PROCESS

5. The Travelsafe Committee considers that one of its prime roles is to provide a forum for public input into the development of road safety measures. As such, the committee attempts to conduct its inquiries in the most open way possible.
6. Advertisements announcing the inquiry, outlining its terms of reference and calling for written submissions were placed in major newspapers on 7 February 1997. A copy of the advertisement is shown in Appendix A.
7. To encourage submissions to the inquiry the committee produced an issues paper and distributed it through targeted mailing and to anyone who rang and requested it. The paper contained some of the committee's preliminary research, details of the nature and scope of the inquiry and guidelines for making a submission. Over 1 000 issues papers were sent out. Sixty-eight submissions from a diverse range of people and organisations were received. A list of those who made submissions is at Appendix B.
8. The committee conducted three public hearings. They were held in Mackay on 4 August 1997, Charters Towers on 5 August 1997 and Brisbane on 2 October 1997. Witnesses were examined on their written submissions and other issues under investigation. The committee also hosted a one day forum in Brisbane on Wednesday, 1 October 1997 to examine compulsory BAC testing in other Australian jurisdictions. People from New South Wales, Victoria, South Australia and the Northern Territory who have expertise in BAC testing systems attended as members of the forum discussion panel. A list of the people who appeared as witnesses at the hearings and who registered for the forum is at Appendix C.
9. The committee held meetings and conducted inspections of four hospitals. On 28 May 1997 the committee met with staff of the Royal Brisbane Hospital in Brisbane and inspected the hospital emergency department. The committee also inspected the Mackay Base Hospital on 4 August, held a private meeting with staff of the Hughenden Base Hospital and undertook inspections of both the Hughenden and Charters Towers Base hospitals on 5 August 1997.

RESPONSIBILITY OF MINISTERS

10. This Report makes recommendations for the Government to implement.

“PART 5 - MINISTERIAL RESPONSES TO REPORTS’ of the *Parliamentary Committees Act 1995* requires the responsible Minister or Ministers to respond to recommendations contained in the committee’s Reports.

Subsections 2 to 6 of section (24) of the Act read as follows:-

- (2) The Minister who is responsible for the issue the subject of the report must provide the Legislative Assembly with a response.

- (3) The response must set out-
 - (a) any recommendations to be adopted, and the way and time within which they will be carried out; and
 - (b) any recommendations not to be adopted and the reasons for not adopting them.
- (4) The Minister must table the response within 3 months after the report is tabled.
- (5) If a Minister cannot comply with subsection (4), the Minister must-
 - (a) within 3 months after the report is tabled, table an interim response and the Minister's reasons for not complying within 3 months; and
 - (b) within 6 months after the report is tabled, table the response.
- (6) If the Legislative Assembly is not sitting, the Minister must give the response (or interim response and reasons) to the Clerk of the Parliament for tabling on the next sitting day.

PART 2 ~ THE PROBLEM WITH DRINK DRIVING

11. Alcohol is the most widely used psychoactive, or mood-changing, recreational drug in Australia. Three in five Australians drink alcohol at least once per week. In 1991 Australia had the second highest per capita consumption of absolute alcohol of the English speaking nations (Department of Human Services and Health: 1994). In 1992, over 6 500 Australians died due to the effects of alcohol. This represents over a quarter of all drug deaths and 5 percent of all deaths in Australia. It has been estimated that the economic cost of alcohol abuse in 1990 was \$6.9 billion (Australian Drug Foundation, 1997).
12. Alcohol is also one of the primary causes of death and injury on Australian roads. Driving a motor vehicle is a complex multi-functional task. It involves visual search and recognition, vigilance, information processing under variable demand, decision making and risk-taking, and requires enough sensorimotor control to carry out all these activities correctly. Alcohol has the ability to impair the performance of this task.
13. Alcohol affects the central nervous system, resulting in cognitive and psychomotor impairment. Judgement, concentration, divided attention information processing, vision and coordination have all been shown to be adversely effected by the consumption of alcohol (HoRSCRS 1980; Pauwels and Helensen, 1992). When compared to a person who is sober, a driver with a blood alcohol content (BAC) level of 0.08 travelling at 100 km/h has a delayed reaction of 0.5 of a second, adding approximately 15 metres to the stopping distance. The imprecision and maladaptation of some movements may have an even greater influence on the determination of accidents. The impact of alcohol on vision is another hazard. Alcohol acts in several ways on the optic nerve and on the processes of transmission of images to the brain. This can lead to false estimation of distances, a reduction in the field of vision, and a significant increase in the perception of dazzle from lights when driving at night (Doria, 1990: Hindmarsh, 1991).
14. Alcohol has also been shown to influence a persons temperament. In small doses alcohol causes people to become more relaxed and lower their inhibitions. They feel more confident and act in a more extroverted manner. In larger doses alcohol can cause unconsciousness and death. Drivers who are impaired by alcohol tend to be less concerned with the potential outcomes of their actions and drive in an irregular, risk taking manner (Mills and Bisgrove, 1983). Coroners' documentation on fatal road crashes occurring in 1992 revealed that drink driving goes hand in hand with risk taking such as driving too fast, not wearing a seat belt and riding a motorbike without a helmet (FORS, 1997).
15. A person who is under the influence of alcohol is also more likely to suffer greater injuries than a person who is sober. Trinca (cited in Zaal, 1994; 31) found that alcohol can reduce tolerance to accident impact, affect the physiological response to injury and increase the probability of post-traumatic shock. Trinca's research also indicated that

there can be more pathological damage of the brain and spinal cord tissue when alcohol is present in the blood stream at the time of injury.

16. The level of driving impairment is broadly related to the amount of alcohol in the blood stream - the blood alcohol concentration. That is, the higher the blood alcohol level the greater the level of driving impairment and risk taking behaviour. Other factors that may influence the level of impairment and hence the crash risk include age, frequency of alcohol consumption (alcohol tolerance) and an individual's metabolism.

THE IMPACT OF ALCOHOL ON CRASH INVOLVEMENT

17. Research conducted over the past 30 years has consistently demonstrated the link between increased BAC levels and increased crash risk. For example, Allsop (1966) found that a person with a BAC of 0.05 has twice the probability of having a crash compared with a person with zero BAC and a person with a BAC level of 0.08 has four times the probability of being involved in a crash. Similarly:-

| | | |
|----------|---|---|
| 0.10 BAC | = | 7 times the crash risk of a person with a zero BAC |
| 0.15 BAC | = | 25 times the crash risk of a person with a zero BAC |
| 0.20 BAC | = | 40 times the crash risk of a person with a zero BAC |

18. A recent Norwegian study cited by the Western Australian Select Committee on Road Safety (1996) suggested the following BAC to crash risk ratios:-

| | | |
|-----------------|---|---|
| 0.05 - 0.10 BAC | = | 13 times the crash risk of a person with a zero BAC |
| 0.10 - 0.15 BAC | = | 100 times the crash risk of a person with a zero BAC |
| over 0.15 BAC | = | 550 times the crash risk of a person with a zero BAC. |

ALCOHOL RELATED CRASHES IN QUEENSLAND

19. The contribution of alcohol to death and injury on Queensland's roads is enormous. Alcohol as a factor in road accidents is particularly evident in crashes resulting in serious injury, and even more so in fatal crashes. An indicative ranking of contributing factors to road crashes in 1995 suggests that alcohol was responsible for 9 percent of all road crashes (1 856 crashes) and 30 percent of fatal crashes (Queensland Transport, 1997; 38).
20. Queensland Transport supplied the committee with figures on casualties in Queensland road crashes where alcohol was known to be a contributing factor. According to these figures, for the 10 years between 1986 and 1995, 14 506 people were injured in alcohol related crashes. Of these 1 451 people were killed, 6 433 were hospitalised, and over 4 871 required medical treatment.

21. The committee also received figures from Queensland Transport on the BAC levels of fatally injured drivers and motorcycle riders. They show that in 1995 almost 40 percent levels of fatally injured drivers and motorcycle riders who were tested had a BAC above the maximum legal limit. Of those who were over the limit, more than 70 percent recorded a BAC above 0.15, three times the limit, and 20 percent recorded a BAC above 0.25, five times the maximum legal limit. These figures are broadly consistent with the five year average (1991 to 1995) where 32 percent of fatalities recorded a BAC of 0.05 or above, of whom approximately 68 percent were over 0.15 and 16 percent were above 0.25 percent.
22. A conservative estimate of the costs incurred in Queensland from alcohol-related road crashes in 1995 alone is \$122 million. This includes approximately \$73 million for fatal crashes, \$42 million for crashes where at least one person was hospitalised, \$3.5 million for crashes where medical treatment was required and \$3 million dollars where there was property damage only.¹

DRINK DRIVING COUNTERMEASURES

23. Over time there has been a growing recognition of the serious road safety problem caused by drink driving and a greater willingness by governments to address the problem. These developments have led to the implementation of a wide range of drink driving countermeasures.
24. Zaal (1994; 32) classifies these countermeasures according to three types: primary, secondary and tertiary:-
 - **Primary intervention strategies** - designed to prevent drivers from driving with BAC over the legal limit. These strategies are typically implemented through public information and deterrence methods;
 - **Secondary intervention strategies** - designed to detect and remove the drink driver who is on the road. They are implemented through legislative and enforcement measures; and
 - **Tertiary intervention strategies** - designed to reduce recidivism among drivers who have been previously detected, arrested and convicted and are usually provided by rehabilitation programs.
25. A range of drink driving countermeasures has been employed in Queensland. The 'flagship' of the drink driving countermeasures is Random Breath Testing (RBT), a program which has been operating in Queensland since 1988. RBT is an enforcement tool designed to achieve a general deterrence to drink driving. Under RBT, police are empowered to stop and breath test any driver without having reason to suspect that the driver had been drinking.

¹ These estimates are calculated in 1993 dollar terms using Bureau of Transport & Communications Economics (1993) averages of the costs of crashes. The estimate of overall cost excludes costs incurred from crashes resulting in minor injury and those crashes where property damage was less than \$2 500.

26. RBT can be performed in both stationary and mobile modes. Stationary RBT is performed using a 'booze bus' and/or patrol cars at highly visible road sites. Motorists passing a stationary RBT site are randomly selected, directed to stop at the side of the road and asked to take a preliminary breath test (PBT). Drivers returning a negative result are allowed to continue on their journey. Those who test positive are detained for an evidentiary breath test, the results of which can be used in court. Mobile RBT is performed by police travelling in patrol cars. Mobile patrols may pull over any motorist at any time, however, they tend to be used to target drivers that they suspect are intoxicated. Once a motorist has been pulled over mobile RBT operates in the same way as stationary RBT (Homel, 1990; 2-3).
27. Of equal importance to policing activities are the legislative controls of drink driving. These not only support the activities of police, making the task of deterrence and detection easier, but can, in their own right, create deterrence and reduce the level of drink driving behaviour (Zaal, 1994; 47). Among other things, Queensland legislation relating to drink driving specifies the maximum BAC levels permissible for holders of particular types of licence whilst in control of a motor vehicle, tram, train or vessel as well as the penalties that may be imposed if a person is found guilty of exceeding these limits.
28. Queensland and other Australian jurisdictions have adopted the 'Scandinavian model' of per se drink driving legislation. Per se drink driving laws require that any driver apprehended with a BAC greater than a specified level as determined by a breath, blood or urine test, be charged with driving whilst under the influence of liquor. Unlike the behaviour based approach to drink driving enforcement, per se legislation dictates that a driver's BAC is, on its own, evidence of alcohol impairment; no other evidence (such as tests for behavioural impairment) is necessary to prove legal incapacity to drive (Zaal, 1994; 34).
29. Sanctions for drivers convicted of exceeding the specified BAC limits include fines, licence action and imprisonment. A basic outline of Queensland's current drink driving penalties is given in Table 1.

Table 1: Drink driving penalties in Queensland

| CATEGORY | FIRST OFFENCE | SECOND OFFENCE | SUBSEQUENT |
|--|--|---|---|
| Zero - 0.05 % BAC Learner and Provisional licence holders under 25 years, unlicensed drivers, heavy vehicle, public transport, and dangerous goods drivers. | <ul style="list-style-type: none"> • \$1 050 max or 3 months gaol • 3 months (min) - 9 months (max) disqual. | | |
| 0.05% - 0.15% BAC | Ticket system for first offenders only: optional for police to use. <0.05 \$100 0.05 - <0.07 \$100 0.07 - <0.09 \$250 0.09 - <0.11 \$400 0.11 - <0.13 \$500 0.13 - <0.15 \$600 <ul style="list-style-type: none"> • \$1 050 max or 3 months gaol • 1 - 6 months disqual (open licence) • 3 - 6 months disqual (Provisional and Learner licence - of or over 25 y.o.) | <ul style="list-style-type: none"> • \$1 500 max or 6 months max gaol • 3 - 18 months disqual | <ul style="list-style-type: none"> • \$2 100 max or 9 months max gaol • 6 months min disqual |
| Over 0.15% BAC | <ul style="list-style-type: none"> • \$2 100 max or 9 months gaol • 6 months disqual | <ul style="list-style-type: none"> • \$2 550 max or 18 months gaol • 12 months disqual | <ul style="list-style-type: none"> • (>0.15x2) - Imprisonment must form part of sentence • 2 years disqual |
| Refuse blood or breath test | <ul style="list-style-type: none"> • \$2 100 max or 9 months gaol • 6 months disqual | <ul style="list-style-type: none"> • \$2 550 max or 18 months gaol • 12 months disqual | <ul style="list-style-type: none"> • \$2 550 max; imprisonment may form whole or part of punishment • 2 years disqual |
| All of the above | Immediate 24 hour licence suspension | | |

Source: Queensland Police Service

30. A variety of additional measures are taken as part of an integrated approach to drink driving management. They include education and publicity campaigns, programs aimed at modifying the social environment in which alcohol is served (eg. patron care

and server intervention programs) as well as rehabilitation programs for drink driving offenders.

PART 3 ~ PROVISIONS FOR BAC TESTING OF ROAD ACCIDENT CASUALTIES AT HOSPITALS

31. Of the Australian States and Territories, New South Wales, South Australia, Victoria, the Northern Territory and the Australian Capital Territory have some form of compulsory BAC testing. Western Australia and Tasmania have legislative provisions that are similar in many respects to those in Queensland.
32. Although the legislation in each of the jurisdictions with compulsory BAC testing is designed to have the same general effect, the provisions differ in some important ways. The following is an overview of the laws in each jurisdiction. A further comparison is provided by table 2 on page 18.

QUEENSLAND

33. At present, people who attend Queensland hospitals for examination or treatment of injuries sustained in road accidents do not routinely have breath or blood samples taken for BAC testing. Specimens must be specifically requested by police.
34. Section 16A(8C) of the *Traffic Act 1949* allows a police officer to require any person who is at a hospital for treatment to provide a specimen of blood or breath for BAC testing if he/she reasonably suspects that a person was:-
 - (a) in the preceding two hours, driving, attempting to put in motion, or in charge of a motor vehicle², or
 - (b) involved in an accident involving a motor vehicle which resulted in injury or death to any person or damage to property and was driving, attempting to drive, or in charge of a motor vehicle at the time of the accident.
35. The police requirement for the supply of samples is subject to the approval of a medical practitioner who is familiar with the person's injuries and apparent state of health.
36. Put simply, the only assurance that a driver who is at a hospital will be subjected to a BAC test (the results of which can be used as evidence) is where the patient is conscious, and a police officer:-
 - is present at the hospital;
 - has reasonable grounds for suspecting that, in the last two hours, the patient was driving, attempting to drive or in charge of a motor vehicle; and

² A motor vehicle is defined in the *Traffic Act 1949* as any vehicle designed for propulsion by mechanical power.

- makes the request for a sample to be taken as soon as practicable and within two hours of the patient last driving, subject to the availability of a doctor and the doctor's approval.
37. There is a consensus that a reasonable interpretation of the *Traffic Act 1949* is that consciousness is a necessary precondition for the taking of a sample for BAC analysis — an unconscious person is not able to give or withhold consent. The state of consciousness matters, despite the fact that the legislation appears to enable the taking of blood with or without consent (submission 55: submissions page 282).
38. The provisions for BAC testing in Section 16A only apply to drivers of motor vehicles, not to other road user groups such as passengers, cyclists and pedestrians.

NEW SOUTH WALES

39. In New South Wales, Section 4F of the *Traffic Act 1909* says that:-

Where a person of or above the age of 15 years attends at or is admitted into a hospital for examination or treatment in consequence of an accident upon a public street (whether in New South Wales or elsewhere) involving a motor vehicle or other vehicle or a horse, it is the duty of any medical practitioner by whom the person is attended at the hospital to take as soon as practicable from the person a sample of the person's blood for analysis, whether or not the person consents to the taking thereof.

40. In the absence of a medical practitioner, the blood specimen is to be taken by a registered nurse who is attending the person and who is accredited by a hospital as competent to perform the sampling procedure. Further, any duty of a medical practitioner may be performed by a person acting under the supervision of a medical practitioner. In that event the duty is deemed to have been performed by the medical practitioner.
41. A blood specimen is not required to be taken unless the person was:-
- driving a motor vehicle involved in the accident;
 - occupying the driving seat of a motor vehicle involved in the accident or attempting to put the motor vehicle in motion;
 - a pedestrian involved in the crash;
 - driving or riding a vehicle (not being a motor vehicle) involved in the accident; or
 - driving or riding a horse involved in the accident.

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42. If a blood sample is taken within two hours of the time of the incident, it is prima facie evidence for a prescribed concentration of alcohol charge. If it is taken outside of the two hours but within 12 hours after the incident, the blood alcohol reading can be used for supportive evidence.
 43. Medical practitioners and nurses are not required to take a blood specimen if one has already been taken by another medical practitioner or registered nurse for the purposes of BAC testing.
 44. Failure by a medical practitioner or nurse to take a blood specimen, as required, is an offence under the Act. There are, however, a number of defences to prosecution, such as if taking a blood specimen would be prejudicial to a patient's proper care and treatment, or if the medical practitioner/nurse reasonably believed that the patient was not 15 years old or over.
 45. The Act also makes it an offence for any person to hinder or obstruct a medical practitioner or nurse from taking a blood specimen. It is also an offence for a person who is liable to be tested for BAC to prevent the taking of a blood specimen by a medical practitioner or nurse, or to alter the concentration of alcohol in his/her blood in the two hours following the accident.
 46. Medical practitioners, registered nurses and people who act under the supervision of a medical practitioner are given immunity from civil and criminal liability for anything done properly or necessarily in the course of taking a sample if they reasonably believe they were required to take a sample.

SOUTH AUSTRALIA

47. In South Australia, Section 47I of the *Road Traffic Act 1961* deals with compulsory blood tests. It says that:-

Where a motor vehicle is involved in any accident and, within eight hours after the accident, a person apparently of or above the age of 14 years who suffered injury in the accident attends at, or is admitted into, a hospital for the purpose of receiving treatment for that injury, it is, subject to this section, the duty of a legally qualified medical practitioner by whom that patient is attended to take, as soon as practicable, a sample of that patient's blood (notwithstanding that the patient may be unconscious) in accordance with this section.

48. A medical practitioner who fails, without reasonable excuse, to comply with the provisions of, or to perform any duty arising under Section 47I of the *Road Traffic Act 1961* is guilty of an offence. However, proceedings against a medical practitioner cannot begin unless they are authorised by the Attorney-General.

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49. A medical practitioner must not take a specimen of blood where, in the opinion of the medical practitioner, it would be injurious to the medical condition of the patient to do so. Further, they are not obliged to take a blood specimen where the patient objects to the taking of the specimen and persists in that objection after the medical practitioner has informed the patient that, unless the objection is made on genuine medical grounds, it may constitute an offence.
50. No proceedings lie against a medical practitioner in respect of anything done in good faith and in compliance or purported compliance with the provisions of Section 47I of the *Road Traffic Act 1961*.

THE NORTHERN TERRITORY

51. Legislative provisions for compulsory BAC testing in the Northern Territory are contained in Section 25 and 26 of the *Northern Territory Traffic Act*. Among other things, Section 25 says that:-

... the Minister administering the Public Health Act shall ensure, for the purpose of having a blood test carried out by an authorised analyst, that a sample of blood be taken as soon as practicable from each person who has apparently attained the age of 15 years who enters a hospital for examination or treatment of injuries which may have been received in a motor vehicle accident.

52. For the purposes of Section 25, a member of staff who is a medical practitioner or who is under the direct supervision of a medical practitioner may -
- take a specimen of blood of a person who is unconscious or apparently incapable of consenting to the giving of the specimen; or
 - require a person to give a specimen.
53. A member of staff of a hospital is not required to take a blood specimen if they believe on reasonable grounds that -
- the concentration of alcohol in the persons blood is already known;
 - the taking of a blood specimen would be detrimental to the person's medical condition;
 - the injuries of the person were not received in a motor vehicle accident or the motor vehicle accident happened more than 12 hours before the person entered the hospital; or
 - a period of more than 4 hours has elapsed since the person entered the hospital.

VICTORIA

54. Section 56 (2) of the Victorian *Road Safety Act 1986* permits the taking of blood specimens from drivers and motorcycle riders brought to or presenting for treatment or examination following involvement in an accident involving a motor vehicle.
55. Unlike New South Wales, South Australia and the Australian Capital Territory, there is no legal requirement in Victoria for medical practitioners to take blood specimens. In 1991, the legal requirement for medical practitioners to obtain specimens was removed and medical practitioners adopted a 'code of practice' in which it is policy to take blood specimens from all drivers and riders involved in a motor vehicle accident.
56. The legal onus is now on the accident victim to allow medical practitioners to take blood specimens. Specifically, Section 56(2) states that:-
- If a person of or over the age of 15 years enters or is brought to a place for examination or treatment in consequence of an accident (whether within Victoria or not) involving a motor vehicle, the person must allow a doctor to take from that person at that place a sample of that persons blood for analysis.*
57. The requirements outlined above do not apply if -
- in the opinion of the doctor the taking of a blood specimen would be prejudicial to the proper care or treatment of the person;
 - a member of the police force has notified the doctor, in writing, that the person has undergone a preliminary breath test (PBT) which did not indicate that the prescribed concentration of alcohol was exceeded;
 - a member of the police force or a member of an ambulance service has notified the doctor, in writing, that the person was an occupant of and was not driving or in charge of any vehicle involved in the accident; or
 - a member of the police force or a doctor has notified the doctor first responsible for the examination or treatment of the person, in writing, that a specimen of the person's blood was taken by a doctor before the person entered or was brought to the place for examination or treatment.
58. Samples must be collected within 3 hours after the patient drove or was in charge of a motor vehicle for the result to be used as prima facie evidence. However, there is no outer time limit specified in the Victorian legislation within which a sample is to be taken for use as supporting evidence.
59. A person who is liable to be tested and who is unconscious or otherwise unable to communicate, is assumed to allow the taking of a blood specimen by a doctor at the place he or she has been taken for examination or treatment.
60. No action lies against a registered medical practitioner in respect of anything properly and necessarily done by the practitioner, in the course of taking any sample of blood
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which the practitioner believed on reasonable grounds was allowed to be taken, under section 56 of the *Road Safety Act 1986*.

61. In practice, if there is any doubt as to whether the person concerned was actually a driver or motorcycle rider, a blood specimen is taken. All persons presenting are treated as possible drivers or motorcycle riders unless police or ambulance personnel provide written advice to the contrary. Police investigations then determine which patients are liable to be tested. Specimens from patients who have had a sample taken but who were subsequently found not to be a driver or rider are not tested (Correspondence 22 November 1996).

THE AUSTRALIAN CAPITAL TERRITORY³

62. The Australian Capital Territory recently passed legislation to make BAC testing of road accident casualties compulsory. Provisions for compulsory testing are in the *Motor Traffic (Alcohol and Drugs) Act 1977* and the *Traffic Act 1997*.
63. Section 36 of the *Traffic Act 1997* says that blood samples should be taken from people who appear to have attained the age of 15 years and attend, or are admitted to, a hospital for the purpose of examination or treatment as a consequence of an accident —
- involving a vehicle that he or she was driving or attempting to drive;
 - involving an animal that he or she was riding, driving or attempting to ride or drive; or
 - in which he or she was involved as a pedestrian.
64. A medical practitioner or a nurse who attends to one of these people is required to take a blood sample for analysis within 2 hours of the person's arrival at hospital. Penalties are prescribed for both medical practitioners and nurses who fail to take a sample and for patients who fail to supply a sample.
65. A medical practitioner or nurse is not required to take a sample:-
- if he or she is of the opinion that to do so would be detrimental to a person's medical condition;
 - if the person objects to the carrying out of the procedure and persists in so objecting after a medical practitioner has informed the person that refusal may constitute an offence; or
 - if the medical practitioner or nurse believes on reasonable grounds that a sample of the blood of the person had already been taken for the purposes of the Act or would be taken.

³ The ACT legislation for compulsory BAC testing of road accident casualties at hospitals was only passed in mid 1997. The new requirements have not yet been implemented. Because of this the committee has not undertaken a detailed investigation of compulsory BAC testing in the ACT.

66. A nurse or medical officer has a defence for not taking a blood sample if they could not take a sample because of the behaviour of the patient or if there was reasonable cause for failure to comply.

67. Section 11 (5) of the *Motor Traffic (Alcohol and Drugs) Act 1977* says that:-

The Territory shall indemnify and keep indemnified a medical practitioner or nurse who carries out a specified procedure when required to do so by this Act in respect of any damages that he or she becomes liable to pay as a result of carrying out the procedure.

Table 2: Legislation on compulsory blood alcohol testing of road crash casualties taken to hospital

| | NEW SOUTH WALES | VICTORIA | SOUTH AUSTRALIA | NORTHERN TERRITORY | AUSTRALIAN CAPITAL TERRITORY |
|---|---|--|---|---|---|
| 1. Road user types tested. | Drivers and pedestrians (pedestrians not liable for prosecution). | Vehicle drivers (includes motorcyclists). | All | All | Drivers, animal riders and pedestrians |
| 2. Minimum age for testing. | 15 years | 15 years | 14 years | 15 years | 15 years |
| 3. Time limit for samples to be taken. | <ul style="list-style-type: none"> 2 hours after the incident for prima facie evidence. 12 hours for supporting evidence. | <ul style="list-style-type: none"> 3 hours after the incident for prima facie evidence. No time limit for supporting evidence. | Within 8 hours of the incident for prima facie evidence | 12 hours after the incident, and within 4 hours of entering hospital. | 2 hours. |
| 4. Who takes samples? | <ul style="list-style-type: none"> Medical practitioner; registered nurse; and person under the direct supervision of a medical practitioner. | Medical practitioners only. | Medical practitioners only. | <ul style="list-style-type: none"> Medical practitioners. People who are under the direct supervision of a medical practitioner. | <ul style="list-style-type: none"> Medical practitioners; and nurses. |
| 5. Mechanisms to ensure samples are taken. | <ul style="list-style-type: none"> Legal compulsion on medical practitioners to take samples. Legal compulsion on patient to provide a sample when requested. | <ul style="list-style-type: none"> Legal compulsion on patients to provide samples. Code of practice for hospitals and medical practitioners to take samples. | <ul style="list-style-type: none"> Legal compulsion on medical practitioners to take samples. Legal compulsion on patient to provide a sample when requested. | <ul style="list-style-type: none"> Minister for Health responsible for ensuring that samples are taken. Patients compelled to provide a sample when requested. | <ul style="list-style-type: none"> Legal compulsion on medical practitioners to take samples. Legal compulsion on patient to provide a sample when requested. |
| 6. Are doctors/nurses given immunity from civil and criminal action? | Yes | Yes | Yes | Yes | Yes |
| 7. Reasons for doctors/nurses not to take a blood sample. | <ul style="list-style-type: none"> Patient's BAC is already known. Taking a blood sample may compromise the patient's health. Patient appears to be less than 15 years old. Patient did not appear to be a road crash victim. | <ul style="list-style-type: none"> Patient's BAC already known. Taking a blood sample may compromise the patient's health. Patient persistently refuses to supply a sample. | <ul style="list-style-type: none"> Patient persistently objects to supplying a sample despite being warned that this refusal constitutes an offence. A blood samples has already being obtained. Taking a blood samples may compromise the patient's health. | <ul style="list-style-type: none"> Patients BAC is already known. Taking a blood sample will compromise the patient's health. Patient did not appear to be a road crash victim. 12 hours have elapsed since the collision or the patient has been at the hospital for over 4 hours. | <ul style="list-style-type: none"> Patient's BAC is already known. Taking a blood sample may compromise the patient's health. Patient appears to be less than 15 years old. Patient did not appear to be a road |

| | | | | | |
|--|--|--|--|--|---------------|
| | | | | | crash victim. |
|--|--|--|--|--|---------------|

PART 4 ~ SHOULD COMPULSORY BAC TESTING BE INTRODUCED IN QUEENSLAND?

QUEENSLAND'S COMMITMENT TO INTRODUCE COMPULSORY BAC TESTING

68. In May 1997, during the course of this inquiry, the Australian Transport Council, comprising federal, state and territory transport ministers, met and endorsed the national road safety package. The package draws from the national road safety strategy and the national road safety action plans and jurisdictional road safety strategies and plans. It seeks the cooperation of all states and territories to immediately implement specific road safety measures that aim to produce results quickly. The package covers road safety measures in the areas of alcohol, speed, general deterrence and enforcement, seat belts, rural road safety, fatigue management and bus safety (Exhibit 16).
69. Among the actions to combat alcohol related road trauma, agreed to by Queensland's Minister for Transport and Main Roads, the Hon. Vaughan Johnson MLA, were the introduction of:-
- mandatory alcohol testing of all drivers, riders killed or admitted to hospital as a result of a road crash; and
 - alcohol testing of adult pedestrians killed or admitted to hospital where feasible.

SUPPORT FOR COMPULSORY BAC TESTING

70. The introduction of compulsory BAC testing was supported by a substantial majority of the individuals and organisations who made submissions to the inquiry. All but one professional medical body were in favour of introducing compulsory testing⁴. Supporters included:
- Australian Medical Association (Queensland Branch);
 - Australian Society for Emergency Medicine;
 - Australasian College for Emergency Medicine;
 - Queensland Emergency Nurses Association;
 - Royal Australasian College of Physicians;
 - Royal Australasian College of Surgeons; and
 - Royal College of Nursing Australia.

⁴ The only professional medical body to object to the introduction of compulsory BAC testing was the Australian College of Paediatrics, and they did not oppose compulsory testing completely.

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71. Out of 25 submissions from individual medical practitioners and registered nurses, 21 supported the introduction of compulsory BAC testing outright.
 72. Compulsory BAC testing is strongly supported by the Queensland Police Service, Queensland Health and the Queensland Ambulance Service — the government bodies that deal directly with the effects of alcohol-related road trauma on a day-to-day basis. Other organisations who support BAC testing include the Royal Automobile Club of Queensland (RACQ), the Child Accident Prevention Foundation of Australia, Citizens Against Road Slaughter (CARS) and the Motorcycle Riders Association of Queensland. Of the remaining submissions, 53 gave in-principle support for the introduction of compulsory BAC testing, and 7 argued against it.

A PROPOSED MODEL FOR COMPULSORY TESTING

73. When considering whether compulsory BAC testing should be introduced in Queensland the committee considered four interrelated matters:-
 1. the nature and extent of the problems with existing provisions for BAC testing of hospitalised road accident casualties in Queensland;
 2. the extent to which the introduction of compulsory testing will address these problems;
 3. if compulsory testing is warranted, what the terms and conditions for testing should be; and
 4. whether the likely benefits from compulsory BAC testing would justify the costs.
74. The committee supports the Minister for Transport's commitment to introduce compulsory BAC testing. It is satisfied that the existing provisions for testing are inadequate and that the introduction of compulsory BAC testing in the form proposed by the committee will address many of the problems. The committee also believes that if its proposed model for testing is adopted, it will generate benefits in excess of its costs.
75. Compulsory BAC testing can take many forms. Variables considered by the committee included: the road user types tested; the minimum age for testing; who should take samples; time limits for blood samples to be taken; mechanisms to ensure that samples are taken; and whether the testing should be based on blood only or breath and blood sampling. These variables are discussed in detail in part 5 of the report.

76. The committee has concluded that:-
- a system based on both breath and blood samples should be implemented;
 - drivers, motorcycle riders and pedestrians should be tested;
 - the minimum age for testing should be 15 years of age;
 - there be no legal compulsion on hospital staff to take samples, but rather a 'code-of practice' be developed and adopted as hospital policy so that samples are taken from those people who are liable to be tested;
 - the legal onus should be placed on patients liable to be tested, including patients who are unconscious or otherwise unable to communicate, to provide a sample when requested to do so by medical practitioners, nurses or other certified people;
 - medical practitioners, nurses and other people who are appropriately trained and certified by a hospital should be allowed to take breath and blood samples; and
 - the BAC test results of blood samples taken within 4 hours of the accident should be accepted as prima facie evidence of a prescribed concentration of alcohol charge. The BAC test results from samples taken within 12 hours of the accident should be admissible as supporting evidence.

THE NATURE AND EXTENT OF THE PROBLEMS WITH THE EXISTING PROVISIONS FOR BAC TESTING

77. As noted in the previous section, the only assurance that a driver or rider who is at a hospital for treatment as a result of a motor vehicle accident will be subject to a BAC test is where the patient is conscious and a police officer:-
- is present at the hospital;
 - has reasonable grounds for suspecting that, in the last 2 hours, the patient was driving, attempting to drive or in charge of a motor vehicle; and
 - subject to the availability of a doctor and the doctor's approval, makes the request for a sample to be taken as soon as practicable and within two hours of the patient last driving.
78. The committee was told that these provisions result in a high level of non-testing and, consequently, a low level of detection of drink drivers who present at hospitals for examination or treatment. The submission from the Queensland Police Service (submission 50: submissions page 180) suggests that the need to attend to other matters and distance are two factors that often serve to make it impossible for them to satisfy the requirements so that a blood sample is taken.
79. When police attend an accident, priority is given to securing the scene, preventing further injury and assisting the injured. In addition, police must attend to other matters

- such as traffic flow around the accident site, documentation of the accident and directing the removal of vehicles from the road way. In many instances, people injured in an accident are admitted to hospital before the attending police officers have left the scene. Frequently, police are then required to attend to other duties.
80. The Queensland Police submission (submission 50: submissions page 180) also notes that blood specimens are often not taken because there is no medical practitioner available to take a sample. This is especially a problem in rural and remote areas where many small hospitals are staffed by registered nurses for a large part of the time and in some instances do not have a doctor. Problems may also arise because in some instances police are not notified of an accident within the 2 hour limit or are not notified at all and, therefore, do not attend the accident.
 81. The need for a patient to be conscious before a sample can be taken is also problematic. McInnes (1993; 1) estimates that in 1991 there were approximately 449 hospitalised road traffic casualties who were unconscious⁵. None of these could have had a sample taken to conduct a blood alcohol test the purposes of the Traffic Act.
 82. The vast majority of submissions from medical groups and individual doctors and nurses indicated that there were problems with the existing provision for testing. One submission suggested that there was no problem with the existing provisions for BAC testing. Dr Ian Knox, the Director of the Emergency Centre at the Wesley Hospital said that he did not believe that there were significant numbers of intoxicated drivers attending hospital emergency departments after road crashes escaping detection because of an inability of the police to attend in time (submission 42 ; submissions page 142).
 83. An estimation of the number of road accident casualties who attend a hospital for treatment and have a BAC above the maximum legal limit can be made by multiplying the number of drivers and riders who are treated at a hospital in Queensland by the percentage of drivers and riders admitted to or treated at a hospital and found with a BAC of 0.05 or over in similar jurisdictions that have compulsory BAC testing and subtracting the number of hospitalised drivers and riders detected in Queensland with a BAC of 0.05 or over.
 84. There were 3 622 driver and motorcyclist casualties admitted to hospital and 8 909 hospitalised and outpatient drivers and motorcyclist casualties (King and Nucifora 1992).
 85. In South Australia, 24 percent of hospitalised drivers and motorcyclists who are tested for alcohol are found to be over 0.05 BAC. In New South Wales this figure is 21 percent. The percentages are lower for hospitalised and outpatient driver and rider casualties. In South Australia, 19 percent are above 0.05 BAC. In New South Wales it is 13 percent.

⁵ The total number of unconscious, hospitalised crash casualties was derived by adding the total number of persons hospitalised for intracranial injuries (n=228) and concussion (n=171) with one-half the total number (n=99/2) of persons hospitalised for skull and face fractures.

86. From these figures it can be estimated that in 1990:-
- between 1 158 and 1 692 hospitalised and outpatient drivers and riders in Queensland had a BAC of 0.05 or over; and
 - between 760 and 869 drivers and riders who were hospitalised in Queensland had a BAC of 0.05 or over.
87. Queensland Transport supplied the committee with statistics on the number of samples taken from hospitalised drivers and motorcyclists and the results of the tests on these samples between 1990 to 1995. They are shown in table 3.

**Table 3: Drivers and motorcyclists hospitalised in Queensland by BAC
1990 to 1995**

| BAC RESULT | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|----------------------|------|------|------|------|------|------|
| Nil | 121 | 91 | 95 | 95 | 94 | 159 |
| 0.01 - 0.04 | 12 | 9 | 10 | 9 | 20 | 17 |
| 0.05 - 0.07 | 16 | 18 | 15 | 19 | 14 | 12 |
| 0.08 - 0.14 | 68 | 64 | 65 | 67 | 66 | 79 |
| 0.15 - 0.19 | 81 | 55 | 56 | 59 | 98 | 68 |
| 0.20 - 0.24 | 41 | 47 | 47 | 37 | 45 | 56 |
| 0.25 and over | 19 | 15 | 20 | 18 | 22 | 21 |
| Number tested | 358 | 229 | 308 | 304 | 359 | 412 |
| Number 0.05 and over | 225 | 129 | 203 | 200 | 345 | 236 |

Source: Queensland Transport

88. From these figures, it can be estimated that in 1990:-
- between 933 and 1 467 hospitalised and outpatient drivers and riders who had a BAC of 0.05 and over were not detected under the existing testing arrangements; and
 - between 535 and 644 hospitalised drivers and riders who had a BAC of 0.05 and over were not detected under the current testing arrangements.
89. Given that the number of drivers and rider hospitalisation casualties and the drink driving rates have remained reasonably steady through the 1990s, the figures cited above indicate that the current arrangements for testing are seriously deficient.
90. The Queensland Council for Civil Liberties argues that, in the majority of cases, drink drivers who cannot be charged for drink driving can still be punished for dangerous driving, a serious offence. The police have verified that in 70-80 percent of cases,

undetected drink drivers will be convicted of dangerous driving. However in roughly 20 percent of cases, the absence of a BAC test (an important 'aggravating' factor) will result in a driver escaping serious conviction. Without drink driving evidence, maximum sentences can be reduced by up to 5 years (McInnis 1993).

91. The committee believes it is unjust that hospitalised drink drivers effectively avoid detection and punishment for grossly irresponsible behaviour because: police are not notified of an accident or are prevented from arriving at hospital within the time specified limit; a doctor is unavailable or does not have time to take a sample; or the patient is unconscious or feigns unconsciousness.

COSTS AND BENEFITS OF COMPULSORY BAC TESTING

Benefits

92. Those jurisdictions with compulsory BAC testing consider it to be part of a comprehensive drink driving package which includes RBT, drink driving legislation, education and advertising campaigns and other drink driving countermeasures. They argue that, without the detection and prosecution of drink drivers through compulsory BAC testing of road accident casualties, there is a major loophole that can be exploited, which detracts from the credibility of drink driving countermeasures generally (forum transcript page 50-1).

Detection and Prosecution of Drink Drivers

93. One of the most apparent advantages of introducing compulsory BAC testing will be the detection and prosecution of drink drivers. It is obvious that compulsory testing will significantly increase the number of people who are tested and the number of people who are prosecuted for drink driving offences. Many of the people convicted of drink driving offences will be removed from the road through licence suspension which will result in fewer accidents. Others will receive monetary penalties.
94. In addition to catching and removing drink drivers from the road it was suggested that a system of compulsory BAC testing would also:-
- prevent hospitals being used as 'safe havens' to avoid prosecution;
 - improve the deterrent impact of drink driving laws;
 - improve the integrity of Queensland data on alcohol as a crash and fatality factor;
 - improve casualty management at hospitals; and
 - improve the identification and treatment of drink drivers.

Prevent Hospitals Being Used as ‘Safe Havens’ from the Law

95. During its inquiries into Queensland’s road toll and compulsory BAC testing, the committee was told that the existing legislation for BAC testing of road accident casualties at hospitals allows drink drivers to avoid BAC testing by feigning injury and unconsciousness, and being taken to hospital. At a hearing for the road toll inquiry in 1996, Mrs Phyl den Ronden from Citizens Against Road Slaughter (CARS) suggested that “people who habitually drink and drive are more street wise than any of us would ever be and they know their rights. They know how to dodge the alcohol test” (transcript page 96). In its submission to the inquiry, the Royal Australasian College of Surgeons Trauma Committee suggested that compulsory testing would prevent hospitals being used as ‘safe havens’ from prosecution (submission 97; page 1).
96. These claims were backed up the Queensland Ambulance Service (QAS) and police. The QAS (submission 66: submission page 307) states that they are “aware that the current Queensland situation .. does encourage those ‘in the know’ to pretend to have injuries that require ambulance transport to hospital, so avoiding breath testing by police at the scene.”
97. At the Charters Towers hearing, Inspector Butterworth told the committee that he had personal experiences of people who had feigned injury to avoid testing. According to Butterworth:
- through hearing about people who have done it in the past they think, “Well, if I get caught, that’s what I’m going to do.” Of course, if they are in an accident they just faint or say that they have some serious injury the police officers have to take all precautions. Over the years, people have been taken to hospital saying they have received some injuries, but there were no visible signs ... When you talk to them about different things after the two-hour limit, they have a marvellous recall of what happened. Yet they had to go to hospital because they bumped their head, felt dizzy and so on. But after the two hour limit, they leave the hospital and walk home (hearing transcript 3, page 6 - 7).*
98. Senior Sergeant Tom Wilkinson, gave the committee an account of the system being exploited in much the same way as that described by Butterworth. According to Wilkinson, “feigning injury is one of the biggest outs to drink-driving.” (hearing transcript 3: page 26).
99. Queensland Transport says it is not aware of anything other than anecdotal evidence that hospitals are used as ‘safe havens, and that the scale of the occurrence is obscure. Its submission argues that, to some extent, the use of a hospital as a ‘safe haven’ is a calculated risk, since police might turn up at the hospital anyway and the risk may not justify the effort since police do not attend a majority of crash scenes in any case (submission 55, submissions page 240). The committee notes that, even if police attended the hospital, a sample would not be taken under the existing law if a person cannot give their consent.

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100. As Queensland Transport notes, the evidence of hospitals being used as ‘safe havens’ from the law is anecdotal and it is not clear how large the problem is. This is hardly surprising given the nature of the problem. It is clear, though, that loopholes in the legislation do exist and can be exploited by people who are aware of them.

Improve the Deterrent Impact of Drink Driving Laws

101. Another proposed benefit of compulsory BAC testing is that it will improve the deterrent impact of drink driving laws. Whether this benefit would actually accrue was the subject of some debate during the inquiry. On the one hand, as Grieve and Nucifora (1992) note, road safety researchers in Victoria believe that compulsory BAC testing may be an effective countermeasure as it should act as both a specific and general deterrent of drink-driving. Specific deterrence is where the individual is deterred from repeating a drink-driving offence as a result of being blood alcohol tested after a road crash and subsequently charged and penalised for drink-driving. General deterrence results from the belief in the community that a real risk of detection and punishment exists where traffic laws are broken.
102. Licence suspension is often regarded as the ‘teeth’ of the driver-improvement system. In recent years it has become one of the principle sanctions for dealing with drink drivers, and has been shown to be an effective countermeasure with a high deterrent effect (Ross, 1991). Licence suspension is administered for two primary reasons: punishment and safety. As a punitive measure, licence suspension is assumed to work as both a specific and general deterrent. As a specific deterrent, it is assumed to punish the drink driver. As a general deterrent, the threat of licence suspension is believed to decrease the likelihood of drink driving because drivers are not prepared to risk the chance of losing the privilege of driving (Zaal, 1994).
103. Grieve and Nucifora (1992; 5) also argue that compulsory testing could act as a general deterrent aimed at the potential drink-driver in the general driving population. Providing that there is an increased level of breath testing at crash sites, compulsory BAC testing will allow publicity and enforcement agencies to construct a powerful media message that all drivers/riders involved in road crashes will be tested whether or not they are at fault, or how well they think they can drive after a few drinks.
104. Ross Homel, Professor of Justice Administration at Griffith University, appeared as a witness at a hearing for the committee’s 1996 inquiry into Queensland’s road toll. He is an expert in the area of road safety and has focussed much of his research on the effectiveness of police enforcement. Homel told the committee that one of the merits of compulsory blood testing would be that it would “improve the deterrent impact of the law because there would be no thought in the mind of the potential offender that they could escape detection by, for example, delaying the test. If there is compulsory testing of all drivers involved in an accident, that removes the loopholes in the deterrence model.” (transcript page 140).

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105. Queensland Transport suggests that greater deterrence from drink driving is most unlikely given what is known about the factors which contribute to deterrence. They argue that compulsory BAC testing is contingent upon being involved in a crash, but drink drivers are deterred by the threat of being detected by Police, not by crash involvement. Detection by RBT, if conducted at a high enough level and using best practice principles, is considered to be a risk that is both high and difficult to avoid. Crash risk is considered much lower and able to be avoided (by the driver's "superior" ability, experience, driving carefully, etc). The threat of compulsory BAC testing involves not only an assessment of crash risk as high and difficult to avoid, but an assessment of one's own risk of injury being high given that a crash occurs. Further, the threat of being breath tested at the crash scene or having a sample requested while in hospital already exist (submission 55, submissions page 241).
106. Adjunct Professor Victor Siskind from the Queensland Centre for Accident Research and Road Safety (submission 38: submissions page 131-2) told the committee that he was unaware of any reliable evidence demonstrating that drink drivers generally are deterred by the prospect of detection in the event of a crash in which they would need to be hospitalised. He notes, however, that there is anecdotal evidence to suggest that certain classes of drivers who feel they have little chance of being apprehended by RBT may be deterred to a greater extent by the non-discriminatory testing that would operate in hospitals.
107. The committee believes that compulsory blood testing will improve the deterrent impact of drink driving laws, although it is difficult to gauge the extent of the benefit. Compulsory testing should be viewed as part of an overall drink driving package. As Homel noted, the introduction of compulsory testing will remove the loopholes in the deterrence model.

Improved Statistics

108. One of the benefits of compulsory BAC testing suggested by panellists at the committee's forum was more comprehensive and accurate data on alcohol related crashes and fatalities, which is important for road safety research. According to Senior Sergeant Eury, Victorian police rely heavily on statistics from compulsory BAC testing at hospitals. They find that the data provides a means for the formulation and adjustment of enforcement, prevention and education programs (forum transcript page 50). Trevor Bailey told the committee that South Australia uses statistics from its compulsory BAC testing as the basis for its drink-driving policies and strategies and to evaluate those initiatives (forum transcript page 51). In New South Wales, traffic police use data from compulsory BAC testing in conjunction with RBT statistics. These are used to ensure that police operations are based on fact rather than gut feelings (Inspector Grainger: forum transcript page 52).
109. In Queensland between 1991 and 1996, 21 percent of driver and motorcycle rider fatalities were not tested for BAC (Queensland Transport, 1997). This low level of testing occurred because fatally injured road casualties taken to hospital were not

blood tested for alcohol level (Queensland Department of Transport, 1991). Although post mortems (including blood alcohol tests) are conducted on all road casualties in Queensland, they do not establish BAC at the time of the crash for those victims who are admitted to hospital and die several hours later (Grieve and Nucifora, 1992).

110. The incomplete alcohol data is even more pronounced for non-fatal road crashes. In 1995, the National Injury Surveillance Unit published a study by O'Connor and Trembath on missing values of blood alcohol concentration in road crash databases. Research undertaken as part of the study indicated that the level of missing values for BAC could be subject to the influence of a wide range of factors including: legal requirements which varied from state to state; operational constraints such as police and hospital work loads; and police and hospital procedures. However, it was considered by the study reference group that principal among the factors was the presence or absence of a legislative requirement for BAC testing. This was verified by the multivariate analysis of BAC status. It was also supported by a univariate analysis of BAC status by state, where much higher levels of missing values were found in those states which have no legislative requirement for blood testing of drivers admitted to hospital. As table 4 indicates, New South Wales had the lowest level of missing values for drivers admitted to hospital following a road crash and Western Australia and Queensland had the highest (O'Connor and Trembath, 1995; 47-9).

Table 4: BAC status and level for hospitalised drivers by State 1990

| STATE OF CRASH* | BAC LEVEL WHERE KNOWN | | | | | | BAC NOT KNOWN | | TOTAL CASES |
|---|-------------------------------|---------------------|-------------------------------|---------------------|-------------|---------------------|---------------|---------------------|----------------|
| | less than or equal to 0.05 | | more than or equal to 0.05 | | Total known | | Not known | | |
| | No. | % of total known | No. | % of total known | No. | % of total known | No. | % of total known | No. |
| States having legislation for BAC testing of drivers admitted to hospital | | | | | | | | | |
| NSW | 2 953 | 79.1 | 779 | 20.9 | 3 732 | 100.0 | 231 | 5.8 | 3 963 |
| SA | 726 | 74.1 | 254 | 25.9 | 980 | 100.0 | 329 | 25.1 | 1 309 |
| NT | 105 | 64.0 | 59 | 36.0 | 164 | 100.0 | 80 | 32.8 | 244 |
| VIC | 1 578 | 73.2 | 577 | 26.8 | 2 155 | 100.0 | 1 613 | 42.8 | 3 768 |
| States not having legislation for BAC testing of drivers admitted to hospital | | | | | | | | | |
| TAS | 49 | 60.5 | 32 | 39.5 | 81 | 100.0 | 236 | 74.4 | 317 |
| ACT | 8 | 33.3 | 16 | 66.7 | 24 | 100.0 | 100 | 80.6 | 124 |
| QLD | 134 | 39.6 | 209 | 60.4 | 346 | 100.0 | 1 767 | 83.6 | 2 113 |
| WA | 98 | 73.1 | 36 | 26.9 | 134 | 100.0 | 1 223 | 90.1 | 1 357 |
| TOTAL | 5 654 | 74.2 | 1 962 | 25.8 | 7 616 | 100.0 | 5 579 | 42.3 | 13 195 |

Note: * The States are arranged in order of the extent of missing values (highest first) for fatalities and for hospital admissions are also divided into subgroups based on the legislative requirement for BAC testing.

Source: O'Connor and Trembath, 1995

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111. The report by O'Connor and Trembath concluded that given the very high levels of missing values (greater than 74 percent), data on BAC distribution of drivers admitted to hospital in Tasmania, ACT, Queensland and Western Australia could be subject to very high levels of error and bias which could prevent meaningful assessment of the level of alcohol involvement in non-fatal road crashes in those states. It was considered that the data on BAC, based on crash reports to police, could reflect factors other than the true incidence of alcohol involvement and that interpretation and use of the data in research could be highly complicated (O'Connor and Trembath, 1995; 48-9).
 112. In its submission, Queensland Transport disputes the benefits from improved statistics. It argues that while the existing statistics do not reflect true drink driving involvement in crashes, consistency in the testing system over time means that deviations from the trends adequately reflect underlying changes in the real rate of drink driving involvement in crashes. While data currently accumulates more slowly than it would under compulsory BAC testing, it is unlikely that improved statistics would have a significant or tangible impact on the development of policy or programs. Policy development in this area, it maintains, occurs in the context of developments and research across Australia and internationally and, consequently, it is most unlikely that compulsory BAC test data would lead to policy developments unique to Queensland (submission 55, submissions page 241).
 113. However, the Queensland Transport submission also recommended that an investigation should be done into obtaining the results of the BAC tests that are done on hospitalised drivers and riders for clinical reasons (submission 55: submissions page 242). At the Brisbane public hearing, King (hearing transcript 3, page 35) suggested that "this would seem to be a good source of information, provided that privacy provisions could be observed and the various caveats about accuracy. ... If we get that information, we will be able to supplement our existing information, and it would be quite useful".
 114. The committee understands that this information could be accessed under current legislation. However, it was told on many occasions by doctors who work in hospital emergency departments that it was uncommon for a blood sample to be taken for BAC analysis as part of a patients treatment. In fact, Dr Mackay from the Mackay Base Hospital suggested that he never measured BAC as part of the patient's treatment (hearing transcript 1, page 3).
 115. The low level of BAC testing or road accident casualties after road crashes means that the true magnitude of the drink driving problem in Queensland is unknown. In fact, behind Western Australia, Queensland has the most incomplete statistics on the BAC levels of hospitalised drivers and riders for all Australian jurisdictions. Further, it has the lowest level of reporting of fatal BACs.
 116. The committee believes that the introduction of compulsory BAC testing would reduce the level of 'unknowns' in Queensland crash data, and assist in road safety policy development and management.
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Improved Casualty Management

117. The introduction of compulsory BAC testing could also improve the treatment of casualties at hospitals. Various studies have shown that knowledge of a patient's BAC assists in casualty management. However, this benefit will only be derived if preliminary breath testing machines are used so that doctors obtain immediate results. Test results from the Government Chemical Laboratory may take up to six weeks to process.
118. Advantages of blood alcohol testing for casualty management identified by Rockerbie *et al* (1981) and Smith, (1975) include:-
- knowledge of the patient's level of impairment alerts the doctor to place less reliance on the patient's self-assessment;
 - testing for alcohol may minimise the confusion between the effects of trauma and the effects of alcohol on level of consciousness;
 - decisions regarding the administration of drugs that are known to interact with alcohol may be made more effectively; and
 - the presence of serious head and internal injuries which may be masked by alcohol could be detected.
119. Dr Gerald Feeney from the Alcohol and Drug Assessment Unit at the Princess Alexandra Hospital informed the committee that, as far back as 1976, the American College of Surgeons (ACS) Committee on Trauma, in characterising the features of level I, level II, and level III trauma centres, recommended that alcohol and drug screening be considered "essential" for level I and level II centres and "desirable" for level III and other centres. The American experience of the magnitude of acute and chronic alcohol abuse in trauma patients has been frequently reported. In one large level I trauma centre reviewing 2 657 patients, 47 percent had a positive BAC (Rivera cited in submission 30, submissions page 112). A smaller study by Kirby *et al.* (cited in submission 30, submissions page 112), looking at 201 injured drivers admitted to a level I trauma centre, confirmed the 37 percent had a positive BAC.
120. According to Feeney, trauma assessment is more difficult when alcohol is a contributing factor, often resulting in increased use of invasive diagnostic and therapeutic procedures. In terms of prognostic indicators and outcome evaluation, it is clear, particularly with chronic alcohol abuse, that this adversely effects outcomes in trauma cases. Current American practice, based on a review of 535 trauma centres listed by the National Trauma Centre Registry (1990) with a 59.1 percent survey response rate, reported 63.7 percent of level I and level II centres and 47.4 percent of other centres routinely obtained BAC levels in acute trauma cases. In this study, stratification for the mechanism of injury, in vehicular trauma, 98.4 percent of responding centres reported "routinely" testing for alcohol (Soderstrom cited in submission 30, submissions page 113).

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121. Routine BAC testing can be recommended for all trauma patients from a medical standpoint to overcome the problems of discriminatory testing based on factors such as appearance, race or social status. BAC testing can facilitate management decisions bearing in mind that patients who drink excessively rarely volunteer information about their alcohol problem. Clinical detection of these problems has not been particularly successful with reported detection rates of between 16 percent and 50 percent in risk patients. Only between 10 percent and 30 percent of patients with high BAC are clinically diagnosed as intoxicated with the majority not being detected (partly because of tolerance) (submission 30, submissions page 113).
122. In view of the clinical limitations in detecting many of these patients, BAC is helpful when making choices about certain medications (particularly agents synergistic with the sedative effects of alcohol, such as opiate analgesics and sedatives, or when trying to anticipate patients who are likely to develop alcohol withdrawal. An additional advantage is that the BAC can be aggregated with the routinely measured Gamma Glutamyl Transpeptidase (γ GT) and the Mean Corpuscular Volume (MCV) to give a score in trauma patients that have a sensitivity of about 75 percent and specificity 83 percent in identifying alcohol problems in this group (Nilssen cited in submission 30, submissions page 113).

Identification and Treatment of Problem Drink Drivers

123. The introduction of compulsory BAC testing will result in many people who are problem drink drivers being detected. It is widely believed that the driver casualties who register a BAC in excess of 0.15 percent are not social drinkers but people who are likely to have an alcohol problem (Smith, 1975). Smith argues that the incidence of drink driving by such problem drinkers may not be affected by any drink-driving convictions they receive. He argues that rehabilitation of drivers with drinking problems is more effective than the imposition of penalties, and would be beneficial to road safety. Blood testing of injured drivers and riders admitted to hospital would allow doctors and the courts to determine whether a road accident casualty should receive some form of treatment. Rehabilitation programs can be commenced while the person is still at hospital.
124. Because of the nature and diversity of alcohol problems ranging from occasional, hazardous, injudicious use to established alcohol dependence with target organ damage (for example, alcoholic cirrhosis, alcoholic pancreatitis, alcoholic cerebellar insufficiency), it can be difficult to detect alcohol problems, particularly in healthy young people who binge drink (submission 65, submissions page 305). Although many patients who do have alcohol problems may not have an elevated BAC in the Emergency Department (other screening instruments are necessary to detect their alcohol problem), many patients who present in trauma centres with an elevated BAC do have alcohol problems. If an attempt is to be made to reduce the recidivism in this group, they need to be identified and offered a programme to try and minimise further problems and further episodes of trauma (Feeney, submission 30, submissions page 113).

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125. Queensland Transport reported that, in 1995, Wells-Parker, Bangert-Downs, McMillen and Williams reported a meta-analysis of 215 studies and concluded that drink driving interventions involving probation, education and counselling resulted in a 9 percent reduction in both drink driving crashes and other crashes, although it was not certain that this was a cost-effective decrease. Currently a program with these features, known as Under the Limit, is being trialed in Central Queensland, and has had promising results. The first stage of the systemic evaluation of the program has revealed a significant reduction in drink driving convictions for first time offenders with a positive trend for recidivist offenders. Extensive process evaluations of this program have revealed high levels of satisfaction with the program among offenders, course providers and remedial professionals including magistrates (submission 55, submissions page 242).
126. Consideration is being given to the more widespread introduction of Under the Limit in Queensland, and there is some discussion that it be made compulsory for certain categories of convicted drink drivers. This would provide another quantifiable benefit for consideration, although once again the benefit would be unlikely to improve the benefit to cost ratio for compulsory blood testing much above the break-even point (submission 55, submissions page 242).
127. Identification and rehabilitation of problem drinkers can also be conducted while the patient is still at hospital. Treatment at this stage may produce better results as people are at their most susceptible during their early hospital stay (Feeney, forum transcript page 54). Patients identified as problem drinkers can then be comprehensively assessed. According to Dr Feeney, depending on facilities, this will range from discussion by treating medical staff to assessment by an alcohol and drug service. Following this assessment, the patient will have therapeutic options discussed with him/her. Depending on the extent and type of the problem, this may range from an outpatient rehabilitation, referral to a community support group or, less commonly, to an inpatient rehabilitative facility (submission 65, submissions page 305).
128. Because a BAC test contributes to problem identification, it is also an educational tool and, over time, the regular practice of estimating a BAC will heighten awareness of problems among medical students, interns and senior medical staff. Once hospitals begin these estimations it will be possible, over time, to:-
- look at annual figures of positive BACs;
 - compare figures annually to look at longer term trends particularly for features of improvement that may reflect the multi-faceted approaches taken to this problem;
 - evaluate what, if any, medical intervention is occurring in those patients with elevated BACs;
 - estimate whether patients offered rehabilitation are in fact participating; and
 - determine whether patients are presenting more than once, giving some estimate of recidivism.
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129. One of the difficulties in the past when people have attempted to do this has been the delay in testing blood samples for alcohol content. When this result has arrived weeks later much of the benefit is lost. For such a program to work, therefore, PBT devices could be used with the results made available immediately to treating medical staff.

COSTS

Direct Costs

130. Direct costs to be incurred through the introduction of compulsory BAC testing will vary depending on the terms and conditions for testing. Variables include the road user types tested, the age groups to be tested, whether a blood only system is utilised or a breath and blood based system, and the status of the patients to be tested.
131. The introduction and maintenance of a system of compulsory BAC testing in hospitals would incur costs through the taking, storage, transportation and analysis of specimens. These could include the cost of equipment such as PBT machines, blood sampling kits, safeboxes and equipment to test blood samples. Direct costs are dealt with in more detail later in the report.

Civil Liberties Issues

132. It may be argued that the enactment of compulsory BAC testing legislation would violate a basic principle of British justice as it compels an individual to provide the evidence necessary for his own conviction. However, the general public believe that legislation aimed at protecting the public from the drinking driver more than counterbalances any loss of individual freedom. For example, in 1972, an Australian Gallup Poll showed that 71 percent of people supported compulsory blood alcohol testing of all road crash casualties (McDermott and Strang cited in Grieve and Nucifora, 1992; 5).
133. Predictably, civil libertarians are opposed to the idea of amending the legislation to enable non-consensual BAC testing. They argue that such testing violates the right to privacy, and the common law principle that protects people from being obliged to give evidence against themselves. The Queensland Council is generally unhappy with the erosion of civil liberties brought about by road crash counter-measures such as compulsory seatbelt wearing and random breath testing, however they reluctantly accept the infringements related to these measures because individuals have the 'freedom' not to wear seat belts, and/or not to submit to blood or breath tests, despite the fact that severe penalties are applied for the exercise of choices deemed to be socially irresponsible. The distinctive feature of the proposed measure, they argue, is that individuals are not in a position to refuse the test (McInnis 1993; 3).

Medical Ethics

134. There were a small number of objections to the introduction of compulsory BAC testing on medical ethics grounds. Dr Michael Mackay, a senior medical officer at the Mackay Base Hospital argues that a conflict can occur between the duty of a doctor to act in the best interest, and with the agreement, of the patient, and that of evidence gathering for the Crown. He argues that this conflict can be avoided if the treating doctor is given the option of arranging for another suitable staff member who is uninvolved with the patients treatment, to take a sample and for patients to be under a legal obligation to provide a sample when requested (submission 10; submissions page 41-3).
135. In his submission, Professor Emeritus F D Schofield from the University of Queensland, noted that the Hippocratic Oath states that “Firstly, and above all else, intend no harm”. Schofield suggests that in most developed countries ‘harm’ is defined and understood to mean social harm and psychological harm as well as physical harm. The taking of a sample which resulted in a drink driver being convicted of that offence, causes the person to worry or become depressed. Schofield suggests that doctors and nurses break the first and most important ethical tenet by which they have learnt their practices (submission 13: submission page 50 and hearing transcript 3: page 11).
136. Dr John Hadok, a senior medical officer at Mackay Base Hospital (submission 18: submission page 76) argued along a similar line, suggesting that it was unethical for doctors to be involved in the compulsory sampling of an individual’s blood and that compulsory testing would erode the relationship of trust between an individual doctor and patient, especially the trust which is based on the principal that doctors ‘do no harm’.
137. Despite these objections the majority of doctors appear to have accepted the principle that their social responsibility to cooperate with legislation against the drinking driver outweighs these traditional ethical obligations (McDermott and Strang, cited in Grieve and Nucifora, 1992; 5). Dr Pollard from the Royal Australasian College of Surgeons told the committee that:-
- most people would regard their social obligation as being more important than that part of the oath... I still think you make the moral judgement over and above that interpretation of the Hippocratic Oath. If I see an injured child and suspect it is a case of abuse, one has no qualms about reporting that in the normal fashion. The gun shot wounds and stab wounds are done routinely. Very few people would have any ethical problems.* (hearing transcript 3: transcript page 4).
138. According to Pollard most doctors have seen so much trauma that they would be happy not to deal with it again (hearing transcript 3: transcript page 3-4).
139. Another objection expressed by Schofield (submission 13: submissions page 51-2), Hadok (submission 18: submission page 81) and Queensland Transport (submission

55: submissions page 240) was that the introduction of compulsory testing would lead to some road accident victims avoiding treatment. Schofield told the committee that drivers may decide to refuse transport to, and/or entry to, the casualty department, and to refuse even first aid examinations and treatments. He argues that 'avoidance of treatment' behaviour patterns are well known to produce serious risks to patients health, whether their cause is psychological, legislative or economic. According to Schofield, the ethical duty of the doctor is not to subject the patient to this risk by doing or saying anything which might cause him/her to refuse examination and treatment, or to abscond.

140. The committee accepts that, if compulsory BAC testing is introduced, some patients may seek to avoid treatment. It notes, however, that people who have not been drink driving have nothing to fear from compulsory BAC testing, and would have no reason to avoid treatment. Further, people with serious injuries will almost certainly be taken to a hospital by ambulance. In addition, evidence from other jurisdictions was that avoidance of treatment was rare.
141. These issues frequently arise at the interface between medical ethics and public health. Similar issues arise with laws requiring doctors to report cases of suspected child abuse as well as gun shot wounds and stabbings. There is a delicate balance between the rights and privileges of the individual as opposed to the greater good of the community. In this instance, the committee believes that the benefits for the community far outweigh the costs to individual rights.

BREAK-EVEN ANALYSIS OF COMPULSORY BAC TESTING BY KING AND NUCIFORA FOR QUEENSLAND TRANSPORT

142. A break-even analysis of the costs and benefits of introducing compulsory BAC testing in hospitals was conducted in 1992 by Queensland Transport in an attempt to determine whether compulsory BAC testing should be introduced in Queensland (King and Nucifora, 1992). An outline of the study is given below. The committee is not aware of any formal cost benefit analyses that have been conducted for compulsory BAC testing in the jurisdictions that have introduced it.

Costs

143. King and Nucifora (1992) noted that the costs of introducing compulsory BAC testing for road casualties taken to hospital depends on the number tested, and this is determined by the target group specified in the legislation and the context within which the legislation is enacted. Options which influence cost include: the road user casualty type detailed in the legislation (eg, driver and motorcycle rider only or all road accident casualties); the extent of the injury specified (hospitalised patients only or hospital patients and outpatients); the mode(s) of testing used at the hospital (blood testing only or blood testing and breath testing); the extent of breath testing used by police at the crash site (current site testing rate or more extensive breath testing at the crash sites); and whether police are using passive alcohol testers (King and Nucifora, 1992; 1).

144. To simplify their estimation of costs, King and Nucifora assumed that there would be few changes to current blood testing operations if compulsory BAC testing was introduced to Queensland. That is, they assumed that hospital staff would still only perform blood alcohol tests, and that there would be no extensive breath testing undertaken at the crash site. The use of preliminary breath tests in hospitals was not considered. It also assumed that a courier system similar to that in New South Wales would be introduced.

Transportation costs

145. The transportation costs associated with introducing compulsory BAC testing to Queensland in the King and Nucifora study, were estimated from the cost of compulsory BAC testing operations in New South Wales. In New South Wales private couriers collect and air freight blood samples from safeboxes in hospitals outside the Sydney Statistical Region. Blood samples from Sydney are collected by the police.
146. The estimated average transportation cost per sample from outside Sydney was \$6. As the air courier system in Queensland is not as efficiently established as in New South Wales, King and Nucifora assumed that the cost in Queensland would be approximately \$12 — double the New South Wales cost.
147. Within Sydney, police collect safeboxes containing the blood samples from the hospitals. To account for the shorter average trip per safebox and the greater average number of blood samples in each box (as the safeboxes in larger metropolitan hospitals would accumulate more blood samples between collection days than the average provincial hospital), a conservative estimate of the cost of transporting metropolitan blood samples is 50 percent of the transportation cost of New South Wales non-metropolitan samples - \$3 per sample. It was assumed that the transport costs in Brisbane would be the same as in Sydney.

Capital cost of safeboxes

148. In New South Wales, blood samples are placed in metal safeboxes that are bolted to a wall at the hospital. The safes are removed by police and transported in metal transit cases to the laboratory. It was estimated that the number of safeboxes and transit cases needed in Queensland would be 175. The manufacturing cost for metal safeboxes (and transit cases) was \$370/unit, and the installation cost is approximately \$100/unit. Hence, the capital costs involved in producing and installing safebox units in Queensland = $175 \times \$470 = \$82\,250$. Assuming depreciation over 5 years, this is equivalent to \$16 450 per year.

Staff and capital costs of the analysis of blood samples

149. A large increase in the number of blood samples analysed would require an increase in staff, maintenance and operating costs and equipment in the Government Chemical Laboratory. Estimates from King and Nucifora are presented in table 5. They assumed that the new equipment can be depreciated over 5 years.

Table 5: Government chemical laboratory costs of analysing blood samples

| BLOOD TEST NOS. | ANNUAL STAFF COSTS | ANNUAL OPERATING COSTS | NEW EQUIPMENT COST | ANNUALISED COST OF NEW EQUIPMENT |
|-----------------|--------------------|------------------------|--------------------|----------------------------------|
| 3 500 | \$60 000 | \$12 000 | \$70 000 | \$14 000 |
| 4 000 | \$60 000 | \$12 000 | \$70 000 | \$14 000 |
| 7 000 | \$60 000 | \$15 000 | \$70 000 | \$14 000 |
| 9 000 | \$87 000 | \$18 000 | \$110 000 | \$22 000 |
| 10 000 | \$87 000 | \$18 000 | \$110 000 | \$22 000 |
| 17 000 | \$115 000 | \$25 000 | \$110 000 | \$22 000 |

Source: King and Nucifora (1992)

The estimated numbers of tests required

150. To estimate the number of blood testing samples to be taken, King and Nucifora used 1990 road crash data sorted according to injury severity and road user type, as shown in table 6.

Table 6: Hospitalised road users by type and severity of injury 1990

| ROAD USER TYPE | SEVERITY OF INJURY | |
|-------------------|--------------------|------------|
| | HOSPITALISED | OUTPATIENT |
| Drivers | 2 961(e) | 4 322(e) |
| Motorcycle riders | 661(e) | 965(e) |
| Pedestrians | 554(e) | 809(e) |
| All road users** | 6 979* | 10 188(e) |

Notes: (e) Estimated (using the known ratio of road casualty inpatients to outpatients from the Department of Transport Road Crash database); it should be noted that these figures are almost twice as high as those recorded in the Road Crash Database because of the high level of underreporting of road accident casualties.

* Department of Health database

** includes passenger and bicyclist casualties

Source: King and Nucifora (1992).

151. Six different target groups for compulsory BAC testing were considered, comprising combinations of road user type tested (3 levels) and severity (2 levels). The corresponding numbers of blood tests expected for each of these target groups is given in table 7.

Table 7: Number of blood samples by testing option

| ROAD USER TYPE | SEVERITY | |
|--|---------------------|--|
| | <i>HOSPITALISED</i> | <i>HOSPITALISED AND OUTPATIENT</i> |
| Drivers and motorcycle riders | 3 622 | 8 909 |
| Drivers, motorcycle riders and pedestrians | 4 176 | 10 272 |
| All road user casualties | 6 979 | 17 167 |

Source: King and Nucifora (1992)

Costing assumptions

152. The cost estimates for compulsory BAC testing by King and Nucifora are based on the following parameters:-
- the unit cost of transporting blood samples in Queensland is \$3 per sample for metropolitan Brisbane and \$12 per sample from areas outside Brisbane;
 - 25 percent of Queensland road casualties occur within the Brisbane Statistical Region;
 - the cost of blood sampling kits is \$30 per kit;
 - the annualised cost of manufacturing and producing safeboxes and transit cases is \$16 450; and
 - the annualised cost of Government Chemical Laboratory operations is as set out in the table 7, above (range \$86 000 - \$162 000 per year).

Estimated full costs of Compulsory BAC Testing

153. The estimated operating costs for each type of compulsory BAC testing, using the parameters outlined above, is documented in table 8.

Table 8: Annual operating cost of compulsory BAC testing by type of road user casualty

| ROAD USER TYPE | HOSPITALISED CASUALTY | HOSPITALISED AND OUTPATIENT CASUALTY |
|--------------------------------------|-----------------------|--------------------------------------|
| Driver and motorcyclists | \$246 425 | \$497 583 |
| Driver, motorcyclists and pedestrian | \$268 446 | \$551 762 |
| All road user casualties | \$382 865 | \$860 838 |

Note: Sample calculation — driver and motorcycle casualties admitted or treated at hospital
 $8\,909 \times \frac{1}{4} \times \$3 + 8\,909 \times \frac{3}{4} \times \$12 + 8\,909 \times \$30 + \$16\,450 + \$87\,000 + \$18\,000 + \$22\,000$
 $= \$497\,583.$

Source: King and Nucifora (1992)

Benefits

154. The single quantifiable benefit of compulsory BAC testing recognised in King and Nucifora's analysis is the identification of additional drink drivers, who would then be removed from the road and thereby cause fewer accidents. They suggest that given the annual costs of compulsory BAC testing, it is possible to calculate how many additional drink drivers would need to be detected each year through compulsory BAC testing to make it cost-effective (King and Nucifora, 1992).
155. The equation is:-
- $$\left(\frac{\text{\{cost of program\}}}{\text{\{the average cost of a casualty accident cost - \$60 000\}}} \right) \div \left(\frac{\text{\{average accident risk for drink drivers each year - 0.010\}}}{\text{\{average period of licence suspension - 0.3 years\}}} \right)$$
156. It is assumed that a drink driver involved in an accident will only have casualty accidents in the future, and that each future accident prevented will lead to a social cost saving of \$60 000. This is the weighted average cost of fatal, hospitalisation and outpatient treatment accidents.
157. The probability of a drink driver having an accident was estimated to be 0.010 per driver per year. In 1990 there were 1 734 000 licensed drivers in Queensland, and each year there are about 9 100 drivers and motorcyclists in casualty accidents (including fatalities), so that the probability of a casualty accident is 0.005 per driver per year. The accident risk for a drink driver was derived by doubling the accident risk for drivers generally, to take account of the probably higher accident risk of drink drivers.
158. The licence suspension period for drink drivers is from a study by Wilson (1987) which found that the average was 3.6 months, or 0.3 years.

159. King and Nucifora conclude that none of the options canvassed would allow compulsory BAC testing to break even. They suggest that at best the benefit cost ratio for compulsory BAC testing would be approximately 1:0.5. Under the cheapest option, only testing hospitalised drivers and motorcyclists, 1 300 drivers and motorcyclists would need to be detected over the legal limit. Under this option, about 3 622 drivers and motorcyclists would be tested, meaning that more than 36 percent would need to be over 0.05 for the benefits to outweigh the costs. King and Nucifora found that 24 percent of hospitalised drivers and motorcyclists tested for alcohol in South Australia had a BAC over 0.05. In New South Wales, the proportion was 21 percent. As such, they argued that there would not be enough drink drivers detected to allow compulsory BAC testing to break even in any of the models for testing that were considered.

A REVISED COST BENEFIT ANALYSIS

160. Information received by the committee during the inquiry suggested that two of the cost figures used in the study by King and Nucifora are incorrect. Firstly, rather than the \$30 for each blood testing kit, estimates from other jurisdictions were \$4 each in South Australia, \$6 in Victoria and \$7 in New South Wales and the Northern Territory (forum transcript: transcript page 47-50). Secondly, figures supplied by Queensland Health indicate that over 30 percent of road casualties occur in Brisbane, rather than 25 percent as used by King and Nucifora.
161. On the basis, that the remaining assumptions about costs made by King and Nucifora are reasonable, the committee recalculated the costs for the six blood testing options using the figures of 30 percent as the proportion of road accident casualties that occur in the Brisbane area and \$6 as the cost of each blood sampling kit.
162. The committee also calculated the likely cost of testing for the following combinations of road user casualties under a breath and blood testing system:-
- hospitalised drivers and motorcyclists;
 - hospitalised and outpatient drivers and motorcyclists;
 - hospitalised drivers, motorcyclists and pedestrians; and
 - hospitalised and outpatient drivers, motorcyclists and pedestrians.
163. Under a breath and blood testing system, a PBT machine would be used to screen patients. Blood samples would be taken and analysed from any patient whose PBT indicates a positive BAC or who cannot provide a breath sample.
164. It was assumed that:-
- 175 PBT machines would be purchased for hospitals at a cost of \$1 600 each and, like the police PBT machines, they would have an operating life of 10 years giving an annualised cost of \$28 000;

- as in South Australia, 24 percent of hospitalised drivers and riders would have a BAC of 0.05 and over;
- as in South Australia, 16 percent of hospitalised and outpatient drivers and riders would have a BAC of 0.05 and over;
- the percentage of ‘hospitalised’ pedestrians and ‘hospitalised and outpatient’ pedestrians with a BAC over 0.05 would be the same as for hospitalised drivers and riders and hospitalised and outpatient drivers and riders respectively; and
- in both the ‘hospitalised’ casualty group and ‘hospitalised and outpatient’ casualty group, for every patient with a BAC of 0.05 and over, there would be one patient who has a BAC that is positive but less than 0.05 or who cannot supply a breath sample and, therefore, would have a blood sample taken.

165. A sample calculation of annual costs to test hospitalised and outpatient drivers and motorcyclists, based on these assumptions, is:

$$[8\ 909 \times 30\% \times 32\% \times \$3] + [8\ 909 \times 70\% \times 32\% \times \$12] + [8\ 909 \times 32\% \times \$6] \\ + \$16\ 450 + 60\ 000 + 12\ 000 + 14\ 000 + \$28\ 000 = \$157\ 046$$

166. Using the methodology outlines in King and Nucifora (1992), the committee also calculated the expected benefits for each testing option or model. The formula derived from King and Nucifora (1992), for calculating benefit in dollar terms is:-

(No. of people found with a BAC of 0.05 or over x average licence suspension x average accident risk for drink drivers each year x average cost of casualty accidents)

$$\text{No. of people found with a BAC of 0.05 or over} \times 0.3 \times 0.010 \times \$60\ 000.$$

167. Using this formula, a sample calculation of the annual benefit from testing hospitalised and outpatient drivers and motorcyclists is:

$$1\ 425 \times 0.3 \times 0.010 \times \$60\ 000 = \$256\ 579$$

168. Table 10 presents calculations using these formulae of the costs and benefits, and a cost benefit ratio, for each of the six testing models considered. The table shows that 3 options for compulsory testing have a positive cost to benefit ratio. They are, in descending order: the testing of drivers and riders under a system of breath and blood sampling (1:1.47); the testing of drivers, riders and pedestrians under a system of breath and blood sampling (1:1.42); and the testing of drivers and riders in a blood only system (1:1.06).

Table 9: Cost/benefit results for models of compulsory BAC testing

| OPTION | ANNUAL COST | ANNUAL BENEFIT | RATIO |
|---|-------------|----------------|--------|
| BLOOD SAMPLES ONLY | | | |
| HOSPITALISED CASUALTIES | | | |
| Drivers and motorcyclists | \$147 866 | \$156 470 | 1:1.06 |
| Drivers, motorcyclists and pedestrians | \$166 342 | \$156 470 | 1:0.94 |
| All road accident casualties | \$209 228 | \$156 470 | 1:0.75 |
| HOSPITALISED AND OUTPATIENT CASUALTIES | | | |
| Drivers and motorcyclists | \$276 757 | \$256 579 | 1:0.92 |
| Drivers, motorcyclists and pedestrians | \$300 611 | \$256 579 | 1:0.85 |
| All road accident casualties | \$441 105 | \$256 579 | 1:0.58 |
| BREATH AND BLOOD SAMPLES | | | |
| HOSPITALISED CASUALTIES | | | |
| Drivers and motorcyclists | \$157 046 | \$156 470 | 1:0.99 |
| Drivers, motorcyclists and pedestrians | \$161 121 | \$156 470 | 1:0.97 |
| HOSPITALISED AND OUTPATIENT CASUALTIES | | | |
| Drivers and motorcyclists | \$174 069 | \$256 579 | 1:1.47 |
| Drivers, motorcyclists and pedestrians | \$180 747 | \$256 579 | 1:1.42 |

169. The cost to benefit ratios shown in table 10 are likely to underestimate the benefits. Estimates contained in the analysis by King and Nucifora (1992), and incorporated into the committee's analysis, are sensitive to some of the assumptions made. They assume, for example, that the drink drivers detected would only have had casualty crashes in the future, and used a weighted average casualty crash cost of \$60 000. However, as Mark King from Queensland Transport told the committee, drink drivers tend to have crashes of a higher average severity which would increase the average crash cost (hearing transcript 3, page 34).
170. Another assumption is that the average licence suspension period for a drink driver convicted as a result of a crash is no different to the average for all drink drivers in 1987. However, it is likely that, on average, drivers and motorcyclists who are found to be over the legal BAC limit and have been involved in a crash (and in many instances are at fault) would receive a longer period of licence suspension than the average for all convicted drink drivers. King and Nucifora also assumed that safeboxes and blood sampling equipment would be depreciated over five years. This may not be an accurate assumption.

171. Given the increased likelihood of crash involvement with increases in BAC levels, it is also likely that hospitalised drivers and riders have higher average BAC levels than the average of drivers and riders caught over the legal BAC limit. Higher BAC levels attract higher penalties. The estimate of the average period of licence suspension (0.3 years) may also prove to be conservative if recent moves to increase the severity of penalties for drink driving are implemented.

PART 5 ~ THE TERMS AND CONDITIONS FOR TESTING

ROAD USER TYPE

172. Road user types targeted for testing vary in those jurisdictions with compulsory testing. In the Northern Territory and South Australia the legislation targets all road user groups who attend a hospital to be tested. In New South Wales it is drivers, riders and pedestrians. The Victorian legislation covers drivers of motor vehicles.
173. The committee asked what advantages there are in testing all road user groups. Superintendent Colin Haymon told the committee that while the Northern Territory legislation says that a blood sample should be taken from all people involved in a motor vehicle accident, where it is clearly known who the driver of the vehicle is, it would be very unusual for a sample to be taken from anyone else involved in an accident (Forum transcript, page 2). The only advantage in testing all road user groups is in cases where a person is thought to be a driver at the time and where that is challenged in court and found not to be the case. In other words, it is simply a mechanism whereby you ensure that the actual driver of the vehicle has been tested at the time (Haymon, Forum transcript, page 2-3). The decision to allow testing of all road user groups in South Australia appears to be based on the same reasons. According to Mr Trevor Bailey from the South Australian Department of Transport, the main reason for all vehicle occupants being tested is that doctors would be in no position to judge who the driver was (Forum transcript, page 3).
174. It is clear from the number of ‘unspecified road users’ in hospital admissions records that there are often instances where a patient’s road user type is not known. Despite this the committee believes that blanket testing is not warranted. In particular, it would be contrary to good public policy if all passengers were to be tested. Passengers represent a large proportion of all road accident casualties but would only rarely be ‘at fault’ in an accident.
175. From a law enforcement and research perspective, it seems obvious that drivers and motorcycle riders should be the principal targets for testing as this is where the major benefits from compulsory testing will arise. Drivers and motorcyclists are the largest groups of controller casualties and both groups are subject to drink driving laws. While there are benefits in testing other road users, such as in terms of gaining additional data and to capture instances where drivers present at hospitals as passengers, it is highly likely that the costs will outweigh the benefits. The principal factor against testing all people is the sheer number (Wells, forum transcript page 7). As the committee’s analysis of the costs and benefits of compulsory BAC testing suggested, testing of all road accident casualties has the lowest cost to benefit ratio.

176. In the committee's opinion, the approach in Victoria and New South Wales is preferable to blanket testing. In those jurisdictions, whenever doctors are uncertain whether a patient is liable to be tested, a sample is taken. The facts are established by police at a later stage (forum transcript page 2,4).
177. The committee believes that, in addition to drivers and motorcycle drivers, pedestrians should be targeted for testing. New South Wales targets pedestrians because it is felt that a pedestrian is a principal in an accident between a driver and a pedestrian and the degree of sobriety of a pedestrian is often a contributing factor to an accident (Forum transcript, page 3). It is known that a high proportion of pedestrians who are admitted to hospital are affected by alcohol. For example, a study by Holubowycz and McLean (1989) examined the association between the BAC and the age and sex of adult pedestrians admitted to hospital in South Australia. It found that injured pedestrians admitted to hospital were more likely to have been drinking than a similar sample of injured motorcycle riders, and much more likely to have had a BAC above 0.15 than either injured drivers or riders.

MINIMUM AGE FOR TESTING

178. A minimum age for testing is specified in each of the jurisdictions with compulsory BAC testing. In New South Wales, the Northern Territory and Victoria, the minimum age for testing is 15 years. In South Australia it is 14 years. Police from each jurisdiction who attended the committee's forum told the committee that the minimum age in their jurisdiction was appropriate. Of those submissions that nominated a preference for a minimum age for testing, the majority suggested that 14 or 15 years of age would be appropriate.
179. Another option is to allow specimens to be taken regardless of age. However, consideration should be given to the likelihood that persons of certain age would consume alcohol and drive a motor vehicle, and Section 29 of the Queensland Criminal Code which deals with criminal responsibility. The balance between costs and benefits for different age groups will depend on the level of drink driving at a specific age and the probable impact of legal action.
180. While there are instances where people who are under 15 years of age drive a motor vehicle and are involved in an accident, they constitute a very small proportion of driver and motorcycle rider casualties. In Queensland during 1995, police reported that there were 35 209 drivers and motorcyclists involved in road traffic crashes. Of these, 71 (0.2 percent) were between 8 and 15 years old (Queensland Transport, 1996; A2-15). Drink driving is not widespread among people below 15 years of age, and it is illegal for people in this age group to drive anyway. Questions of criminal responsibility are also relevant. Section 29 (1) of the Queensland Criminal Code says that:-

A person under the age 10 years is not responsible for an act or omission

Section 29 (2) says that:-

A person under the age of 15 years is not criminally responsible for an act or omission, unless it was proven that at the time of the doing of the act or making the omission the person had the capacity to know that a person ought not to do the act or make the omission.

181. The committee believes that 15 years and over is a reasonable minimum age for testing. As there are very few drivers and motorcycle riders below 15 years who are involved in accidents, it is highly likely that the costs of testing casualties below this age would far outweigh the benefits. Further, it is doubtful whether people below 15 would receive penalties for drink driving above what they would receive for unlicensed driving.

RECOMMENDATION 1

That the Traffic Act 1949 be amended so that all drivers, motorcycle riders and pedestrians who are 15 years of age or over and attend a hospital for examination or treatment of injuries resulting from an accident involving a motor vehicle on a road, whether in Queensland or elsewhere, be required to supply a sample of breath and/or blood when requested to do so by a certified person.

MINISTERIAL RESPONSIBILITY

. Minister for Transport and Main Roads

WHO SHOULD TAKE SAMPLES?

Blood Samples

182. Suggestions in the submissions on who should take blood samples ranged from doctors and nurses to ambulance officers and police. In New South Wales, a medical practitioner, a registered nurse, or a person acting under their direction are allowed to take samples. Originally it was only medical practitioners, however, changes were made to allow registered nurses to take samples because in many country hospitals there is no doctor on duty for a large proportion of the time (Inspector Grainger, transcript page 9). Registered nurses must be accredited by their hospital to take blood samples.
183. South Australian, Northern Territory and Victorian legislation only allows medical practitioners to take blood samples. However, both the Northern Territory and Victoria are in the process of changing the law to allow nurses to take samples. The reasons for the changes are the same as in New South Wales - the frequent unavailability of a medical practitioner to take a sample.

184. The committee believes that doctors, nurses and other appropriately trained and certified people at hospitals are the most qualified and are in the best position to take blood samples for BAC testing. It notes, however, that, if it is done incorrectly, venipuncture can present risks for both the person taking the sample and the person having the blood taken (Dr May, forum transcript 11). Further not all medical practitioners and nurses are appropriately trained to perform a venipuncture (Dr Perl, forum transcript 11). For these reasons the committee believes that all people who take blood samples should be appropriately trained and certified by a hospital to perform the procedure.

Breath Samples

185. Taking breath samples using a preliminary breath testing device is a far simpler procedure than performing a venipuncture. As with blood samples, the committee believes that doctors, nurses and other appropriately trained and certified people at hospital are the most qualified and are in the best position to take breath samples for BAC testing. Training for the use of PBT devices needs to be in accordance with the national training standards. The Police are developing a training program for police officers which could also be made available to people who will be taking samples in hospitals. For people with a background knowledge of medicine, it is estimated that full training would take approximately 30 to 45 minutes.

RECOMMENDATION 2

That the Traffic Act 1949 be amended so that doctors, nurses and other people who are appropriately trained and certified by a hospital be allowed by law to demand and take breath and/or blood samples from all drivers, motorcycle riders and pedestrians who are 15 years of age or over and attend a hospital for examination or treatment of injuries resulting from, or suspected to be resulting from, an accident involving a motor vehicle on a road, whether in Queensland or elsewhere.

MINISTERIAL RESPONSIBILITY

Minister for Transport and Main Roads

TIME LIMITS FOR SAMPLES TO BE TAKEN

186. Under the existing Queensland legislation, a sample must be taken within 2 hours of an accident if it is to be accepted as evidence of an infringement of drink driving laws. In other jurisdictions, samples can be taken many hours after an accident and still be admissible as evidence. In the Northern Territory, for example, a sample can be taken up to 12 hours after the accident, but must be taken within 4 hours of the person arriving at the hospital. The basic reason for the extended time for samples to be taken is the remoteness of much of the Northern Territory. The long time frame allows sufficient time for a person to be conveyed to a hospital and for sample to be taken (Haymon: forum transcript page 16).

187. In New South Wales if a sample is taken within two hours of the time of the accident, it is prima facie evidence for a prescribed concentration of alcohol charge. If it is taken outside the 2 hours but up to 12 hours after the accident, it may be used as supporting evidence in a driving under the influence charge (Grainger: forum transcript page 16). Like the Northern Territory, the time frame in New South Wales was set to account for the remoteness in many areas of that state.
188. In South Australia a sample may be taken up to eight hours after the accident and be accepted as prima facie evidence in a drink-driving case. Victorian legislation says that samples must be collected within 3 hours after the patient drove or was in charge of a motor vehicle for the result to be used as prima facie evidence. However, there is no outer time limit specified within which a sample must be taken to be used as supporting evidence.
189. To be used as supporting evidence, a person with expertise in blood alcohol testing and the absorption and elimination of alcohol would do a 'count-back' to estimate a BAC range within which a person would have been at the time of the accident. Factors taken into account when calculating a range often include alcohol elimination rates, the time of the first and last drinks, the BAC test result, the time delay in obtaining the blood, the weight of the person and the amount of alcohol consumed over a period (Perl. forum transcript pages 17-18).
190. When done by people with appropriate expertise, 'count-backs' are very well accepted in the courts (Perl. forum transcript page 18). The lower end of a calculated range would be the level at which any charges would be laid. Therefore, the range that is given is very much biased towards the person who is being charged. However, the longer the time taken after a crash for a sample to be obtained, the wider the range will become. As such, it is extraordinarily difficult to provide a meaningful range that could be used as supporting evidence if a sample has been taken over 12 hours after the accident (Wells: forum transcript page 17).
191. The Committee concludes that time frames for testing should be wide enough to allow for: the remoteness of many parts of Queensland and the times it would take for many people to attend a hospital; the time demands placed on hospital emergency departments; and the need for BAC readings from samples to be accepted by the courts. The committee believes that BAC readings from samples taken within 4 hours of the accident should be accepted as prima facie evidence for a prescribed concentration of alcohol charge, and that the BAC readings from samples taken within 12 hours of the accident should be acceptable as supporting evidence.

RECOMMENDATION 3

That BAC readings from samples taken within 4 hours of the accident be accepted as prima facie evidence for a prescribed concentration of alcohol charge, and that the BAC readings from samples taken within 12 hours of the accident be acceptable as supporting evidence.

MINISTERIAL RESPONSIBILITY

. Minister for Transport and Main Roads

MECHANISMS TO ENSURE SAMPLES ARE TAKEN

192. The mechanisms employed to ensure that samples are taken vary between jurisdictions. They include combinations of laws compelling medical staff to take samples, laws compelling hospitalised, road accident casualties to provide samples, a 'code of practice' for doctors to take samples, and a legislative requirement on the minister for health to ensure that samples are taken. These are often supplemented by penalties for failing to take a sample, to supply a sample or obstructing or hindering a doctor or nurse from taking a sample.
193. In New South Wales under Section 4F of the *Traffic Act 1909*, it is the duty of any medical practitioner to take a blood sample for analysis from a road accident casualty of, or above, the age of 15 years who attends or is admitted to a hospital. In the absence of a medical practitioner, a registered nurse who is attending the person is responsible for taking the sample. There are no provisions within the legislation for penalties for medical practitioners and nurses who do not comply. There is a legal compulsion on the patient to provide a sample when requested. Further, the patient must not hinder the doctor. If the patient hinders the doctor in any way, or if a third party hinders a doctor in taking a sample, there are provisions in the legislation for such people to be charged with refusing to have a sample taken, and a third person can be charged with hindering a doctor (Inspector Grainger, forum transcript page 12).
194. Similar to New South Wales, the South Australian legislation requires a legally qualified medical practitioner to take a blood sample for analysis from road accident casualties who attend hospital. According to Senior Sergeant Laslett, the Attorney General must authorise any legal action against a doctor for not taking a blood sample. However, he could not recall any doctors being prosecuted for failing to take a sample. Both New South Wales and South Australia claim that compliance rates of medical staff are very high. Also like New South Wales, South Australia compels patients to provide a sample when requested.
195. Under the Northern Territory Traffic Act, the Minister administering the *Public Health Act* (the minister for health) has the responsibility to ensure that a sample of blood is taken. This is achieved through policy directive issued at hospitals. There is no legislated penalty against the minister. Superintendent Haymon told the committee that, as far as he was aware, no doctor had ever been prosecuted in the Northern

Territory for not taking a blood sample (Haymon; forum transcript page 14). Patients are compelled to provide a sample.

196. Victoria has taken a different approach to the other jurisdictions. In 1991, the legal requirement for medical practitioners to take samples was removed and a ‘code of practice’ was adopted. The code of practice was entered into by the hospitals. It is organisational policy that says that samples are taken from all drivers and motorcycle riders following involvement in an accident, unless there are compelling medical reasons for not doing so. When there is doubt that a person is not in those categories, a blood sample will be taken unless the police or ambulance provide written advice to the contrary (Eury, forum transcript page 13). The ‘code of practice’ is reproduced in figure 1.

Figure 1: Victorian 'Code of Practice'

Code of Practice for Taking Blood Samples from Road Accident Victims

It is organisational policy that blood samples are taken from all drivers and motorcycle riders brought to or presenting for treatment or examination following involvement in an accident involving a motor vehicle, unless there are compelling medical reasons for not doing so.

Where there is any doubt the person concerned is in one of these categories or not, a blood sample is taken. In practice all persons presenting are treated as possible drivers or motorcyclists unless police or ambulance personnel provide written advice to the contrary.

Blood samples are not taken where police or a doctor advise in writing that a blood sample has already been taken, or that a preliminary breath test has been conducted and the result indicated that in that person's blood alcohol concentration was less than the prescribed concentration.

Cooperation in obtaining blood from pedestrians and bicyclists over agreed time periods for purposes of devising and evaluating programs involving these groups is encouraged, subject to the availability of resources.

Where a person refuses or fails to provide a blood sample, information to this effect is noted in the person's Medical Record, and Victoria Police form **"Refusing or Failing to Provide a Blood Sample or Negative PBT by Doctor"** is to be completed and forwarded to the Traffic Alcohol Section* (form may be forwarded in Labmailer or deposited in Screening Box). If necessary, the Traffic Alcohol Section may be contacted by telephone.

Where a sample is taken, the sample and accompanying certificates are dealt with using the material in the kit provided by Victoria Police, in accordance with procedures specified in the instructions with the kit.

The sample in the bag marked 'screening sample', is placed in the LABMAILER provided for screening samples, and forwarded to the Traffic Alcohol Section. At locations where LABMAILER containers are not provided, place the samples in the 'Screening Box' and a Police Courier will collect the screening sample.

Deposit the 'police sample' along with the green and pink certificates in the police safe provided.

The sample in the bag marked 'patient sample' becomes the property of the person from whom the sample was taken, and is to be given to the patient or stored for them with their personal property.

* Victoria Police, Traffic Alcohol Section, 20 Dawson Street, Brunswick, 3056
Telephone 03 380 7212

197. In Victoria, the legal onus is now on the accident victims to allow medical practitioners to take blood samples for BAC testing. There are penalty clauses in the Victorian

Road Safety Act 1986 for patients who do not allow a sample to be taken. The legislation also says that a person must not hinder or obstruct a doctor from taking a blood sample (forum transcript page 13).

198. The vast majority of individuals and groups from the medical profession who made submissions expressed opposition to legal compulsion being placed on them to take samples. Most believed that the Victorian model should be followed in Queensland. The committee agrees. The compulsion should be on drivers, motorcycle riders and pedestrians who are at hospital for examination or treatment to allow medical practitioners, nurses and other certified people to take blood samples. Failure to permit a sample to be taken should attract a harsh penalty. So should any move to hinder or obstruct a sample being taken, whether by the patient or by a third party. A 'code of practice' should be drafted and adopted as policy in hospitals so that all drivers, motorcycle riders and pedestrians are tested for their BAC.

RECOMMENDATION 4

That the government consult with hospitals and relevant hospital staff to develop a 'code-of-practice' so that all drivers, motorcycle riders and pedestrians who are 15 years of age or over and attend a hospital for examination or treatment of injuries resulting from an accident involving a motor vehicle on a road, whether in Queensland, or elsewhere, have a breath and/or blood sample taken for BAC testing.

MINISTERIAL RESPONSIBILITY

. ***Minister for Transport and Main Roads***

RECOMMENDATION 5

That any person who is liable to be tested, but fails to supply a breath or blood sample when requested to do so by a certified person, be guilty of an offence under the act and receive a penalty that is equivalent to that for driving a motor vehicle with a BAC reading of over 0.15.

MINISTERIAL RESPONSIBILITY

. ***Minister for Transport and Main Roads***

RECOMMENDATION 6

That any person who hinders or obstructs a doctor, nurse or other certified person from taking a breath or blood sample be guilty of an offence and receive a penalty that reflects the seriousness of the act.

MINISTERIAL RESPONSIBILITY

. Minister for Transport and Main Roads

A BLOOD SYSTEM OR A BREATH AND BLOOD SYSTEM?

199. At present, all jurisdictions except Victoria operate a BAC testing system based exclusively on blood sampling. Under these systems every person who is liable to be tested (or who is thought to be liable for testing) has a blood sample taken. The blood sample is stored at the hospital and transported to the government chemical laboratory where it is tested. With a breath and blood system people who are liable to be tested for their BAC would be asked to blow into a PBT machine wherever possible. Only those people whose PBT result indicated a positive BAC or who could not supply a breath sample would have a blood sample taken. Blood samples would then be processed in the same way as in the blood only system.
200. The committee examined the possibility of introducing a dual breath and blood system and concluded that a system based on both blood and breath was preferable to a blood only system. Such a system should be less expensive to operate because of cost savings in storage, transportation and analysis of blood samples. BAC analysis through a PBT is also a far less invasive procedure than venipuncture and is safer for both the person giving the sample and the person taking it.
201. In Victoria, many hospitals have acquired Lion Alcometer SD2 devices for PBT of drivers who have been involved in road accidents. These devices are used under the 'code of practice' that says that if a PBT is conducted and the result is negative then a blood sample would not be taken. The introduction of PBT devices was an initiative of doctors. The hospitals pay for the devices, but the police will calibrate them (Eury: forum transcript page 29).
202. A high proportion of casualties who present at hospitals for examination or treatment have a zero BAC. The use of PBT device to determine those casualties who have a zero BAC would eliminate the need for the vast majority of people who are liable to be tested from having a blood sample taken and for that sample to be labelled, packaged, stored, transported to the government chemical laboratory and analysed. Blood tests would only be required to quantify or qualify a positive screening result or if the patient is unable or unwilling to give a breath sample because of facial injuries or they are unconscious (Bailey: forum transcript page 30). Senior Sergeant Jan Eury told the committee that the use of PBT machines in Victorian hospitals has had considerable cost advantages. Following changes to their legislation in 1991, the number of blood samples dropped from around 25 000 per year to approximately 8 000. Since the

introduction of breath screening, the number of blood samples has dropped to about 4 000 (forum transcript page 31).

203. The breath screen is a far simpler procedure than taking a blood sample and would produce significant savings in time for doctors and accident victims. Informal trials in South Australia found that, in the vast majority of cases, the device was well accepted by doctors and patients (Bailey: forum transcript page 30). The committee also notes that the introduction of PBT devices in Victoria was an initiative of the doctors themselves. According to Senior Sergeant Eury, doctors in Victoria are very comfortable with the PBT devices because they are using them to test patients for other reasons, such as for Alcoholics Anonymous meetings (forum transcript page 32).
204. Another benefits of using PBT devices, is that they give an immediate result. The results from blood tests conducted by the Government Chemical Laboratory can take several weeks from when the sample is taken. Their ability to provide immediate BAC readings makes PBTs an aid to trauma management. They can also be used to help detect and initiate treatment of drivers with alcohol problems while they are still in hospital. Using a PBT is also safer than conducting a venipuncture as they avoid problems such as needle stick injuries. The committee was told that, if there are ways of avoiding having to do venipunctures, most practitioners would “grab them very hard.” (Dr Wells: forum transcript page 32).
205. Problems with the use of preliminary breath testing machines can arise if the person operating the machine is not properly trained in its use. To obtain an accurate analysis, the operator must ensure that: sufficient time has elapsed since the patient last consumed alcohol; a reading is taken at the appropriate time in the cycle of breath provision; and the machine is properly calibrated (Perl: forum transcript page 32). It should be noted however that, if the PBT gives any indication of alcohol (even if it is a low reading), the patient should still have a blood sample taken.
206. New technology incorporated into the latest alcolmeters will make alcolmeters easier to use and more reliable. Some of the devices are automatic sampling instruments, meaning that there is no guess work in taking a sample. The flow rates, when they sample and how many litres of air go through is set in the software of the instrument. The new devices are easy to blow into and have built in data collection that can record the details of tests. This can then be downloaded onto a spreadsheet on a computer. They can also have automatic calibration so that they cannot be used if they are not properly calibrated. The units typically cost around \$1 600 each, but would be cheaper if they were bought in bulk.
207. Training for doctors, nurses and other appropriate hospital staff in the use of the alcometer would be available through the Queensland Police Service which is introducing new alcolmeters as part of an ongoing replacement program. In accordance with national training standards, the police are establishing a formal training programs for police officers. Training takes approximately 1 hour, but would be substantially less for people with a medical background.

RECOMMENDATION 7

That compulsory BAC testing be achieved through the collection of both breath and blood samples. Wherever possible, people who are liable to be tested should, in the first instance, be tested using a preliminary breath test (PBT). All people whose PBT result indicates a positive BAC (regardless of the BAC level) and any people who cannot supply a breath sample should have a blood sample taken for analysis.

MINISTERIAL RESPONSIBILITY

. Minister for Transport and Main Roads

CONSUMPTION OF ALCOHOL AFTER AN ACCIDENT

208. One area of concern to the Queensland Police Service is the consumption of alcohol after an accident by people who are liable to be tested so they can avoid conviction on a drink driving charge. The jurisdictions with compulsory BAC testing address this problem in various ways.
209. In the Northern Territory, the courts have held that the reading obtained from a specimen is the reading for the purposes of the prosecution. Thus, regardless of whether a person consumed alcohol after the accident, the BAC result obtained from the sample is accepted by the courts as being the correct BAC level at the time of the accident. In New South Wales, it is an offence for a person who is liable to be tested to alter the concentration of alcohol in his/her blood in the 2 hours following the accident. Under the Victorian legislation, a person who claims to have consumed alcohol after the incident has to show the court that, on the balance of probabilities by sworn evidence corroborated by material evidence, they did drink after the incident. South Australian legislation does not deal with the problem directly.
210. The committee believes that it should be an offence for a person to wilfully alter the alcohol concentration in their blood within four hours after an accident.

RECOMMENDATION 8

That any person who is liable to be tested and, within four hours of the accident, wilfully does anything to alter the concentration of alcohol in his/her blood (except under the direction or under the supervision of a medical practitioner or nurse and for the proper care and treatment of the person), be guilty of an offence and receive a penalty that is equivalent to that for driving a motor vehicle with a BAC of over 0.15.

MINISTERIAL RESPONSIBILITY

. Minister for Transport and Main Roads

OTHER ISSUES

Immunity from Civil and Criminal Action

211. Several medical professionals expressed concern about possible legal ramifications that the introduction of compulsory BAC testing may have for them. One of the major concerns was that they may be the subject of civil or criminal legal action. As noted already in this report, all jurisdictions who have instituted compulsory BAC testing have also afforded the people who take samples (and in some instances the analyst) protection against legal action for things they reasonably and properly do in the course of taking a sample for the purposes of the particular Act.
212. In Victoria, subsection 56(6) of the *Road Safety Act* covers the doctor who takes a blood sample from an unconscious person. Subsection 56(8) states that no action lies against a doctor in respect of anything done in good faith and in compliance or purported compliance with the section of the Act (Eury: forum transcript page 34). Subsection 26(3) of the Northern Territory Traffic Act states that no action or proceedings for assault shall lie against a person who takes a sample for the purposes of the Act (Haymon: forum transcript page 34). Similarly, in South Australia, the legislation covers the medical practitioner. It states that no proceedings lie against a medical practitioner in respect of anything done in good faith and in compliance or purported compliance with the provisions of the section (Laslett: forum transcript page 34). In New South Wales, medical practitioners, registered nurses and people who act under the supervision of a medical practitioner are given immunity from civil and criminal liability for anything done properly or necessarily in the course of taking a sample if they reasonably believed that they were required to take a sample (Inspector Grainger: forum transcript page 34).
213. The committee believes that, if the *Traffic Act 1949* is to be amended to introduce compulsory testing, appropriate safeguards should include for the people who take the samples. Specifically, any person who is certified to take samples should be immune from civil and criminal liability for any actions they properly or necessarily take in the course of obtaining a sample for the purposes of the Act.

RECOMMENDATION 9

That doctors, nurses and other people who are certified to take samples be indemnified from civil and criminal liability for anything they properly and reasonably do in the course of taking blood and/or breath samples for the purposes of the Traffic Act 1949.

MINISTERIAL RESPONSIBILITY

. Minister for Transport and Main Roads

Court Appearances

214. Another of the concerns expressed by some of the medical profession is the threat of being summonsed to attend court to give evidence, possibly several years after the event, and spending days being cross-examined about the taking of a particular blood sample. At the Charters Towers hearing, Acting Senior Sergeant Fusco told the committee that these concerns exist under the present system. According to Acting Senior Sergeant Fusco, while some doctors take blood samples as a matter of course, others are hesitant to become involved in a matter that may go to court (hearing transcript 2, page 5).
215. Inspector Grainger and Dr Perl told the committee that there was little problem in New South Wales with doctors and nurses being forced to appear in court as a result of their taking of blood samples. According to Dr Perl the certificate, if completed correctly, is accepted as prima facie evidence in the vast majority of cases, and the doctor is not required in court (forum transcript page 16).
216. The Victorian legislation contains provisions that limit the likelihood of doctors and analysts having to make court appearances, and serves to give doctors ample notice and information about necessary, impending court appearances (McInnis 1993). Part of the reason for the Victorian doctors' disquiet prior to 1991, was what they perceived was an abuse of them by the court process (Wells; forum transcript page 14).
217. Section 57(7) of the Victorian *Road Safety Act 1986* says that anybody that has been served with a copy of the certificate from a legally qualified medical practitioner or an approved analyst cannot call that person to court unless they get the leave of the court. The court must not grant leave unless at least 7 days notice has been given and the court is satisfied that there is a reasonable possibility that: the blood referred to in the certificate was not that of the accused; it was contaminated so that the BAC reading was higher than it would have otherwise been; it was not taken in accordance with the code of practice for taking blood samples; or for some other reason the giving of evidence by the person who gave the certificate would materially assist the court to ascertain certain relevant facts.

RECOMMENDATION 10

That the conditions under which doctors, nurses and other people who are certified to take a sample, and analysts may be called to court be the same as those within section 57 of the Victorian Road Safety Act 1986.

MINISTERIAL RESPONSIBILITY

. Minister for Transport and Main Roads

RECIPROCAL BLOOD SAMPLING LEGISLATION

218. New South Wales, Victoria and South Australia have reciprocal blood sampling legislation. In some instances an accident occurs in one jurisdiction but the casualties are taken to a hospital in another jurisdiction. Under the arrangements for cross-border sampling police are given access to test results from samples that have been taken in hospitals in another jurisdiction and are allowed to use the information as evidence in court (Grainger: forum transcript page 57). Victorian legislation actually covers all of Australia by allowing a certificate purporting to be signed by a person who took a blood sample or who analysed a blood sample in accordance with the provisions of an Act of another state or territory to be used as evidence (Eury: forum transcript page 57).
219. This is an issue in Queensland, especially around the Gold Coast. There are a significant number of casualties from traffic accidents in the southern Gold Coast that are taken to the Tweed Hospital in New South Wales. Currently Queensland does not have access to samples from Queensland road accident casualties taken in New South Wales hospitals. According to Sergeant Garth Crank from the Queensland Police, “the bottom line is that if the person pleads guilty, so be it. If they plead not guilty then the charge is not continued with” (forum transcript page 457). The basis of this problem is that Queensland and New South Wales do not have reciprocal blood testing legislation (Inspector Grainger, forum transcript page 7).

RECOMMENDATION 11

- *That legislation in Queensland allow for the reciprocal exchange of blood and/or breath test results with other jurisdictions, and for the results from other jurisdictions to be admissible as evidence in Queensland courts.*
- *That the Queensland Police Service negotiates with authorities in New South Wales, the Northern Territory and South Australia to establish an agreement and protocol for cross border sampling.*

MINISTERIAL RESPONSIBILITY

- *Minister for Transport and Main Roads*
 - *Minister for Police and Corrective Services and Minister for Racing*
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RECOMMENDATION 12

That the Minister for Transport and Main Roads lobby the Australian Transport Council to ensure all states and territories implement legislation to allow for the reciprocal exchange of blood and/or breath test results, and the admissibility of blood test results from other jurisdictions as evidence in court.

MINISTERIAL RESPONSIBILITY

- *Minister for Transport and Main Roads*
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BAC TESTING BY POLICE AT THE SCENE OF AN ACCIDENT

220. The level of breath testing for alcohol at crash sites (eg, uninjured culpable drivers) in Queensland is low. Only 19 percent of drivers, riders and pedestrians involved in police reported crashes were tested for alcohol in Queensland in 1996 (Queensland Police, correspondence). Queensland Transport argues that, if compulsory BAC testing is introduced without an increase in breath testing levels at crash sites, an inequitable situation would occur, in that hospitalised drivers involved in serious crashes would be tested for alcohol while non-hospitalised drivers involved in serious crashes would not, thereby escaping possible prosecution. Because of this potential anomaly, an earlier report on compulsory BAC testing (Queensland Department of Transport, 1988) recommended that the introduction of blood alcohol testing of crash victims presenting to hospital should only be undertaken in the context of increased breath testing at crash sites (Grieve and Nucifora, 1992; 7).
221. At present, police would not generally conduct a breath tests on those involved in an accident unless they: suspected that the driver was affected by alcohol; judged that the driver was affected based on the smell of liquor and/or sign of impairment (eg. slurred speech); or it was a serious accident where someone was taken to hospital (Hannigan: transcript 3, page 18). A significant increase in the level of breath testing at crash sites should not be difficult. Superintendent Michael Hannigan, the officer in charge of the Queensland Police Service's State Traffic Support Branch, told the committee that very few police vehicles would not be equipped with breath testing devices (hearing transcript 3: page 18).
222. The committee believes that it should be standard operational procedure for police to conduct breath tests on all drivers and riders who are involved in an accident, at the accident scene and able to supply a breath sample. A breath test should be administered regardless of whether a person's outward appearance suggests that they have consumed alcohol.

RECOMMENDATION 13

That police should conduct a preliminary breath test (PBT) on all drivers, riders and pedestrians who are involved in an accident, are at the accident scene and able to supply a breath sample.

MINISTERIAL RESPONSIBILITY

- . Minister for Transport and Main Roads***
 - . Minister for Police and Corrective Services and Minister for Racing***
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PART 6 ~ CONCLUSION

223. Under current provisions within the *Traffic Act 1949*, the only assurance that a driver or motorcycle rider who is at hospital for treatment as a result of a motor vehicle accident will be subject to a BAC test is where the patient is conscious and a police officer:-
- is present at the hospital
 - has reasonable grounds for suspecting that, in the last 2 hours, the patient was driving, attempting to drive or in charge of a motor vehicle; and
 - makes a request for a sample to be taken as soon as practicable and within 2 hours of the patient last driving, subject to the availability of a doctor and the doctor's approval.
224. The difficulties in complying with these provisions result in a high level of non-testing and, consequently, a low level of detection of drink drivers who present at hospital for examination or treatment. The committee estimates that in 1990 approximately 1 000 to 1 500 hospitalised and outpatient drivers and motorcycle riders who had a BAC over 0.05 escaped detection under the current arrangements for testing.
225. The committee supports the introduction of compulsory BAC testing. It is satisfied that the existing provisions for testing are inadequate and that the introduction of compulsory BAC testing, in the form proposed by the committee, will address many of the current problems. The committee also believes that, if its proposed model for testing is adopted, the benefits will exceed the costs.
226. The benefits derived from compulsory BAC testing should include: improvements to road safety through increased detection and removal of drink drivers from Queensland roads; improvements to the integrity of Queensland's data on alcohol as a factor in crashes; better casualty management at hospitals; improved identification and treatment of drink drivers; and the prevention of hospitals being used as 'safe havens' from the law.
227. Compulsory BAC testing can take many forms. Variables considered by the committee included: the road user types tested, the minimum age for testing, who should take samples, time limits for blood samples to be taken, mechanisms to ensure that samples are taken and whether the testing should be based on blood only or breath and blood sampling. These variables are discussed in detail in part 5 of the report.

228. The committee has concluded that:-

- a system based on both breath and blood samples should be implemented;
- drivers, motorcycle riders and pedestrians should be tested;
- the minimum age for testing should be 15 years of age;
- the BAC test results of blood samples taken within 4 hours of the accident should be accepted as prima facie evidence of a prescribed concentration of alcohol charge. The BAC test results from samples taken within 12 hours of the accident should be admissible as supporting evidence;
- medical practitioners, nurses and other people who are trained and certified by a hospital should be allowed to take breath and blood samples;
- the legal onus be placed on the patients liable to be tested, including patients who are unconscious or otherwise unable to communicate, to provide samples when requested to do so by medical practitioners, nurses and other certified people;
- there be no legal compulsion on hospital staff to take samples, but that a 'code-of practice' be developed and adopted as hospital policy so that samples are taken from those people who are liable to be tested.

229. The committee also believes that doctors, nurses and other people who are certified to take samples should be indemnified from civil and criminal liability for anything they properly and reasonably do in the course of taking blood and/or breath samples for the purposes of the *Traffic Act 1949*. People who take samples should be protected by legislative provisions that effectively limit unnecessary court appearances. Finally, police should conduct a preliminary breath test on all drivers, riders and pedestrians who are involved in an accident, are at the accident scene and are able to supply a breath sample.

230. Legislation in Queensland should allow for the reciprocal exchange of blood and breath testing results with other jurisdictions, and for the results of blood tests conducted in other jurisdictions to be admissible as evidence in Queensland courts. The Minister for Transport should lobby the Ministerial Transport Council for reciprocal arrangements to be implemented throughout Australia.

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APPENDIX A — CALL FOR SUBMISSIONS

CALL FOR SUBMISSIONS

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Parliamentary Travelsafe Committee Inquiry into

Compulsory Blood Alcohol Content Testing

The Travelsafe Committee is an all-party Committee appointed by the Parliament to inquire into and report on all aspects of road safety and public transport in Queensland.

The Committee is inquiring into whether it should be compulsory for persons who attend a hospital for examination or treatment as a result of a motor vehicle accident to be subject to a Blood Alcohol Content (BAC) test. The objective of this testing is to identify alcohol affected persons involved in road accidents.

In examining this question, the Committee will consider:-

- the nature and scope of problems with existing provisions for BAC testing in Queensland;
- the extent to which the introduction of compulsory BAC testing at hospitals would address these problems;
- if compulsory testing is warranted, what the terms and conditions should be; and
- whether the likely benefits from compulsory BAC testing will justify the costs.

The Committee has prepared a paper to outline the issue being examined in detail for those contemplating making a submission. **Copies of the paper called Issues Paper No.1 can be obtained free of charge from the Committee's Research Director by:**

**telephone (07) 3406 7908; facsimile (07) 3406 7262 or
e-mail tsafe@parliament.qld.gov.au**

Alternatively, the issues paper can be accessed via the Committee's internet site on www.parliament.qld.gov.au

The closing date for written submissions is **Friday, 21 March 1997.**

John Goss MLA, Chairperson
7 February 1997

APPENDIX B — LIST OF SUBMISSIONS RECEIVED

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| <p>1 (a) Mr R Moran WELLINGTON POINT QLD 4160</p> <p>1 (b) Mr R Moran WELLINGTON POINT QLD 4160</p> <p>2. Mr D Spiller MANLY QLD 4179</p> <p>3. Mr B Reily CAIRNS QLD 4870</p> <p>4. Mr K R Partlett MUNDINGBURRA QLD 4812</p> <p>5. Mr T R Moore Chief Executive Officer Cairns City Council CAIRNS QLD 4870</p> <p>6. Mr C den Ronden Citizens Against Road Slaughter LUTWYCHE QLD 4030</p> <p>7. Dr V Hill Director Spinal Injuries Unit Princess Alexandra Hospital WOOLLOONGABBA QLD 4102</p> <p>8. Mr R Wintour EARLVILLE QLD 4870</p> <p>9. CONFIDENTIAL</p> <p>10. Dr M Mackay MACKAY QLD 4741</p> <p>11. Mr L Haines BENOWA WATERS QLD 4217</p> <p>12. Mr A Conway-Jones BIGGERA WATERS QLD 4216</p> <p>13. Prof F D Schofield University of Queensland Medical School</p> | <p>HERSTON QLD 4006</p> <p>14. CONFIDENTIAL</p> <p>15. Mr K Howkins KEPERRA QLD 4054</p> <p>16. Mrs B G Tinetti MAGNETIC ISLAND QLD 4819</p> <p>17. Prof R Smallwood The Royal Australasian College of Physicians SYDNEY NSW 2000</p> <p>18. Dr J Hadok Mackay Base Hospital MACKAY QLD 4741</p> <p>19. Mr E J Rowe BABINDA QLD 4861</p> <p>20. Ms D O'Brien President Queensland Emergency Nurses Association Inc. WOOLLOONGABBA QLD 4102</p> <p>21. Mr G Fites General Manager External Relations RACQ BRISBANE QLD 4000</p> <p>22. Emergency Room Nursing Staff The Prince Charles Hospital CHERMSIDE QLD 4032</p> <p>23. Mr F Carroll MLA Member for Mansfield UPPER MT GRAVATT QLD 4122</p> <p>24. Mr D Huntley LATHAM ACT 2615</p> <p>25. Royal Australasian College of Surgeons Trauma Committee (Qld Division) KIPPA RING QLD 4021</p> |
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| 26. | Royal College of Nursing Queensland Chapters BRISBANE QLD 4000 | 40. | CAMOOWAL QLD 4828 Motorcycle Riders Association Queensland Inc. INDOOROOPILLY QLD 4068 |
| 27. | The Australian College of Paediatrics PARKVILLE VIC 3052 | 41. | Mr L Edwards Charters Towers Hospital CHARTERS TOWERS QLD 4820 |
| 28. | Dr A P Harrington Nambour General Hospital NAMBOUR QLD 4560 | 42. | Dr I Knox Wesley Hospital AUCHENFLOWER QLD 4066 |
| 29. | Dr D Lewis-Driver Logan Hospital LOGANHOLME DC QLD 4129 | 43. | Drs B Bell and D Green Gold Coast District Health Service SOUTHPORT QLD 4215 |
| 30. | Dr G Feeney Alcohol and Drug Assessment Unit Princess Alexandra Hospital WOOLLOONGABBA QLD 4102 | 44. | Dr M Marshall Longreach Hospital LONGREACH QLD 4730 |
| 31. | Dr A Hughes Nambour General Hospital NAMBOUR QLD 4560 | 45. | Mr K J Carroll TINGALPA QLD 4173 |
| 32. | Mr A Noonan FITZGIBBON QLD 4018 | 46. | Ms C Bodger ATHERTON QLD 4883 |
| 33. | Dr N Small Townsville General Hospital TOWNSVILLE QLD 4810 | 47. | Dr I Wilkey Royal Brisbane Hospital and District Health Services BRISBANE QLD 4029 |
| 34. | The Australian Society for Emergency Medicine BRISBANE QLD 4000 | 48. | M J Avery Mater Misericordiae Public Hospitals SOUTH BRISBANE QLD 4101 |
| 35. | Dr D Manahan Stanthorpe Health Services STANTHORPE QLD 4380 | 49. | Dr F Brecciaroli Medical Superintendent Caloundra Hospital CALOUNDRA QLD 4551 |
| 36. | Dr W Jaffurs Cairns Base Hospital CAIRNS QLD 4870 | 50. | Queensland Police Service BRISBANE QLD 4000 |
| 37. | Mr K J Carroll Government Medical Office BRISBANE QLD 4000 | 51. | Child Accident Prevention Foundation of Australia (Kidsafe) HERSTON QLD 4029 |
| 38. | Queensland Centre for Accident Research and Road Safety (CARRS-Q) BRISBANE QLD 4000 | 52. | Australian Medical Association (Queensland Branch) KELVIN GROVE QLD 4059 |
| 39. | Ms I Petrie | | |

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| 53. | Dr S Buckland District Manager Redcliffe-Caboolture District Health Services REDCLIFFE QLD 4020 | 67 | BRISBANE QLD 4000 Dr R L Stable Director-General Queensland Health BRISBANE QLD 4000 |
| 54. | Mrs P Clarke CARINDALE QLD 4152 | 68 | Dr J G Youngman Deputy Director-General Health Services BRISBANE QLD 4000 |
| 55. | Queensland Transport FORTITUDE VALLEY QLD 4006 | | |
| 56. | Dr John Edgar Mackay Base Hospital MACKAY QLD 4740 | | |
| 57. | Dr D Richardson Princess Alexandra Hospital WOOLLOONGABBA QLD 4102 | | |
| 58. | Australasian College for Emergency Medicine CARLTON VIC 3053 | | |
| 59. | Dr M Mackay MACKAY QLD 4741 | | |
| 60. | Dr J M H Gillett Miles Heath Services MILES QLD 4415 | | |
| 61. | Dr M Mackay MACKAY QLD 4741 | | |
| 62. | Motorcycle Riders Association Queensland Inc. INDOOROOPILLY QLD 4068 | | |
| 63. | Mr K.J. Carroll Government Medical Office BRISBANE QLD 4000 | | |
| 64. | Mrs M Cottrell STAFFORD HEIGHTS QLD 4053 | | |
| 65. | Dr Gerald Feeney Alcohol and Drug Assessment Unit Princess Alexandra Hospital WOOLLOONGABBA QLD 4102 | | |
| 66. | Mr R Bonham Medical Director Queensland Ambulance service | | |

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| <i>APPENDIX C — WITNESSES AT PUBLIC HEARINGS AND PUBLIC FORUMS</i> |
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MACKAY — PUBLIC HEARING - 4 AUGUST 1997

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| Dr M J Mackay | Senior Emergency Officer Emergency Department | Mackay Base Hospital |
| Dr J C Hadok | Senior Medical Officer Emergency Department | Mackay Base Hospital |
| Sergeant R Turner | Officer in Charge Mackay District Traffic Branch | Queensland Police Service |
| Constable P Corbett | Accident Investigation Officer Mackay Police Station | Queensland Police Service |

CHARTERS TOWERS — PUBLIC HEARING - 5 AUGUST 1997

| | | |
|--------------------------------|--|---------------------------|
| Inspector W Butterworth | Regional Traffic Coordinator for the Northern Region | Queensland Police Service |
| Senior Sergeant J Urquhart | Officer in Charge Townsville District Traffic Branch | Queensland Police Service |
| Acting Senior Sergeant B Fusco | Officer in Charge Townsville Police Station | Queensland Police Service |
| Senior Sergeant D Wheildon | Officer in Charge Charters Towers Police Station | Queensland Police Service |
| Sergeant D Last | Charters Towers Police Station | Queensland Police Service |
| Mr B Beveridge | Mayor | Charters Towers City |

BRISBANE — BAC FORUM - 1 OCTOBER 1997
FORUM PANEL

| | | |
|--------------------------|---|--------------------------------|
| Inspector Kerry Grainger | Traffic Technology Section | New South Wales Police Service |
| Dr Judy Perl | Pharmacologist Clinical and Forensic Medicine Section | New South Wales Police Service |

FORUM PANEL CONTINUED

| | | |
|------------------------------|--|---|
| Senior Sergeant Jan Eury | Traffic Support Department | Victoria Police Service |
| Dr David Wells | Head -Clinical and Forensic Medicine | Victoria Institute of Clinical and Forensic Medicine |
| Senior Sergeant Rick Laslett | Traffic Technical Resource Section | South Australia Police Service |
| Mr Trevor Bailey | Office of Road Safety | South Australia Department of Transport |
| Superintendent Colin Haymon | Road Safety and Accident Investigation Unit | Northern Territory Police Force |

PEOPLE REGISTERED FOR THE FORUM

| | | |
|------------------------------|--|--|
| Senior Sergeant Merv Adamson | | Queensland Police Department |
| Mr Bob Aldred | | Alcohol And Drug Foundation, Queensland |
| Ms Bonny Barry | Professional Officer | Queensland Nursing Union |
| Mr Ron Biltoft | Assistant Director | Queensland Health Scientific Services |
| Dr Richard Bonham | Medical Director | Queensland Ambulance Services |
| Mr Jonathan Boyd | | Weekend Independent |
| Ms Cheryl Bray | Planning Officer Performance Management Branch | Queensland Health |
| Mr Don Buchanan | Director | Government Medical Officer |
| Dr Ken Carroll | Deputy-Director | Government Medical Officer |
| Mr John Cook | Chairman | Committee Investigating Testing Of Road Accident Casualties |
| Sergeant Garth Crank | Officer In Charge Accident Investigation Squad | Queensland Police Service |
| Senior Sergeant Errol Dellit | South Eastern Region | Queensland Police Service |
| Mr Colin Den Ronden | | Citizens Against Road Slaughter |
| Mrs Phyl Den Ronden | | Citizens Against Road Slaughter |
| Sergeant Mick Fawcett | South East Region | Queensland Police Service |

PEOPLE REGISTERED FOR THE FORUM CONTINUED

| | | |
|---------------------------------|---|--|
| Dr Gerald Feeney | Medical Director Alcohol And Drug Assessment Unit | Princess Alexandra Hospital |
| Acting Sergeant Peter Flanders | Officer In Charge Gympie Traffic Branch | Queensland Police Service |
| Ms Jan Gehrke | | Princess Alexandra Hospital |
| Superintendent Michael Hannigan | State Traffic Support Branch | Queensland Police Service |
| Ms Judy Harris | CNC Emergency Department | Redcliffe Hospital |
| Ms Valerie Hearn | Public Relations And Road Safety | Motorcycle Riders Association Queensland Inc |
| Mr Mark King | Manager (Road User Behaviour) | Queensland Transport |
| Inspector Tony Lake | | Queensland Police Service |
| Dr Ken Levy | Deputy Director-General | Department of Justice |
| Senior Sergeant Ray Loader | Metropolitan South Region | Queensland Police Service |
| Inspector Peter Mansfield | | Queensland Police Service |
| Mr Stuart Mason | Chairman Road Safety Sub-Committee | Motorcycle Riders Association Queensland Inc |
| Dr Chris May | Treasurer | The Australian Society For Emergency Medicine |
| Mr Geoff Meers | Manager (Road Use Data Analysis) | Queensland Transport |
| Ms Renae Moore | Project Officer Road User Behaviour Scientist | Queensland Transport |
| Mr Roy Moran | | |
| Mr Jenny Morris | Senior Project Manager | Federal Office of Road Safety |
| Ms Delia O'Brien | President | Queensland Emergency Nurses Association Inc. |
| Dr Jeshri Pattni | | |
| Dr Rooks Pillay | Deputy Director of Emergency Medicine | Royal Brisbane Hospital |

PEOPLE REGISTERED FOR THE FORUM CONTINUED

| | | |
|---------------------------------|--|---|
| Dr Cliff Pollard | Chairman - Queensland Trauma Committee | Royal Australasian College of Surgeons |
| Dr Brian Purssey | | Surgeon And Medico-Legal Services |
| Dr Drew Richardson | Director of Emergency Medicine | Princess Alexandra Hospital |
| Dr Hugh Rigby | Senior Medical Officer | Caloundra Hospital |
| Professor Frank Schofield | Medical School | University Of Queensland |
| Dr Victor Siskind | Adjunct Professor | Centre For Accident Research And Road Safety (Queensland) |
| Mr Martin Skeates | | Citizens Against Road Slaughter |
| Chief Superintendent Doug Smith | South Eastern Region | Queensland Police Service |
| Ms Michelle Smith | Road User Behavioural Scientist | Queensland Transport |
| Ms Margaret Smythe | Research Officer | Federal Office of Road Safety |
| Mr Alan Soares | President | Alcohol and Drug Foundation, Queensland |
| Mr Des Spiller | | |
| Inspector John Sybenga | Metropolitan North Region | Queensland Police Service |
| Dr Dana Wainwright | President Elect | Australian Medical Association (Queensland) |
| Senior Sergeant Tom Wilkinson | | Queensland Police Service |
| Mr Rick Williams | Program Manager | Queensland Health |
| Senior Constable Gary Wren | Chandler Traffic Branch | Queensland Police Service |
| Mr Phillip Young | | Representing The Member For Gladstone |

BRISBANE — 2 OCTOBER 1997

| | | |
|-----------------------------|---|---|
| Dr C Pollard | Chairman - Queensland Trauma Committee | Royal Australasian College of Surgeons |
| Professor F Schofield | Medical School | University of Queensland |
| Superintendent M Hannigan | State Traffic Support Branch | Queensland Police Service |
| Senior Sergeant T Wilkinson | | Queensland Police Service |
| Mr M King | Manager - Road User Behaviour | Queensland Transport |
| Mr G Mahon | Director - Road User Management and Safety | Queensland Transport |

APPENDIX D — EXHIBITS

Exhibit

| Exhibit No. | Description |
|-------------|---|
| 1. | New South Wales Police Department — Alcohol Sampling System. General alcohol sampling statistics for the period 1 January 1994 — 31 March 1997. |
| 2. | Information from New South Wales on alcohol and drug testing. Including:- <ul style="list-style-type: none"> (a) Chronology of drink driving countermeasures in New South Wales; (b) <i>Traffic Act 1909 (NSW)</i> - s4F — s5AC; (c) <i>Traffic Act 1909 (NSW — Regulation: Schedule N</i> — Substances prescribed as drugs; (d) New South Wales blood testing certificate; (e) New South Wales drug testing certificates; (f) photograph of a safe used for the storage of blood and urine samples at hospitals; (g) <i>Motor Traffic Regulations 1935 (NSW)</i> - s173(1) Blood Sample, s138 Institutions etc prescribed in relation to the taking of blood samples and s140 Laboratory prescribed in relation to s5AA of the Act. |
| 3. | Victoria Police Service — Blood Alcohol Procedure 1.7, 1993. Including information on:- <ul style="list-style-type: none"> (a) taking blood samples from road accident victims; (b) the code of practice for taking blood samples from road accident victims; (c) patients refusing or failing to provide a blood sample and negative preliminary breath test (PBT) results; (d) the patient sample; (e) blood sample kit instructions; (f) labmailers; (g) calibration of PBT device; (h) fatal motor vehicle accidents - persons to have a blood sample taken. |
| 4. | Victoria: Blood test results — <i>statewide</i> , fiscal years 1989/90 to 1995/96 |
| 5. | Victoria: Blood test results — <i>male</i> fiscal years 1989/90 to 1995/96 |

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6. Victoria: Blood Test Results — *female* fiscal years 1989/90 to 1995/96
 7. Victoria: Blood Samples 1989/90 to 1995/96
 8. Victoria: Road Traffic Fatalities, 1970 to 1996
 9. Victoria: Traffic Alcohol Statistics (blood system) 1.7.95 - 30.6.96
 10. Victoria: Drivers and Riders Killed in Victoria with a BAC over 0.05%, 1977 - 1995
 11. Victoria: Road Fatality Trends - effects of legislation and strategies, 1970 - 1993
 12. Victoria: Breath Alcohol Levels:-
 - (a) statewide - calendar years 1989 to 1996
 - (b) metropolitan - calendar years 1989 to 1996
 - (c) country - calendar years 1989 to 1996
 - (d) evidential breath tests - 1989 to 1996
 - (i) statewide
 - (ii) metropolitan and country
 13. South Australia — Compulsory blood samples. Includes information on:-
 - (a) *Road Traffic Act 1961* (South Australia);
 - (b) police procedures;
 - (c) case law;
 - (d) documentation for blood sampling;
 - (e) *Harbours & Navigation Act*
 14. Queensland Police Service, statement delivered at public hearing on 2 October 1997 prepared by Acting Inspector T D Wilkinson, State Traffic Support Branch, Traffic Operations.
 15. New South Wales Department of Health — Blood alcohol sampling kit.
 16. Victoria Police — Blood Alcohol Sampling Kit.
 17. Queensland Police Service — Blood Sampling Kit.
 18. Summary of alcohol and drugs found in blood specimens analysed by the Queensland Government Chemical Laboratory 1992/93 to 1996/97.
 19. Queensland Police Service Certificate — Certificate to be completed by medical practitioner when a blood sample is taken for the purpose of a laboratory test.
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20. Queensland Police Service Certificate — Certificate to be completed by medical practitioner when a person fails to provide a blood sample for the purpose of a laboratory test.
 21. Queensland Police Service — Traffic Incident Report form.
 22. Correspondence, n.d. J P O'Sullivan, Commissioner of Police to Mr G Stevenson, Director General, Department of Transport.
 23. Correspondence, 27 June 1995. Ass. Comm. J C Banham, Queensland Police Service to Mr R Drabble, Queensland Nurses Union of Employees
 24. Correspondence, 27 June 1995. Ass. Comm. J C Banham, Queensland Police Service to Dr E Burkett, Australian Medical Association (Queensland Branch)
 25. Correspondence, 11 July 1995. Dr Beres Wenck, Honorary Secretary Australian Medical Association (Queensland Branch) to Ass. Comm. J C Banham, Queensland Police Service
 26. Correspondence, 22 August 1995. Stephen Philips, President Australian Medical Association (Queensland Branch) to Ass. Comm. J C Banham, Queensland Police Service
 27. Correspondence, 6 November 1995. Mr S. R. Drabble, Queensland Nurses Union to Ass. Comm. J C Banham, Queensland Police Service
 28. Correspondence, 13 December 1995. J P O'Sullivan, Commissioner of Police to Mr G Stevenson, Director General, Department of Transport.
 29. Correspondence 24 January 1995. Capt. K Dwyer, A/Director General (Policy) Department of Transport to J P O'Sullivan, Commissioner of Police

REPORTS OF THE TRAVELSAFE COMMITTEE

| NUMBER | TITLE | TABLING DATE |
|--------|--|------------------|
| 1. | Annual Report for the period 10 May 1990 to 30 June 1990 | 5 September 1990 |
| 2. | The need for some form of compulsory periodic inspections of passenger vehicles as an effective means of reducing road crashes and the severity of associated injuries, AND The need to improve the standards of motor vehicle repairs as a means of improving vehicle and road safety | 4 December 1990 |
| 3. | Road Safety Education AND Traffic Law Enforcement | 4 September 1991 |
| 4. | Annual Report for the period 1 July 1990 to 30 June 1991 | 2 October 1991 |
| 5. | Bicycle Safety | 28 November 1991 |
| 6. | Achieving High Levels of Compliance with Road Safety Laws - a review of road user behaviour modification | 18 March 1992 |
| 7. | Road Environment and Traffic Engineering | 28 April 1992 |
| 8. | Annual Report for the period 1 July 1991 to 30 June 1992 | 25 August 1992 |
| 9. | Pedestrian and Cyclist Safety | 15 July 1993 |
| 10. | Annual Report for the period 1 July 1992 to 30 June 1993 | 18 November 1993 |
| 11. | The Safety and Economic Implications of Permitting Standees on Urban and Non-Urban Bus Services | 18 November 1993 |
| 12. | Local Area Traffic Management | 28 April 1994 |
| 13. | Annual Report for the period 1 July 1993 to 30 June 1994 | 27 October 1994 |
| 14. | The Desirability of Requiring Compulsory Third Party Insurance Cover for Boats and Trailers | 22 November 1994 |
| 15. | Speed Cameras: Should They Be Used in Queensland? | 24 November 1994 |
| 16. | Report on Driver Training and Licensing | 3 April 1996 |
| 17. | Annual Report for the period 1 July 1995 to 30 June 1996 | 4 September 1996 |
| 18. | Queensland's Road Toll : An Overview | 8 February 1997 |
| 19. | Queensland's Road Toll : Drink Driving (Part 1) | 8 February 1997 |
| 20. | Unsecured Loads Report | 16 May 1997 |
| 21. | Annual Report for the period 1 July 1996 to 30 June 1997 | 18 November 1997 |

Reports are available on the committee office website www.parliament.qld.gov.au or from the committee's secretariat:

Parliament House
George Street
BRISBANE QLD 4000

Telephone: (07) 3406 7908
Facsimile: (07) 3406 7262