Drink driving

• Drink driving is a contributing factor in over 10% of traffic fatalities in Australia¹, and over 18% of fatalities in Queensland².

• Almost 1 in 10 drivers and riders killed on Australian roads have a BAC exceeding the legal limit.

State of the Road A Fact Sheet of the Centre for Accident Research & Road Safety - Queensland (CARRS-Q)

THE FACTS
• Drink driving remains a major contributor to trauma on Australian roads, despite an illegal blood alcohol concentration (BAC) limit having been in place for over 25 years.
• Queensland police conduct approximately 3.5 million breath tests a year, detecting over 19,000 drink driving offences - a detection rate of approximately 0.6%³.
• Casualty crash risk doubles when driving with a BAC just in excess of 0.05, and the risk of involvement in a fatal crash increases even more sharply⁴.
• A high proportion of repeat drink drivers have clinical alcohol dependence problems⁵.

How does alcohol affect the body?
• Alcohol is one of the most widely used drugs - a potent depressant that affects both physical and mental functioning.
• Cognitive impairment can include affects on judgement, memory, coordination and reaction time.
• Alcohol affects the driving task by:
  ° Slowing down reaction time - reducing the ability to perform in an emergency.
  ° Reducing the ability to multi-task - an essential skill for safe driving.
  ° Causing poor judgement - reducing the ability to judge distances and speeds of other vehicles.
  ° Reducing attention span - reducing the ability to notice other drivers/vehicles.
  ° Causing blurred vision and reduced hearing - reducing the ability to drive safely and identify driving hazards.
  ° Creating over-confidence - despite being less able to cope with unexpected events and more likely to take risks.
• Consuming a large quantity of alcohol in the evening may mean alcohol is still present in your system the next day.
• If you will be drinking, the best and safest approach is to adopt an alternative transport plan, such as:
  ° Designating a ‘dry’ driver who will not be drinking or using any drugs.
  ° Using public transport, catching a cab or using a rideshare service.
  ° Staying overnight at a friend's place rather than driving.
  ° If walking home, walk in a group or with a sober friend, stay on the footpath and only cross at marked crossings or where you are clearly visible to motorists.
  ° If hosting at your house, provide food/non-alcoholic drink options, ensure your guests have an alternative transport plan and/or invite them to stay the night.
• If none of these options are possible, the following could be used as a guide to help stay under the BAC limit:
  ° Males: no more than 2 standard drinks in the first hour, and no more than 1 standard drink every hour after.
  ° Females: no more than 1 standard drink every hour.
• A standard drink contains 10g of alcohol. The following table shows drinks which are approximately one standard drink:

How much can I drink?
• BAC is a measurement of the amount of alcohol in the body. In Queensland, it is illegal to drive a vehicle with a BAC of 0.05 or more. However, novice drivers (those with a Learner or Provisional licence) and professional drivers (taxi, bus and heavy vehicle drivers) must maintain a zero BAC.
• The best and safest approach is to not drink if you are planning on driving. Research has shown that even a BAC of 0.01 negatively affects your reaction time⁶.
• A number of factors make it difficult to accurately monitor alcohol consumption:
  ° Different alcohol content for different drinks (wine, beer, spirits).
  ° Different sizes and shapes of glasses and volumes poured for different drinks.
  ° The more you drink, the less accurately you can estimate your consumption.
  ° Your BAC may continue to rise even after you’ve stopped drinking.
  ° Other variables affect your BAC (such as weight, gender, age, metabolism, fitness, liver state) or your reaction to alcohol (such as how often you drink, duration since eating food or other medications).

<table>
<thead>
<tr>
<th>Drink</th>
<th>Volume</th>
<th>Alcohol Content</th>
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</thead>
<tbody>
<tr>
<td>Low alc beer</td>
<td>375ml</td>
<td>(3.5% alc)</td>
</tr>
<tr>
<td>Regular beer</td>
<td>285ml</td>
<td>(4.9% alc)</td>
</tr>
<tr>
<td>Spirits</td>
<td>30ml</td>
<td>(40% alc)</td>
</tr>
<tr>
<td>Small glass of wine</td>
<td>100ml</td>
<td>(12% alc)</td>
</tr>
<tr>
<td>Port or sherry</td>
<td>60ml</td>
<td>(18% alc)</td>
</tr>
</tbody>
</table>

NB: A glass of champagne (11.5% alcohol), a 375ml stubby or a can of full strength beer (4.9% alcohol) are all 1.5 standard drinks.
Penalties for drink drivers

• Drink driving legislation is in effect in all Australian jurisdictions. The consequences of drink driving include not only a fine and loss of licence, but also the potential loss of insurance cover and WorkCover.
• Prosecutions can be commenced as a result of breaches of the Workplace Health and Safety Act for any worker under the influence of alcohol who has been found negligent in his or her duties. Management, supervisors or fellow workers could also be legally liable if they were aware of a driver’s alcohol affliction and failed to report or amend the situation (e.g., send the driver home and/or suspend his/her driving tasks).

CARRS-Q’S WORK IN THIS AREA

• Review of drink driving rehabilitation and new developments8.
• Examination of the inclusion of rehabilitation as part of interlock programs9.
• Profile of recidivist drink drivers, including their other offences, crash involvement and the impact of sanctions8.
• Profile of first time drink driving offenders and the development of an intervention10.
• Examination of zero BAC laws among novice drivers and the impact of transitioning to an increased BAC once obtaining their Open licence.
• Profile of Indigenous drink drivers and the development of a culturally sensitive prevention program11.
• Profile of women drink drivers and the development of targeted countermeasures.
• Evaluation of smartphone applications aimed at reducing drink driving.
• Development, implementation and evaluation of the Under the Limit (UTL) drink driving education and rehabilitation program.
• Comprehensive reviews of RBT and vehicle-based sanctions for drink drivers12.
• Submission to the Travelsafe parliamentary enquiry in Queensland regarding vehicle impoundment and other countermeasures in managing recidivist drink drivers.
• Evaluation of the ‘Skipper’ designated driver program13.
• Examination of risk perceptions in drink walking14.

FUTURE DIRECTIONS

The National Road Safety Strategy identifies a number of goals in this area. These include:
• Collaborating with police to strengthen the deterrent effects of RBT programs and to improve public awareness of these programs.
• Undertaking research on extending the use of alcohol ignition interlocks to cover a wider segment of drink driving offenders, particularly high-risk offenders, and investigating the option of requiring demonstrated rehabilitation from alcohol-dependence before interlock conditions can be removed.
• Expanding the use of other vehicle-based sanctions for repeat and high-risk drink driving offences.
• Reviewing international best practice and identifying the cost-effectiveness of interventions for dealing with high risk and repeat traffic offenders.
• Investigating drink driving in the female population.

REFERENCES