

Medication & driving



- Health professionals and researchers in Australia and internationally agree that the impairing effects of some medications can have potentially harmful effects on traffic safety.
- Almost 1 in 4 Australian drivers ignore medication warning labels and continue to drive after taking prescription drugs.¹
- Researchers and health professionals have called for improvements to medication classification and warning systems.^{2,3,4}

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

THE FACTS

This fact sheet complements *CARRS-Q's Drug Driving Fact Sheet*.⁵

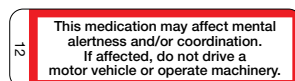
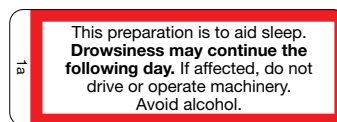
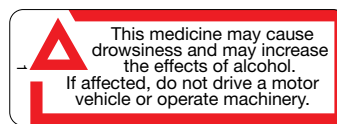
- The use of drugs that affect mood, cognition and psychomotor functioning can directly or indirectly potentially impair driving ability.
- Many over-the-counter and prescription medications, such as some cough-cold-flu day and night formulas, non-steroidal anti-inflammatories, antihistamines, antibiotics, antidepressants, some drugs for epilepsy, and sleep medications such as benzodiazepines, can potentially impair driving.^{6,7,8}
- Australian and international research has provided evidence for the potentially impairing effects through simulator and on-road driving studies.
- Some medications can impair driving by:
 - causing drowsiness;
 - slowing reaction time – this can be crucial in an emergency situation;
 - affecting mental concentration – making it difficult to multi-task and make quick decisions;
 - causing shakiness or unsteadiness; and
 - affecting coordination.
- These effects can make it unsafe to drive, cycle or use machinery after taking medication.
- There are many factors which can cause the effects of medications to vary, such as:
 - the individual's metabolism;
 - the strength and time of dose;
 - whether it is the start of initial treatment or recommencement;
 - whether the dosage is increased; and

- whether it was taken in combination with other substances, such as other medications, illicit drugs, alcohol, and some complementary medicines.

Ask your doctor or pharmacist about the effect of medications on your driving.

Warning labels about driving

- In Australia, medications that have the potential to impair driving must display a warning label.^{9,10}
- According to national guidelines, ancillary warning labels 1 and 1a are mandatory, and label 12 may also be displayed.



- In addition, States and Territories may have specific requirements. In Queensland, the ancillary labels are not required to appear if the warnings are already visible on the manufacturer's pack.¹⁰
- Australian warning labels require those using medication to monitor its effects and self-assess their impairment.

- However, recent Australian research¹ indicated that there are very low levels of knowledge within the driving population of the effects of medications on driving, and of how much time should pass following the use of analgesics, benzodiazepines and prescription stimulants, before it becomes safe to drive.
- This brings into question whether people are able to monitor their own status and make their own decisions about being safe to drive, as the Queensland warning labels require.
- Further, research suggests that people don't read the warning labels. A report by the Australian Drug Foundation revealed that almost one in four Australian drivers ignore medication warning labels and continue to drive after taking prescription drugs.¹
- Researchers and health professionals have called for improvements to medication classification and warning systems to improve user awareness and knowledge of the effects of classes of medications on driving performance, assist appropriate medication choices and underpin legislation.^{2,3,4}
- Australian research suggests there may be potential to improve Australian medication warning and labelling systems to meet consumer needs, and improve driver awareness, attitudes and compliance with medication warnings.^{2,3}
- Ley (1995) assessed the effectiveness of medication warnings and safety directions and found that warnings were noticed by about 52% of people. Further, 50% of participants were skeptical of product warnings, while the other 50% followed the warning.¹¹

- Evidently there is potential to improve the noticeability of pharmaceutical warning statements, and user attitudes toward and compliance with medication warnings.
- While there have been international developments in medication classification and warnings, Queensland is yet to adopt any modifications.

Penalties for drivers

In Australia, drivers have received sentencing for culpable driving causing grievous bodily harm, as a result of driving under the influence of alcohol and medications. In one particular case, the driver had been warned by their doctor not to drink alcohol while taking their medication; however the driver ignored the warning and made the conscious decision to drive while under influenced. A heavier sentence was imposed.

TIPS FOR STAYING SAFE

- Remember your driving can affect not only you, but also your passengers and others on the road.
- Always ask your doctor or pharmacist about the medication you have been prescribed and its potential effects on your driving capabilities.
- Read all the labels on all your medicines.
- Keep the telephone number of your doctor or pharmacist handy. If you have taken medication and are unsure whether you can drive or suspect you might be impaired, contact your doctor or pharmacist to ask their advice. They can consider your medical situation and provide you with the best advice.

- Be aware of the dangers of mixing medications with other drugs and alcohol. Remember to ask your doctor or pharmacist about interactions with any other medications you are taking.
- Remember to tell your doctor if you are required to drive or operate machinery for work. This will assist in medication choice.
- Ask your doctor or pharmacist what symptoms you should look for, how to detect effects, and when you should not operate machinery.
- Alcohol can exacerbate the impairing effects of medications, so avoid consuming alcohol while taking medications that affect driving.
- If your medicine affects your driving, stop driving, not your medication.
- Make arrangements for alternative transport while you are taking the medication.

CARRS-Q'S WORK IN THIS AREA

In line with international developments, CARRS-Q is developing a program of research to investigate the effectiveness of the warning systems currently in use in Australia, and individual ability to accurately self-assess impairment from medications on driving. This includes:

- Surveys to assess the perceptions, knowledge, awareness, attitudes and behaviour of the general community, in Australia and overseas, in relation to medication warning labels about driving and driving while medicated.^{2,3}
- Investigation of the preferences and information needs of Australian and overseas health professionals.

- Investigation of prevalence of driving while taking impairing medication.
- Simulator study to investigate self-assessment of driving impairment resulting from medications.
- Investigation of barriers, advantages, and disadvantages to implementation of adaptations of the warning system.
- Investigation of effectiveness of French warning labels as an alternative model.
- Collaboration with international research consortiums.
- Investigation of the involvement of medications in fatal crashes.
- CARRS-Q's research will assist the community through the development of simpler medication labelling to advise people about driving and medication.

FUTURE DIRECTIONS

The National Road Safety Strategy 2011-2020¹² recognises existing evidence for increased crash risk associated with the use of certain licit drugs, and the potential for improving the national approach to the management of impaired driving due to use of prescription medication. The strategy identifies a number of goals in the area of drug driving:

- Investigating the use of new roadside drug testing technology as it applies to licit drugs.
- Compulsory blood drug testing for all drivers in serious casualty crashes.
- Strengthening and improving the process of random drug testing of drivers/riders.
- Improving awareness of random roadside drug testing programs.

REFERENCES

1. Mallick, J., Johnston, J., Goren, N., & Kennedy, V. (2007). *Drugs and Driving in Australia: A Survey of Community Attitudes, Experiences and Understanding*. Melbourne: Australian Drug Foundation.
2. Smyth, T., Sheehan, M., Siskind, V. (2013). Hospital outpatients' responses to taking medications with driving warnings. *Traffic Injury Prevention*, 14(1), 18-25. <http://eprints.qut.edu.au/67134/>
3. Smyth, T., Sheehan, M., Siskind, V., Mercier-Guyon, C., & Mallaret, M. (2013). Consumer perceptions of medication warnings about driving: a comparison of French and Australian labels. *Traffic Injury Prevention*, 14(6), 557-564. <http://eprints.qut.edu.au/67132/>
4. International Council on Alcohol, Drugs and Traffic Safety [ICADTS]. (2001). The ICADTS Working Group on Prescribing and dispensing guidelines for medicinal drugs affecting driving performance (March 2001). *Prescribing and dispensing guidelines for medicinal drugs affecting driving performance*. Retrieved June 1, 2007, from www.icadts.org/medicinal.html
5. CARRS-Q. (2016). *Drug Driving Fact Sheet*. (http://www.carrsq.qut.edu.au/publications/corporate/drug_driving_fs.pdf). Accessed 8 May 2016.
6. Drummer, O.H., Gerostamoulos, J., Batziris, H., Chu, M., Caplehorn, J., Robertson, M.D., et al. (2004). The involvement of drugs in drivers of motor vehicles killed in Australian road traffic crashes. *Accident Analysis and Prevention*, 36, 239-248.
7. Engeland, A., Skurtveit, S., & Møreland, J. (2007). Risk of road traffic accidents associated with the prescription of drugs: A registry-based cohort study. *Annals of Epidemiology*, 17(8), 597-602.
8. Verster, J.C., Veldhuijzen, D.S., & Volkerts, E.R. (2004). Residual effects of sleep medication on driving ability. *Sleep Medicine Reviews*, 8, 309-325.
9. Queensland Health. (2011). *Drugs and Poisons Regulation 1996 (State)*. Reprinted 28 January 2011 (Reprint no.10D). (2011). Retrieved from <http://www.legislation.qld.gov.au/LEGISLTN/CURRENT/H/HealDrAPoR96.pdf>
10. Pharmaceutical Society of Australia (PSA). (Ed.). (2009). *Australian pharmaceutical formulary and handbook* (21st ed.). ACT: Deakin West.
11. Ley, P. (1995). *Effectiveness of label statements for drugs and poisons*. Australian Health Minister's Advisory Council. Canberra: Australian Government Publishing Service.
12. Australian Transport Council (ATC). (2011). *National Road Safety Strategy 2011 - 2020*. Retrieved August 5, 2011, from https://infrastructure.gov.au/roads/safety/national_road_safety_strategy/

STATE OF THE ROAD is CARRS-Q's series of Fact Sheets on a range of road safety and injury prevention issues. They are provided as a community service and feature information drawn from CARRS-Q's research and external sources. See the reference list for content authors.

FOR MORE INFORMATION

Marketing & Events Officer, CARRS-Q
Queensland University of Technology
130 Victoria Park Road
Kelvin Grove QLD 4059 Australia

Phone +61 (0)7 3138 4568
Fax +61 (0)7 3138 7532
Email marketing.carrsq@qut.edu.au
Twitter @CARRS_Q
Facebook www.facebook.com/carrsq130



CARRS-Q is a joint venture initiative of the Motor Accident Insurance Commission and Queensland University of Technology

www.carrsq.qut.edu.au