# **Prescription Drugs & Driving**

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### Introduction

Driving safely is a complex skill which requires the driver to divide their attention simultaneously across several competing cognitive demands, relying on visual accuracy, rapid decision making, planning, tracking, vigilance, reaction time, coordination and gross motor activity<sup>9</sup>. While it is commonly known that drug driving is a serious road safety issue, many prescription drugs can impair these skills and adversely affect your driving ability. Prescription drugs have major impacts on your concentration, mood, coordination and reaction time<sup>2</sup>, creating impairments which increase your crash risk and put you and others on the road at risk<sup>8</sup>. In fact, in Victoria between the years of 2007-2013, prescription drugs were involved in approximately 21% of fatal road collisions<sup>9</sup>.

Despite this, research has found that there is poor community understanding of the impact of medications on driving ability and how much time should pass after the use of impairing medication before driving. Additionally, it has been found that 1 in 4 Australian drivers ignore medication warning labels and continue to drive after taking prescription medication<sup>10</sup>.

In Australia, and globally, the number of prescriptions for potentially impairing medications is steadily increasing, indicating it is critical to increase public awareness about the impairing effects of prescription medication<sup>4</sup>.

### How exactly do prescription drugs impair driving ability?

Prescription medications can impair driving by:



Causing drowsiness<sup>1</sup>



Slowing reaction time<sup>1</sup>



Affecting mental concentration<sup>1</sup>



Causing shaking or unsteadiness<sup>1</sup>



Affecting coordination<sup>1</sup>



Blurring vision<sup>8</sup>



Causing confusion<sup>8</sup>



Creating mood changes or anxiety<sup>8</sup>

As a result, it can be unsafe to drive, cycle or use machinery after taking prescription medication<sup>1</sup>. Additionally, this impairment does not only occur during the time of medication use, but also afterwards as a result of the 'hangover effect'<sup>9</sup>.

## Which medications could affect my driving ability?

There are over 400 medicines that may affect your driving ability<sup>8</sup>, and as such it's impossible to cover all of the prescription drugs which can impair driving. An example of some of the medication that can affect your driving ability includes prescription medication commonly used for anxiety, sleep problems, epilepsy, depression, pain relief, psychotic conditions, allergies, cough, cold and flu symptoms and allergies<sup>8</sup>. Numerous factors can impact how these drivers impair driving ability such as dose, dosage frequency, acute and residual effects, chronic administration, route of administration, drug concentration, metabolic factors, drug tolerance or hypersensitivity, and poly drug use<sup>5</sup>.

Additionally, it's not only prescription drugs that can affect your ability to drive safely – even over the counter medicines and herbal remedies can impair your driving ability<sup>11</sup>.

The Transport Accident Commission provides the following list which gives generic example and brand names of some of the medication which can impair driving ability<sup>8</sup>:

Type of medicine	Commonly used for	Generic name	Example brand name
Benzodiazepines	Anxiety, sleep problems	Alprazolam	Xanax
		Oxazepam	Serepax
	Anxiety, sleep problems, epilepsy	Diazepam	Valium
		Clonazepam	Rivotril
Other sleep medicines	Sleep problems	Nitrazepam	Mogadon
		Zolpidem	Stilnox
		Temazepam	Temaze
Tricyclic antidepressants	Depression, bladder problems, migraine and/or nerve pain	Amitriptyline	Endep
		Doxepin	Deptran
Monoamine oxidase (MAO) Inhibitors	Depression, anxiety	Moclobemide	Aurorix
Selective Serotonin Reuptake Inhibitors (SSRIs)	Depression, anxiety	Escitalopram	Lerxapro
		Fluoxetine	Prozac
		Sertraline	Zoloft
Other antidepressants	Depression	Mirtazepine	Avanza
	Psychotic conditions (e.g. schizophrenia and/or bipolar disorder	Haloperidol	Serenace
Antipsychotics		Olanzapine	Zyprexa
		Quetiapine	Seroquel
Sedating antihistamines	Allergies, cough, cold and flu symptoms	Chlorpheniramine	Codral original Cold and Flu, Cough Day and Night capsules
		Brompheniramine	Demazine Cough and Cold Relief Elixir
	Allergies, itchiness, motion sickness, sedation	Promethazine	Phenergan
	Allergies, cough, cold and flu symptoms, sleep problems	Diphenhydramine	Benadryl for the Family original syrup, Snuzaid
		Doxylamine	Dozile
Less sedating antihistamines	Hay fever, skin rash	Cetirizine	Zyrtec
		Fexofenadine	Telfast
		Loratadine	Claratyne
Anticonvulsants	Epilepsy	Primidone	Mysoline
Opioids	Pain relief	Codeine	Nurofen Plus, Panadeine Forte
		Oxycodone	Oxycontin
		Morphine	Anamorph

## Prescription drug snapshots: Benzodiazepines and Opioids

Benzodiazepines and opioids are the two prescription drug classes most commonly detected in driver fatalities<sup>4</sup> and are amongst the top 30 most frequently prescribed medications in Australia<sup>14</sup>.

Benzodiazepines are frequently prescribed to treat anxiety and sleep disorders, and possess anxiolytic, sedative, muscle relaxant and anticonvulsant properties<sup>4</sup>. Driving impairments as a result of benzodiazepine ingestion has been demonstrated in both laboratory and driving stimulator settings, with the most dramatic impairment generally observed in steering ability, emergency decision-making, tracking and speed control<sup>4</sup>. It has been estimated that benzodiazepine use is associated with at 60-80% increase in the risk of traffic accidents<sup>7</sup>.

 Diazepam is a benzodiazepine which has been estimated to account for 1.5% of all prescriptions issued in Australia<sup>14</sup>. A single therapeutic dose of diazepam has been associated with significant psychomotor skill impairment, with some effects lasting the morning-after a night dosage<sup>5</sup>. **Opioids** are a class of drugs used to relieve mild to severe pain<sup>4</sup>. It is suggested that opioids can cause drowsiness and impaired reaction time in some individuals<sup>15</sup>, with a recent metanalysis demonstrating a significant association between prescription opioid use and increased risk of vehicle crash involvement<sup>16</sup>.

It has been recommended that patients should avoid driving for up to four weeks while stabilising on benzodiazepine or opioid dosing regimen, which includes after their medication dose has been altered<sup>6</sup>.

## Is it legal to drive while taking prescription medication?

It is illegal to drive under the influence of drugs in Australia, regardless of whether it is prescription or over-the-counter<sup>18</sup>.



It is your responsibility as a driver to always read the labels of any medication you're taking and to talk to your doctor or pharmacist about whether or not your driving will be affected<sup>19</sup>.



Do not drive while taking medicines with a warning label that tells you not to drive<sup>10</sup>.



Do not drive if any medication affects your ability to control a vehicle<sup>20</sup>.

Penalties for drug-driving vary across Australia, however they can include fines, demerit points, the loss of your license, community programs or jail time<sup>21</sup>. For more information, check your state or territory's road traffic authority.

#### Polydrug use

When prescription medications such as benzodiazepines and opioids are detected in driver fatalities, they are more often than not found in combination with at least one other drug<sup>12,13</sup>. The combination of any sedating drugs (such as alcohol, opioids, benzodiazepines or sedating antidepressants) can exacerbate driving impairment and increase the risk of road accidents<sup>6</sup>.



Even a small amount of alcohol, underneath the legal driving limit, can increase the impairing effects of prescription drugs<sup>8</sup>. For example, the combination of benzodiazepines and alcohol has been found to be associated with a 7.7-fold accident risk increase<sup>17</sup>.

# How can you stay safe on the road while taking prescription medication?

Your ability to safely drive does not only affect you, but also others on the road<sup>1</sup>. Understanding how your medication affects your ability to drive is an important safety measure to protect yourself and the community as a whole.



Ask your doctor or pharmacist about the medication you have been prescribed and how it will affect your driving abilities<sup>1</sup>.

- Inform your doctor if you are required to drive or operate machinery as part of your occupation<sup>1</sup>
- Find out what symptoms you should look for and how you can detect impairment<sup>1</sup>
- Inform your health care provider of all other medication or herbal products you are taking<sup>3</sup>



Stay vigilant – continue to monitor how you react to your prescriptions.

- Keep track of the way the medication affects you and when the onset of these effects occur<sup>3</sup>
- If you find your medication affecting your reflexes, concentration, alertness or vision stop driving and contact your health care provider<sup>2</sup>
- Remember: Always stop driving, not your medication



Read all the labels on your medication and follow the use instructions<sup>1</sup>.

 Medications which could potentially impair driving must display a warning label in Australia. These labels can help you understand the potentially impairing effects of your medication.



It's best not to drive when you are using a new medication to allow yourself time to understand and experience the way it affects you<sup>2</sup>.

 Think about alternative such as public transport, a lift from a friend, or booking an uber or taxi



Take your medications at prescribed levels and dosages<sup>3</sup>.

- Never take someone else's prescription medication<sup>2</sup>
- Be aware of the dangers of mixing medications with other drugs and alcohol<sup>1</sup>

Call the Alcohol and Drug Foundation (ADF) for more information and support on 1300 85 85 84, or visit their website on https://adf.org.au/

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