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Disclaimer:

This information is intended as a guide only. It should not replace individual medical advice. If you have any concerns about your health, or further questions, you should contact your health professional.

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Diabetes and driving

It's a privilege to drive a motor vehicle, but with this comes a responsibility to keep you and others on the road safe.

Driving is a complex skill, both physically and mentally, and if you have diabetes, you may need to take extra precautions to ensure road safety. If you take insulin or some types of diabetes tablets, the main risk to your safety is hypoglycaemia, (a 'hypo') where blood glucose levels drop too low (usually below 4mmol/L, but symptoms can occur in some at blood glucose levels a little above this).

Fortunately, hypos can usually be prevented by following the guidelines in this booklet.

Don't drive under 5mmol/L.



Planning to avoid low blood glucose while driving*

- » Before you get in the car, check your blood glucose level. It needs to be above 5mmol/L and stable before you drive.
- » Carry a blood glucose meter with you when you drive
- » Carry some fast acting and longer acting carbohydrate foods (or drinks) with you as well as keeping extra supplies in your vehicle.

It is a good idea to wear or carry identification showing that you have diabetes.

If you are driving for two hours or more, re-check your blood glucose level at least every two hours to make sure it stays above 5mmol/L.



^{*}People using continuous glucose monitoring to manage their diabetes should talk to their doctor about how to best reduce of potential hypos whilst driving.

Treating hypoglycaemia while driving

If you feel a hypo developing while driving, follow the below steps:

- 1 Safely steer the vehicle to the side of the road
- 2 Turn off the engine and remove the ignition key (if applicable)
- 3 Check your blood glucose level
- 4 IMMEDIATELY eat or drink at least 15 grams of fast acting carbohydrate (examples in table below)
- 5 Wait 10-15 minutes and check your blood glucose level again
- 6 Repeat steps 4-5 if required until your blood glucose level is above 5mmol/L
- 7 Once your blood glucose is above 5mmol/L, eat a longer acting form of carbohydrate (examples in table below)
- 8 Wait 30 minutes and check your blood glucose level again

DO NOT resume driving until your hypo symptoms have completely gone and your blood glucose level has remained above 5mmol/L for at least 30 minutes. Even if you are feeling better, wait for 30 minutes, as studies have shown that your brain function may take this long to fully recover.

Fast acting carbohydrates	Longer acting carbohydrates
6-10 Jelly beans (approximately 15-20g glucose)	A piece of fruit
Fruit juice (150-200mls)	Wholegrain bread
Soft drink (150-200mls) – NOT diet or low-calorie drink	Muesli bar
2-4 Glucose tablets (15-20g glucose)	Dried fruit
Lucozade (100-200mls)	
Glucose gel	

Severe hypoglycaemia

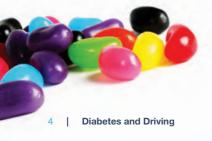
If you've experienced a severe hypo, it is essential that you don't drive again until you have medical clearance to do so. A severe hypo is one where you have needed help from others to treat it, or where you have lost consciousness or had a seizure. Your diabetes specialist will need to determine your fitness to safely resume driving. The general recommendation is to wait for a minimum of six weeks, before getting back behind the wheel.

Reduced awareness of hypoglycaemia

Some people with diabetes have difficulty recognising or feeling the early symptoms of a hypo. This is called 'reduced awareness of hypoglycaemia' or hypo unawareness. This is a serious condition that increases the risk of having a severe hypo. If a mild hypo is not recognised and properly treated, blood glucose levels may drop to the point where brain function is affected, without any warning.

A hypo can develop quickly, but those with normal hypo awareness will get 'early warning symptoms' such as trembling, sweating, light headedness, hunger, headache, palpitations and tingling around the lips, which alerts them to the need to eat. If not treated at this stage, blood glucose levels will fall further and may lead to poor concentration, behavioural changes, irritability, changes in vision and a reduced level of consciousness, due to a lack of glucose supply to the brain.

Those with reduced awareness of hypos lose the early warning symptoms of a hypo. They may have few or no symptoms, even when the blood glucose is very low. This means they may become confused and even lose consciousness without ever knowing their blood glucose levels were low and dropping.



Reduced awareness of hypos is more likely to occur in people who have had insulin-treated diabetes for many years. If you've had insulin-treated diabetes for more than 10 years, or if you've had a severe hypo or a car accident, it is recommended that your diabetes specialist checks your hypo awareness using a questionnaire called the Clarke questionnaire, which asks questions about your frequency and symptoms of hypos.

If you have reduced awareness of hypos, it is especially important to check blood glucose levels before and during driving. It is critical to be above 5mmol/L to ensure safety when driving.

People with this condition in general are not eligible to drive, but a conditional licence (not commercial), may be granted following advice from an endocrinologist or diabetes specialist. In many instances, with appropriate specialist management, awareness of hypo can return. See your doctor as you may be able to get a conditional licence. More details can be found in the Austroads Assessing Fitness to Drive guidelines (austroads. com.au/drivers-vehicles/assessing-fitness-to-drive).

Hypoglycaemia and medication

It is important to talk to your doctor to make sure you understand the interaction between insulin and other blood glucose lowering medications, food and activity. People with type 2 diabetes who are taking medications to manage their diabetes, should talk to their doctor about the implications this medication may have on their driving and how they can manage the risk of potential hypos.



Hyperglycaemia

Hyperglycaemia, or high blood glucose levels, can result in tiredness, blurred vision and altered decision making, which all impact on driving. If your blood glucose level is high and you feel unwell, it's important not to drive.

Other factors that may affect driving

While hypos are the main risk to driving for people with diabetes, there are also some long-term diabetes-related complications which may affect your ability to drive safely.

It's therefore important to have regular complications screening as part of managing your diabetes. This includes:

- Having your eyes checked every 12 months or as recommended by your doctor. Your doctor may clear you for driving for 18-24 months
- Having your feet checked every 12 months or as recommended by your doctor. Seek advice from your doctor or podiatrist straight away if your feet or legs are numb or painful, or you have trouble feeling the pedals when you drive
- Seeing your doctor regularly to monitor your blood pressure, cholesterol and risk of heart disease, as these are often increased in people with diabetes
- Talking to your doctor if you have any signs of sleep apnoea which is more common in people with type 2 diabetes (particularly if you are overweight) and which can cause excessive daytime drowsiness and loss of concentration while driving

It is also important to talk to your doctor to find out how long you need to wait before you are fit to resume driving after any surgical or medical procedure.



Diabetes and your driver's licence

There may be conditions placed on your driver's licence because of your diabetes.

It is your legal responsibility to advise the Driver Licensing Authority (DLA) in your State or Territory if you take blood glucose lowering medications, including insulin. If your diabetes is treated with diet and exercise only, notification requirements vary across different states and territories and you should check with the DLA requirements in your state or territory (contact details on page 9).

If you are a commercial driver, you will usually need to see an endocrinologist or specialist in diabetes for assessment and a report on your fitness to drive.

You will need to plan for your doctor's medical report for your fitness to drive. Check well ahead of time which records you should take to the appointment. These will usually include your blood glucose meter as well as a record of your blood glucose monitoring results.

In the event of an accident, if you have a meter that records the date and time of your last blood glucose test, it can be used as evidence that you have been taking responsibility for safe driving. Most meters record date and time, but if yours does not, record this separately.

Driver responsibilities check list

I check my blood glucose level before driving and ensure the reading is above 5mmol/L
I carry fast and longer acting carbohydrate when I drive
I carry my blood glucose meter when I drive
I check my blood glucose level at least every two hours on long trips and check that the reading is above 5mmol/L
If a hypo occurs, I pull over safely and treat it immediately
I see my doctor and other health care team members on a regular basis
I have talked to my doctor about the interactions between insulin, and other diabetes medications, food and activity
I do not have daytime drowsiness or untreated sleep apnoea
I have had my eyes checked in the last 12 months
I have had my feet checked in the last 12 months
I have advised my driver licensing authority that I have diabetes

Contact details for driver licensing authorities

State	Contact	Website	Phone
ACT	Access Canberra	accesscanberra.act.gov. au/#/transport	13 22 81
NSW	Roads and Maritime Services	rms.nsw.gov.au	13 22 13
NT	Northern Territory Department of Transport	nt.gov.au/transport	1300 654 628
QLD	Department of Transport and Main Roads	tmr.qld.gov.au	132 380
SA	Department of Planning, Transport and Infrastructure	sa.gov.au/topics/driving- and-transport	13 10 84
TAS	Department of State Growth	transport.tas.gov.au	1300 135 513
VIC	Vic Roads	vicroads.vic.gov.au	13 11 71
WA	Department of Transport	transport.wa.gov.au	13 11 56

Other useful contacts and resources

Your local doctor	
Your diabetes team	
Assessing fitness to drive (in press)	austroads.com.au/drivers- vehicles/assessing-fitness-to- drive
NDSS	Helpline 1800 637 700 Website ndss.com.au
Australian Diabetes Society	diabetessociety.com.au
Australia Diabetes Educators Association	adea.com.au



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