

# Drug use and type 1 diabetes

**An Australian Government Initiative** 







### A drug is any chemical substance that you put in or on your body that changes how your body or brain works.

Drugs are often taken for medical or recreational reasons. This guide focuses on the use of recreational drugs by people with type 1 diabetes. People over 18 can legally purchase some recreational drugs, like alcohol and tobacco, but other drugs, such as marijuana, ecstasy, cocaine, LSD and amphetamines are illegal.

The following information on illegal drugs should be used as a guide. drugs affect people differently and some of this information may not apply to all people with type 1 diabetes.

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Taking recreational drugs may seem like a good way to take your mind off things and spend time with friends. But, sooner or later, drug use has negative effects on your mind as well as your body.

Taking illegal drugs can lead to exhaustion, addiction, stress, overdosing, mood swings, depression, violence, paranoia, reduced sleep, and even brain damage. Some of these effects can lead to dangerous or even fatal situations.

Drugs can also have other effects on your life besides physical effects. They can mess up school, work, family and relationships. You can experience painful withdrawal symptoms if you stop taking them. They're also illegal and will get you into trouble with the law.

If you have diabetes and take drugs you face extra health risks. It's important to know about these risks so you can manage them and avoid dangerous situations.

## The effect of drugs on people with diabetes

If you take drugs and have type 1 diabetes you're more likely to forget to take your insulin dose or forget to eat. This puts you at a greater risk of high blood glucose levels (BGLs) and diabetic ketoacidosis (DKA). DKA is a serious condition that happens when the level of ketones in the blood is too high. The build-up of ketones makes the blood too acidic. DKA can be life-threatening. If you have any of the following symptoms you need to see a doctor immediately for emergency treatment:

- » tummy pain
- a deep, rapid breath or shortness of breath
- » vomiting or diarrhoea
- » signs of dehydration such as extreme thirst, dry mouth, weakness or confusion and not peeing
- a sweet 'fruity' smell on your breath.

For more information on DKA go to ndss.com.au to read or download our Living well with type 1 diabetes – what to do when you are sick fact sheet.





Is it OK to smoke if I have diabetes?

No. People with diabetes who smoke are more likely to die of heart disease than people with diabetes who don't smoke. People with diabetes who smoke are also more likely to develop:

- » damage to their eyes, nerves or kidneys
- » cancer
- » lung disease
- » higher BGLs, making it harder to manage their diabetes.

Never smoking is one of the best things a person with diabetes can do when it comes to maintaining good health. If you do smoke,, the next best thing is to stop smoking. Call Quitline on **13 78 48** or go to **quitnow.gov.au** to help you quit smoking today.

### Is it OK to drink if I have diabetes?

Yes, but there are additional health risks for people with diabetes who drink alcohol. Knowledge of these risks and how to prevent them will reduce your chances of problems when mixing diabetes and alcohol. Further information can be found in our booklet about type 1 diabetes and alcohol: ndss.com.au/about-diabetes/resources/find-a-resource/ alcohol-type-1-diabetes-booklet

# **Illicit drugs:** what are they?

Illicit drugs is a broad term to describe drugs. It can include both legal and illegal drugs. The main types of illicit drugs are depressants, stimulants, hallucinogens and empathogens.

### **Depressants**

Depressants slow down your body because they affect the messages being sent to and from your brain. This slows down your actions and reactions.

Alcohol, opiates and opioids (like heroin, morphine, codeine and methadone), cannabis or marijuana, benzodiazepines or BZD, and some glues, petrols and other solvents are all depressants.

#### **Stimulants**

Stimulants speed up your body and increase your heart rate, body temperature and blood pressure. Caffeine, nicotine, amphetamines (like speed, ice and crystal meth), cocaine, and slimming tablets are all stimulants. Ecstasy/MDMA also act like a stimulant on your nervous system. If you have diabetes and take a stimulant drug, you're at greater risk of having hypoglycaemia or a 'hypo'. This is due to burning more carbohydrates (carbs) than usual, similar to not having a snack before exercising. A hypo is when your BGLs drops below 4 mmol/L. Symptoms of a hypo include:

- shaking, sweating and dizziness
- numbness and tingling around your lips, tongue or cheeks
- headache, crying and grumpiness
- hunger. **>>**

You should treat a hypo immediately with a fast-acting carb such as 6 to 7 jellybeans or half a glass of fruit juice or soft drink.

For more information on treating hypos go to ndss.com.au and read or download our Managing hypoglycaemia fact sheet.

### **Empathogens**

Empathogens relax the body and release 'feel-good' chemicals called dopamine and serotonin. MDMA or ecstasy is classed as an empathogen. Other examples of empathogens include MDA, mephedrone and ethylone.

### **Hallucinogens**

Hallucinogens or psychedelics are drugs that alter your mind, your senses and your emotions. Hallucinogens can make you hallucinate and see things that aren't there or are distorted from reality which can cause you to panic, take risks or become paranoid. LSD, PCP, magic mushrooms, ecstasy or MDMA, mescaline, ketamine and high doses of cannabis or marijuana are all hallucinogens (also known as dissociatives).

### Mixing Drugs

If you take different types of drugs at the same time you're more likely to pass out, stop breathing, overdose, act dangerously or die. Mixing drugs - including alcohol can be dangerous because it puts a lot of stress on your body. It can cause serious or life-threatening damage to your body.



# What effect do legal and illegal drugs have on my diabetes?

If you take legal or illegal drugs, it may affect your BGLs. You should always remember the following:

- » Know what you are taking. It's best to research the effects of the drug before deciding to try it. Talk to your doctor. Don't take something if you're unsure what it is.
- » Never take drugs alone. If you take drugs always have someone sober with you who you trust, and knows what drug you are taking, that you have diabetes and knows how to help you if you have a hypo.
- » Be in a safe, comfortable environment. If you take drugs make sure your friends are with you and you are in a place you know.
- » Always wear your medical alert ID for easy identification.
- Never stop taking your insulin. This could lead to higher BGLs, serious health risks and DKA.

Currently there isn't much information on the effect of illegal drugs on type 1 diabetes. But the following information about the general effects of illegal drugs from the available sources to date are discussed below. It's important to remember there is no safe level

of illegal drug use.





Type: Cannabinoid

Marijuana is the most commonly used recreational drug in young people with type 1 diabetes. You might think it's less harmful than cocaine and heroin, but marijuana can cause significant harm to your brain and your body. Some of the effects are:

- » increased appetite or 'the munchies' which can lead to overeating, causing high BGLs (or hyperglycaemia)
- » problems with short-term memory which may result in forgetting to take insulin doses, leading to hyperglycaemia and DKA
- problems with low BGLs which can lead to a hypo
- problems with concentration, hand and eye coordination and problem solving, which can make you forget to take your insulin
- » loss of motivation, depression and anxiety if you take it on a regular basis
- » serious damage to your health when mixed with alcohol.

### **Ecstasy/MDMA**

Type: Stimulant

The formulation of any street drugs can never be guaranteed. The content of these drugs is very much an unknown quantity. You might think ecstasy is a safer drug than taking ice or meth, but ecstasy has a lot of the same poisonous ingredients as other amphetamines. Illegal drugs like ecstasy are not regulated or safety-checked. This means there is no certainty of what the drug contains or what you are taking. Some harmful side-effects of ecstasy/MDMA use include:

- problems with concentration, hand and eye coordination, and slowed reflexes
- » depression and anxiety if you take it on a regular basis which can impact on diabetes management
- your heart beating too fast, too slowly or irregularly which could be fatal
- » reduced appetite which may lead to low BGLs and hypos
- » breakdown of the muscles in your body releasing muscle enzymes into your bloodstream, which can cause kidney damage
- kidney failure
- ongoing problems such as paranoia, sleep and memory loss
- a lack of need for rest or food, increasing the risk of hypo dangerous levels of dehydration from prolonged exercise or strenuous activity
- » a loss of body temperature regulation, leading to a rise or fall in body temperature
- » nausea, dizziness, and vomiting which can happen shortly after taking ecstasy
- » very low levels of sodium (salt) in your blood (known as hyponatraemia) due to drinking too much water. Sodium is essential for maintaining normal body functions. If sodium levels get too low it can be life-threatening.



#### Heroin

Type: Opioids

Heroin is a highly addictive and dangerous drug. Little is known about the impact of heroin on type 1 diabetes. Studies have shown that opiates such as heroin do appear to interact with the pancreas. Effects of heroin may include:

- » reduced appetite and vomiting which can affect BGLs
- » changes in perception, including confusion, drowsiness and brief euphoria, which can make you forget to take insulin
- » slower breathing which could lead to breathing difficulties and possible death
- » intense psychological addiction and cravings
- » risk of diseases such as hepatitis, HIV or other infections from sharing needles
- » scarring or collapsing of veins which causes bruises and poor circulations
- » painful withdrawal symptoms if you stop taking heroin, including intense cravings, sweating, bone and muscle pain, fever, stomach cramps, nausea, diarrhoea and vomiting.

### Ketamine (K, Special K)

Type: Hallucinogen (or dissociative)

Ketamine is a medical drug that is used as a general anaesthetic on humans and animals. It works by essentially "cutting off" the brain from the body. As a hallucinogen, it also distorts your vision, hearing, emotions and your thinking. The effects of ketamine are dependent on things like your height, weight and general health, and may include:

- a feeling of detachment from your body and not being able to move
- confusion and difficulty concentrating, sometimes loss of memory, causing you to change your eating habits or forget to take your insulin
- feelings of anxiety, paranoia and panic and dangerous behaviour
- slurred speech, blurred vision and reduced hand and eye coordination
- increased heart rate, breathing rate and blood pressure
- drowsiness, nausea, vomiting and sweating
- » DKA that requires emergency treatment.

#### Cocaine

Type: Stimulant

Cocaine is a highly addictive drug. Cocaine constricts blood vessels and increases blood pressure, adding to the increased risk of heart attack and stroke that people with diabetes already face. Other effects of the drug may include:

- » reduced appetite which can increase the risk of having low BGLs or a hypo
- » rapid heartbeat and breathing
- anxiety and paranoia
- altered perception, which can affect your the ability to take insulin and generally manage diabetes.

A recent review found people with type 1 diabetes who used cocaine had a higher risk of DKA and hospital admission.



### Methamphetamine/Speed/Ice

Type: Stimulant

Methamphetamine is a stimulant, which means it speeds up the communication between the brain and the rest of the body. The effects of methamphetamine can last a long time in the body (up to 12 hours). The drug can put severe stress on your heart and cardiovascular system causing irreversible damage. Other effects of using methamphetamine include:

- » sleeplessness
- » loss of appetite, nausea, sweating, vomiting, diarrhoea which can affect BGLs
- » weight loss
- increased body temperature and blood pressure
- increased heart and breathing rate
- irritability, blurred vision and severe headaches
- paranoia, anxiety, aggression, and sometimes hallucinations which can affect diabetes management
- » skin infections, the result of picking at imaginary bugs
- regular use can lead to depression, brain damage and loss of memory.

## Peer pressure

Wanting to fit in and make friends can make you act in certain ways. Sometimes your friends might pressure you to do something you don't really want to do. This can make you feel uncomfortable or left out unless you join in.

If you're offered drugs that you don't want to take, stand your ground. You have the right to say no. Resisting pressure can be hard at times but you should only do something if you want to, know how to do it safely, and feel comfortable doing so.

People don't have to agree on everything, and if you can explain to people in a calm way why something isn't for you, more often than not, you'll gain their respect.



# How to stay safe

There is no safe way of taking illicit drugs. They're illegal and will get you into trouble with the law. It's not recommended that you take them, but if you choose to, here are some tips that may reduce the risks of harm.

- Look up the effects of the drug and discuss it with your diabetes health professional.
- Wear a medical alert identification bracelet.
- Don't mix different types of drugs.
- Don't mix drugs and alcohol.
- » Carry extra fast-acting carbs.
- » Snack regularly.
- Never take drugs alone. If you take drugs make sure your friends are with you and you're in a place that you feel safe. Make sure the people you're with know you have diabetes, can recognise a hypo and know how to treat it.
- » Never stop taking your insulin. If you do, this will lead to hyperglycaemia and DKA which can be life-threatening.
- » Set an alarm to remind you to check your BGLs.



### **Further resources**

Drug Help:

health.gov.au/our-work/drug-help?language=en

NDSS youth resource:

ndss.com.au/living-with-diabetes/about-you/young-people

Diabetes NSW&ACT As 1 diabetes app:

as1diabetes.com.au/listing/new-app-lifeoned

Alcohol and Drug Foundation:

adf.org.au

Youth Beyond Blue Info Line:

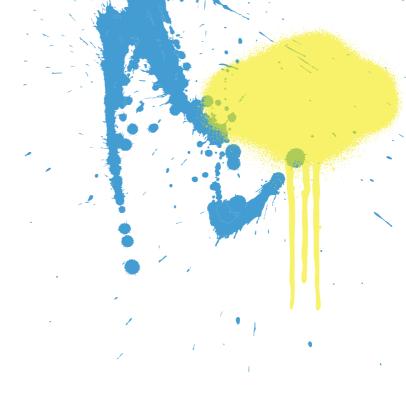
1300 224 636

Youth beyond Blue Website:

youthbeyondblue.com

Headspace National Youth Mental Health Foundation:

headspace.org.au



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