



DRUG USE

AND
TYPE 1
DIABETES

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Drug use and type 1 diabetes

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.

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.

Taking recreational drugs may seem like fun and a good way to take your mind off things or spend time with friends. But, sooner or later, drug use has negative effects on your mind as well as your body. Taking dangerous and 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 are also illegal and will get you into trouble with the law.

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

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 smoke¹. People with diabetes who smoke are also more likely to develop:

- damage to their eyes, nerves or kidneys
- cancer
- lung disease and
- higher blood glucose levels, making it harder to control their diabetes.

Never smoking is one of the best things a person with diabetes can do when it comes to maintaining good health. For those who have started to smoke, the next best thing is to stop smoking. (You can contact Quitline on 13 78 48 or <http://www.quitnow.gov.au/>)

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 fact sheet about alcohol: {insert the link to diabetes and alcohol sheet here}

<http://www.diabetesaustralia.com.au/en/NDSS-Content/Diabetes-Information-Sheets/Alcohol-and-Diabetes/>

¹ <http://www.quit.org.au/about/frequently-asked-questions/how-does-smoking-affect-my-body/smoking-and-diabetes.html>

The effect of drugs on people with diabetes

If you take drugs and have type 1 diabetes you are more likely to forget to take your insulin dose or forget to eat, and you are at a greater risk of high blood glucose levels (BGLs), ketosis and acidosis. Ketosis occurs when the fat in your body does not break down properly, producing ketones. This can lead to a build-up of acid in your blood that can cause acidosis. If you have any of the following symptoms, such as abdominal pain, a sweet acetone smell on the breath, vomiting or dehydration, you need to see a doctor immediately for emergency treatment. For more information on ketoacidosis see our ketoacidosis fact sheet:

(http://www.ndss.com.au/Documents/NDSS/Resources/Diabetes_Information_Sheets/SICK-DAYS-TYPE-1-2009.pdf)

Illicit drugs: what are they?

There are 3 main types of illicit drugs – depressants, stimulants and hallucinogens.

Depressants

Depressants slow down your body because they affect the messages being sent to and from your brain, which slows down your actions. 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, ecstasy or MDMA and slimming tablets are all stimulants. If you have diabetes and take a stimulant drug, you are at greater risk of having hypoglycaemia or a 'hypo', due to burning more carbohydrates than usual, similar to not having a snack before exercising. A hypo is when the amount of blood glucose in your body drops to a very low level and may cause you to shake, feel dizzy or numb around your lips and fingers or even make you pass out. You should treat a hypo immediately with an easily absorbed carbohydrate such as 6-7 jellybeans or half a glass of fruit juice or soft drink. For more information on treating Hypos see our Hypoglycaemia fact sheet:

(http://www.ndss.com.au/Documents/NDSS/Resources/Diabetes_Information_Sheets/HYPOGLYCAEMIA-2009.pdf)

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.

Mixing Drugs

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

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

If you take legal or illegal drugs, it may affect your blood glucose levels (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. You can search the internet or 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, who knows what drug you are taking, and who knows you have diabetes.
- **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 and serious health risks.

Currently there isn't much information on the effect illegal drugs have on type 1 diabetes. However, the following information and knowledge about the general effects of illegal substances has been combined from various sources.

Marijuana/Cannabis

Type: Depressant

Marijuana is the most commonly used recreational drug in young people with type 1 diabetes². You might think it is less harmful than cocaine and heroin, however marijuana can cause significant harm to your brain and your body, including:

- increased appetite or 'the munchies' which can lead to overeating, high blood sugar levels and hyperglycaemia
- problems with short term memory during intoxication
- problems with low blood sugar levels which can lead to hypoglycaemia or 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, and has some harmful side effects, including:

- causing your heart to beat too fast, too slowly or irregularly which could be fatal
- breakdown of the muscles in your body releasing muscle enzymes into your bloodstream, which can cause kidney damage
- kidney failure
- very low levels of sodium (salt) in your blood, which is essential for maintaining your normal body functions and which could be fatal
- ongoing problems such as paranoia and anxiety, depression, no sleep and loss of memory.

² Lee P, et al. Managing young people with Type 1 diabetes in a 'rave' new world: metabolic complications of substance in Type 1 diabetes. Diabetic Medicine 2009; 26: p.328-333.

Short term effects may include:

- suppressed appetite
- you may not feel the need for rest or food - a situation that can lead to hypoglycaemia
- 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 shortly after taking ecstasy.

Heroin

Type: Depressant

Heroin is a highly addictive and dangerous drug. Little is known of 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:

- changed eating habits, which can affect blood glucose levels
- changed 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
- damage to your lungs, liver, kidneys or brain
- 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

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 and hearing, your emotions and your thinking. The effects of ketamine are dependent on things like your height, weight and general health, and may include:

- 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. Forgetting to take insulin can lead to diabetic ketoacidosis as a result of too much acid build up in your blood
- 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
- causing acid to build up in your blood from lack of insulin, leading to diabetic ketoacidosis 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. Effects of the drug may include:

- increased blood flow and changed eating habits
- high blood glucose as a result of more sugar being produced and released into the bloodstream faster than usual which can lead to a hypo
- risk of forgetting to take insulin can lead to diabetic ketoacidosis as a result of too much acid build up in your body
- altered perception, which can affect the ability to manage diabetes.

Methamphetamine/Speed/Ice

Type: Stimulant

Methamphetamine can be poisonous to your heart and blood due to releasing hormones into your blood and causing high levels of stress. This can result in high glucose levels by holding back insulin secretion and increasing glucose production. Other consequences of using methamphetamine include:

- sleeplessness
- loss of appetite and weight loss
- nausea, sweating, vomiting, diarrhoea
- elevated body temperature and blood pressure
- increased heart and breathing rate
- irritability, blurred vision and severe headaches
- paranoia, anxiety, aggression, and sometimes hallucinations
- 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, making you feel uncomfortable or left out unless you join in.

If you are offered drugs 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 can do it. You should only do something if you want to, know how to do it safely, and feel comfortable doing so.

If you're finding it hard to work up the guts to say no to something, you should know that sticking up for what you believe in feels really good. People don't have to agree on everything, and if you can explain to people in a calm way why something is not for you, more often than not, you'll gain their respect.

Further Resources

Diabetes Australia: Illicit Drug Use and Diabetes

<http://www.diabetesaustralia.com.au/en/NDSS-Content/Diabetes-Information-Sheets/Illicit-Drug-Use-and-Diabetes/>

Medicine Digest: the High Life

<http://www.diabetes.org.uk/Documents/How%20we%20help%20other/Medicine%20Digest%20-%20Diabetes%20Update%20Winter%2009.pdf>

DrugInfo – Australian Drug Foundation

<http://www.druginfo.adf.org.au/>

Youth Beyond Blue

Info Line: 1300 224 636

<http://www.youthbeyondblue.com/>

Headspace: National Youth Mental Health Foundation

<http://www.headspace.org.au/>

Risk Behaviour Resource series



Drug Use



Alcohol



Travelling