

HALLUCINOGENS

WHAT YOU NEED TO KNOW



Australian Government
Department of Health

WHAT ARE HALLUCINOGENS?

Hallucinogens cause perceptual distortions such as hallucinations. Hallucinations are experiences where people hear or see things that aren't really there, or where perception is altered, for example colours or shapes may appear to be changing or different to usual. They can also be tactile (touch) or olfactory (smell).¹ In addition, users may experience unusual thoughts, feelings or beliefs.

Hallucinogens are also known as psychedelics and can be naturally occurring or manufactured. The most commonly known synthetic hallucinogen is LSD. Naturally occurring hallucinogens include magic mushrooms, DMT, mescaline and salvia. In recent years, new psychoactive drugs have arrived on the market that are designed to mimic the hallucinogenic effects of these drugs (For more information, see 'New Psychoactive Substances' factsheet at www.comorbidity.edu.au/cre-resources/public).

Other names for LSD include acid, tabs and trips. Magic mushrooms are also known as mushies and shrooms. Salvia is sometimes known as Sally, sage, magic mint and lady's sage. Being under the influence of hallucinogens is also known as 'tripping'.

WHAT IS...?

LSD (ACID)

LSD (lysergic acid diethylamide) is a powerful mood and perception altering drug. Only very small doses are required to produce changes in mood, perception, consciousness and thought.

LSD is usually prepared as a liquid and can be sold in a variety of forms, including tablets, capsules, small gelatine squares ('window panes') and microdots. It is most frequently sold on small pieces of blotting paper known as 'tabs'. Tabs are taken orally, often held under the tongue until the paper dissolves.²

MAGIC MUSHROOMS

Magic mushrooms are a nickname for fungi that have hallucinogenic effects. Usually these are due to the chemical psilocybin or psilocin.³ Mushrooms may be fresh or dried and are eaten raw, boiled in water to make a tea, or cooked with other foods to disguise the flavour.³ Psilocybin is converted by the body into psilocin, which belongs to the same chemical family as LSD so its effects are similar, although full hallucinations are rare.³

MESCALINE

Mescaline is another type of hallucinogen, originally extracted from the peyote cactus.⁴ It is also found in some other types of cactus and can be manufactured.^{5,6}

SALVIA

Salvia divinorum (often known simply as 'salvia') is a plant that is native to Mexico. It is legal in some countries but illegal in Australia. The active ingredient is salvinorin A.^{7,8} Salvia is usually sold as dried leaves or extracted salvinorin A in the form of crystals.⁹

DMT, 5-MEO-DMT AND RELATED TRYPTAMINES

DMT (dimethyltryptamine) is a powerful hallucinogenic drug found in some plants and is chemically very similar to psilocybin. In Australia, most DMT bought on the street is a synthetic equivalent.¹⁰ In its pure form it is a crystal, while on the street it is usually a powder.^{10, 11}

5-MeO-DMT (5-methoxy-dimethyltryptamine) is also a naturally occurring drug present in some plants.¹² It can also be found in the venom of the *Bufo alvarius* toad which is native to North America.¹³

There are a number of other related hallucinogenic chemicals, including AMT, DET, DPT, DBT, DiPT, and 5-MeO-DiPT.¹⁴

LSA, HAWAIIAN BABY WOODROSE

Hawaiian Baby Woodrose is a plant native to India.⁷ Its hallucinogenic effects are due to its seeds, which contain LSA (d-lysergic acid amide), a precursor to LSD or acid. LSA is also found in some other plants, e.g. some varieties of morning glory, and some types of fungus.¹⁵

DOB AND OTHER PHENETHYLAMINES

Some phenethylamines, for example DOB, can also have hallucinogenic effects (please see 'Emerging Psychoactive Drugs' factsheet for more information).

HOW MANY PEOPLE USE HALLUCINOGENS?

According to the 2016 National Drug Strategy Household Survey, one in every one hundred people (1%) in Australia (aged 14 or over) had used hallucinogens in the past 12 months.¹⁶

WHAT ARE THE EFFECTS?

The effects of hallucinogens are extremely variable and unpredictable, even if the person has used the same substance before. Factors that can influence how the drug affects them include the person using (e.g. mood, personality), the setting and the drug itself (including the amount taken, the potency and how it's used e.g. swallowed or smoked).

Broadly speaking, depending on the specific substances, the effects of hallucinogens may include:^{3, 7-9, 17-20}

- Dilated (enlarged) pupils
- Increased heart rate and blood pressure
- Increased body temperature and sweating and/or chills
- Euphoria or a 'high'
- Laughing fits
- Hallucinations (e.g. seeing or hearing things that aren't really there)
- Distress, anxiety, panic attacks, fear or terror (a 'bad trip')
- Poor coordination and problems moving (physical impairment or incapacitation)
- Drowsiness
- Sweating and palpitations
- Muscle aches
- Stomach cramps
- Nausea and vomiting
- Poor concentration
- Restlessness
- Trance-like states
- Vivid perceptual distortions (e.g. things looking/feeling weird or different)
- Feelings of relaxation or stimulation
- Distorted sense of time and place, for example:
 - Derealisation, where the user feels that the world around them is no longer real
 - Depersonalisation, where the user feels that they have been divorced from their 'self' and that their experiences and sensations no longer belong to them
- Loss of consciousness
- Paranoia (feeling extremely suspicious and frightened)
- Psychosis: a loss of contact with reality that may happen while under the influence and can last for several hours after the drug effects have worn off. This may be most likely among people who are vulnerable to psychosis (e.g. people with schizophrenia)

Effects of specific hallucinogens

Drug	How is it usually taken?	How long does it take to have an effect?	How long do the effects last for?
LSD ¹⁹	Swallowed	Approx. 30 minutes	Approx. 8-12 hours
Magic mushrooms ³	Swallowed	Approx. 30 minutes	Approx. 4-6 hours
Mescaline ^{4, 7, 21}	Swallowed, smoked or inhaled	Within 1-2 hours	Approx. 6-12 hours
Salvia ⁷⁻⁹	Smoked or chewed. If smoked, produces a more faster, more intense and short-lived effect	If chewed, within a few minutes If smoked, within a few seconds/minutes	Up to an hour if chewed Approx. 15-30 minutes if smoked
DMT, 5-MeO-DMT and related tryptamines	DMT and 5-MeO-DMT are usually smoked	Within a few seconds	DMT effects approximately 1 hour 5-MeO-DMT effects 1-2 hours. Other tryptamines vary

These effects are all very variable according to the amount used and concentration.^{19, 22}

WHAT ARE THE RISKS?

One of the major risks is that the effects of illegal drugs are unpredictable. Whether a person is a first-time, occasional or regular user, they are at risk of negative reactions and problems when using hallucinogens. Along with those described in the 'Effects' section, these can also include:^{4, 8, 9, 17, 18, 23}

- **Increased risk of accident or injury while under the influence**
- **Unpleasant after-effects, which may include tiredness, flashbacks, dizziness and amnesia**
- **Poisoning (see paragraph below)**

A particular risk with magic mushrooms and some other plant-based hallucinogens is that of mistaken identity; poisonous mushrooms can easily be misidentified as magic mushrooms. Consuming these poisonous mushrooms can have serious and even fatal consequences.³

People who are having a 'bad trip' — i.e. experiencing anxiety, panic attacks, fear or terror following use can sometimes become aggressive or violent towards themselves (self-harm) or other people.

There has not been a great deal of scientific research into the long-term effects of hallucinogen use, especially among those that have emerged more recently (e.g. salvia⁹ and LSA), though some hallucinogens have been associated with:⁹

- **Flashbacks (see next page)**
- **Possible addiction (see next page)**
- **Depression**
- **Anxiety and panic attacks**
- **Personality changes**
- **Memory problems**
- **Psychosis, particularly in people who are already prone to these problems**

This doesn't necessarily suggest that hallucinogens cause these problems. For people who are prone to these types of issues, the use of hallucinogens may bring on the symptoms, or make them worse. People who use hallucinogens often use other drugs too, which makes it difficult to know which problems are caused (or triggered) by which drugs. More research is needed before anyone knows for certain.

WHAT ARE FLASHBACKS?

The most commonly discussed long-term effect of using hallucinogens is the experience of 'flashbacks'. A flashback is a spontaneous recurrence of a specific experience that occurred while taking the drug. These flashbacks can be distressing.

Flashbacks may be one or more of the following:

- **Perceptual** – for example, experiencing greater colour intensity, face distortions, the sensation of insects crawling, etc.
- **Somatic** – altered bodily sensations such as pain
- **Emotional** – re-visiting lonely or depressed states of being

These flashbacks are usually brief, but can reoccur for days, weeks and sometimes even years after taking the drug.¹⁰ They could be triggered by the use of other substances (e.g. cannabis or stimulants such as methamphetamine),²⁴ and may be mistaken as symptoms of psychosis.

ARE HALLUCINOGENS ADDICTIVE?

Hallucinogens do not seem to be as addictive as some other drugs. However, some people do report that they have problems with their use and that they find it hard to stop taking the drug. It seems that hallucinogens may be addictive for a small number of people who use them regularly.^{23, 25, 26}

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FOR MORE INFORMATION

We have listed some of the national telephone helplines and websites below.

Australian Drug Foundation

Provides information about drugs and links to services in each state and territory
www.adf.org.au

DrugInfo Line

Provides information about drugs and alcohol. Open 9am–5pm, Monday to Friday
1300 85 85 84 or **03 8672 5983**. Or visit www.druginfo.adf.org.au

Just Ask Us

Provides information about drugs, alcohol, health and well-being
www.justaskus.org.au

Kids Helpline

Free, private and confidential telephone and online counselling service for young people aged 5–25 years
Open 24 Hours **1800 55 1800**

Lifeline

24 hour crisis line **131114**
Also available is one-on-one chatlines for crisis support, visit
www.lifeline.org.au/Find-Help/Online-Services/crisis-chat

Counselling Online

Free, confidential counselling service for people using drugs, their families and friends
www.counsellingonline.org.au

National Drugs Campaign

Australian Government website provides information about illicit drugs and campaign resources.
www.australia.gov.au/drugs

Family Drug Support

For families and friends of people who use drugs or alcohol
1300 368 186

Some state and territory based helplines are listed below.

Alcohol and Drug Information Service (ADIS)(free, confidential advice about drugs and alcohol).
Some services operate 24 hours.

State/Territory	City contact	Regional/Rural contact (free call from landline)
New South Wales ADIS	02 9361 8000	1800 422 599
Queensland ADIS	1800 177 833	1800 177 833
Victoria Directline	1800 888 236	1800 888 236
Western Australia ADIS	08 9442 5000 08 9442 5050 (for parents)	1800 198 024 1800 653 203
Australian Capital Territory Alcohol & Drug Program	02 6207 9977	
Northern Territory Alcohol & Other Drug Services	08 8922 8399 (Darwin) 08 8951 7580 (Alice Springs)	1800 131 350
Tasmania ADIS	1800 811 994	1800 811 994
South Australia ADIS	1300 131 340	1300 131 340

Callers in Victoria can also contact the Youth Substance Abuse Service (YSAS) on 1800 014 446
(24 hour toll free service)



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