

HALLUCINOGENS

WHAT ARE HALLUCINOGENS?

Hallucinogens are drugs that primarily affect the senses, thinking, self-awareness, emotion, and perception of time and space. These drugs can also cause delusions (false beliefs) and hallucinations (experiencing unreal or distorted sensations). Such effects may be mild or overwhelming. Hallucinogens are also called psychedelics.

Hallucinogens may be divided into three main groups. The first group includes LSD and chemically related drugs such as psilocybin and DMT. The second group includes mescaline, MDA, PMA, DOM (STP), MDMA, and others. This group is chemically related to amphetamines. The third group includes belladonna, datura, and other atropinic drugs. Both natural and synthetic hallucinogens exist in each group.

DO OTHER DRUGS CAUSE HALLUCINATIONS?

Other mind-altering drugs can cause hallucinogenic effects at certain doses. However, drugs whose major effects are as a depressant or stimulant are not included in this fact sheet. These include alcohol, marijuana, PCP (phencyclidine), and amphetamines. These drugs are included in other fact sheets in this series.

WHAT ARE THE EFFECTS OF HALLUCINOGENS?

LSD causes the most potent hallucinogenic effects, and it is used in this fact sheet as an example. Other hallucinogens have effects much like LSD, though generally less extreme.

The detailed effects are different for each drug. Effects depend as well on the dose taken, the setting, the user's mood and expectations, and other factors. The effects also vary widely

from person to person and from use to use.

Hallucinogens affect all the senses. Vision alters, including changes in depth perception and in the meaning of the perceived object. Illusions and hallucinations are common. The sense of time and of self are altered. Senses may "cross" so that music may be "seen" or color "heard."

Physical effects may include dilated pupils, a rise in temperature and heart-beat, slight increase in blood pressure, and tremors. The user may be relaxed, or may feel fear or panic.

WHAT RISKS OCCUR WITH HALLUCINOGENS?

A person under the influence of a hallucinogen loses control over normal thought processes. This may bring about behavior that can be harmful or fatal to the user or others. Risks include suicide, injury, or accidental death.

Users may experience a "bad trip." These last for up to a few hours. A bad trip may include depression, panic, or psychotic episodes.

Longer-term harmful reactions include anxiety, depression, or "breaks with reality." These may last from a few days to months. The drugs may create these mental problems, or trigger an existing problem.

Tolerance (the need to take more of a drug to obtain the same effect) occurs with most hallucinogens. Physical dependence is not known to occur. Psychological dependence on LSD has been reported.

WHAT IS A FLASHBACK?

A flashback is a return of some of the drug's effects long after the drug was taken. Flashbacks occur mostly with LSD use. The reasons for flashbacks

are not known. They may be spontaneous, or they may be triggered by physical or psychological stress, medications such as certain antihistamines, or use of other drugs such as marijuana. A flashback can be very frightening, especially to someone not expecting it.

CAN HALLUCINOGENS CAUSE DEATH?

Certain hallucinogens can cause seizures, coma, and death. These include MDA, PMA, and the atropinic drugs. Death can also occur from impurities found in a hallucinogen, or when other drugs are sold as a hallucinogen. Death from an accident or suicide while under the drug's effects may result.

HOW PURE ARE HALLUCINOGENS?

These drugs come from illegal sources. The potency of illicit drugs varies from time to time or batch to batch. Street samples typically include other drugs or adulterants. Some of these additives are themselves dangerous.

Other drugs are often sold as hallucinogens. For instance, the very risky drug Phencyclidine (PCP) is often sold as "THC", the hallucinogenic chemical in marijuana. In fact, THC in tablet or liquid form is not available at all on the street. Users of street drugs most often cannot know what they are getting, or the quality or potency of the drug.

IS THERE EVIDENCE THAT HEAVY LSD USE HAS LONG-TERM EFFECTS ON THE MIND?

Research has shown changes in the mental functions of some heavy users of LSD. These include signs similar to those of organic brain damage, such as impaired memory and attention span, mental confusion, and

difficulty with abstract thinking. These conditions may last for years.

DOES LSD IMPROVE CREATIVITY AND SELF-KNOWLEDGE?

Although some people who have taken LSD say that they feel more creative, research has not shown significant changes. The new perceptions of the body and self that some users report can be frightening as well as pleasant.

CAN LSD DAMAGE CHROMOSOMES?

Earlier studies that linked LSD use with chromosome damage have not been confirmed. However, LSD is so often mixed with other substances (adulterants) that its genetic effects are uncertain.

DOES HALLUCINOGEN USE DURING PREGNANCY HARM THE FETUS?

Little is known about the effects of these drugs during pregnancy. LSD has been studied more than other hallucinogens.

LSD taken by the mother crosses the placenta. The effects on the fetus are not known. Studies indicate a higher incidence of spontaneous abortion and birth defects in children of women who used LSD while pregnant. It is not certain, however, if these problems were caused by LSD itself, additives, impurities, other drugs that were taken, or a combination of factors.

Women who are pregnant, considering pregnancy, or breast-feeding should not use LSD or any other hallucinogen.

HOW COMMON IS HALLUCINOGEN USE?

In 2000, 2.6 percent of high school seniors, 2.3 percent of tenth graders, and 1.2 percent of eighth graders reported using hallucinogens in the past month. Hallucinogen use was greatest in 1975, when 4.7 percent of high school seniors reported using hallucinogens in the past month. Use declined from 1975 to a 1992 low among seniors of 2.1%. It then increased through 1996, and has dropped slightly for all three grade levels from 1997 to 2000.

In 2000, LSD had been used in the past month by 1.6 percent of twelfth graders, 1.6 percent of tenth graders, and 1.0 percent of eighth graders. LSD use has dropped each year since 1997.

The 1999 National Household Survey found that among all young people aged 12 to 17, 1.6 percent had used hallucinogens in the past month. Among those aged 18 to 25, 3.5 percent had used hallucinogens in the past month. Among those aged 26 to 34, .5 percent had used hallucinogens in the past month. Among those aged 35 or older, use in the past month was below .1 percent.

LEGAL INFORMATION

LSD, Peyote, Mescaline, DMT, and Psilocybin are controlled substances. Use, possession, possession with intent to distribute, distribution, and manufacture of hallucinogens are illegal.

For more information, see the Michigan Law Fact Sheet in this series.

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