Lysergic Acid Diethylamide (LSD)

Lysergic acid diethylamide (LSD) is the most potent hallucinogen known to science, as well as the most highly studied. LSD was originally synthesized in 1938 by Dr. Albert Hoffman. However, its hallucinogenic effects were unknown until 1943 when Hoffman accidentally consumed some LSD. It was later found that an oral dose of as little as 0.000025 grams (or 25 micrograms, equal in weight to a few grains of salt) is capable of producing rich and vivid hallucinations. LSD was popularized in the 1960s by individuals like Timothy Leary who encouraged American students to "turn on, tune in, and drop out." LSD use has varied over the years but it still remains a significant drug of abuse. In 1999, over 12 percent of high school seniors and college students reported that they had used LSD at least once in their lifetime.

Because of its structural similarity to a chemical present in the brain and its similarity in effects to certain aspects of psychosis, LSD was used as a research tool to study mental illness. The average effective oral dose is from 20 to 80 micrograms with the effects of higher doses lasting for 10 to 12 hours. LSD is usually sold in the form of impregnated paper (blotter acid), typically imprinted with colorful graphic designs. It has also been encountered in tablets (microdots), thin squares of gelatin (window panes), in sugar cubes and, rarely, in liquid form.

Physical reactions may include dilated pupils, lowered body temperature, nausea, "goose bumps," profuse perspiration, increased blood sugar, and rapid heart rate. During the first hour after ingestion, the user may experience visual changes with extreme changes in mood. In the hallucinatory state, the user may suffer impaired depth and time perception, accompanied by distorted perception of the size and shape of objects, movements, color; sound, touch, and the users own body image. During this period, the users' ability to perceive objects through the senses is distorted: they may describe "hearing colors" and "seeing sounds." The ability to make sensible judgments and see common dangers is impaired, making the user susceptible to personal injury. After an LSD "trip," the user may suffer acute anxiety or depression for a variable period of time. Flashbacks have been reported days or even months after taking the last dose.

TRAFFICKING

Lysergic acid diethylamide (LSD) remains available in retail quantities in virtually every state. LSD production reportedly is centered on the West Coast, particularly in San Francisco, northern California, the Pacific Northwest, and recently the Midwest. Since the 1960s, LSD has been manufactured illegally within the United States. LSD production is a time-consuming and complex procedure. Several chemical recipes for synthesizing LSD are on the Internet, but clandestine production requires a high degree of chemical expertise. Chemists maintain tight control at the production level, but do not necessarily participate in the distribution of the drug. These chemists usually sell the crystal LSD product to one or two trusted associates, insulating themselves from the wholesale distributors.

Few LSD laboratories have ever been seized in the United States because of infrequent and irregular production cycles. In 2000, DEA seized one LSD laboratory that was located in a converted missile silo in Kansas. LSD is produced in crystal form that is converted to liquid and distributed primarily in the form of squares of blotter paper saturated with the liquid. To a lesser

extent, LSD is sold as a liquid, contained in breath mint bottles and vials; in gelatin tab form ("window panes") of varying colors; and in pill form known as "microdots."

Distribution of LSD is unique within the drug culture. A proliferation of mail order sales has created a marketplace where the sellers are virtually unknown to the buyers, giving the highest level traffickers considerable insulation from drug law enforcement operations. The vast majority of users are middle-class adolescents and young adults attracted by its low prices. Rock concerts continue to be favorite distribution sites for LSD traffickers; however, distribution at raves throughout the United States is becoming more popular. Contacts made at raves and concerts are used to establish future transactions and shipments of larger quantities of LSD.