



INTELLIGENCE BULLETIN

Ketamine

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The trafficking and abuse of ketamine are a concern to law enforcement and drug treatment providers because of the drug's increasing availability and its use in facilitating sexual assaults. Ketamine is frequently smuggled into the country from Mexico and is commonly distributed by Caucasian males, although Mexican criminal groups increasingly distribute the drug.

Background

Ketamine hydrochloride, a Schedule III drug under the Controlled Substances Act, is a dissociative anesthetic that has a combination of stimulant, depressant, hallucinogenic, and analgesic properties. Legally used as a preoperative veterinary anesthetic, ketamine is abused for these properties and used to facilitate sexual assault. Common street names for ketamine are K, special K, ket, kit kat, vitamin K, purple, special la coke, cat valium, super acid, super C, lady K, super K, ketaject, and cat tranquilizers.

Distribution of liquid and powdered ketamine typically occurs among friends and acquaintances, most often at raves, nightclubs, and at private parties; street sales of ketamine are rare. Caucasian males between the ages of 17 and 25 are the primary distributors of ketamine, but Mexican criminal groups are increasingly distributing the drug,

particularly in the Rocky Mountain High Intensity Drug Trafficking Area (HIDTA). Retail quantities of powdered ketamine (100 mg to 200 mg) typically are packaged in small glass vials, small plastic bags, and capsules as well as paper, glassine, or aluminum foil folds. Law enforcement reporting indicates that liquid ketamine can be purchased for \$20 to \$140 per 10-milliliter vial, while powdered ketamine typically sells for \$40 to \$100 per gram.

Ketamine is produced commercially in a number of countries including Belgium, China, Colombia, Germany, Mexico, and the United States. Ketamine production is a complex and time-consuming process, making clandestine production impractical. For this reason most of the ketamine illegally distributed in the United States is diverted or stolen from legitimate sources, particularly veterinary clinics, or smuggled into the United States from Mexico.

Ketamine Smuggled From Mexico

Mexico is a significant source of ketamine available in the United States. The drug often is diverted from pharmaceutical manufacturers and veterinary clinics in Mexico and smuggled into the United States for distribution in markets throughout the country.

California and Florida. On October 2, 2002, the Drug Enforcement Administration (DEA), the U.S. Attorney for the Southern District of California, and the U.S. Attorney for the Southern District of Florida announced the indictment of 20 individuals for their involvement in smuggling ketamine from Mexico into the United States. The indictments were the result of two investigations conducted by federal and local agencies in San Diego and South Florida. The individuals allegedly solicited orders for Ttokkyo brand ketamine (produced in Mexico) from retail distributors and users via the Internet. The ketamine was smuggled into the United States for distribution in Boston, New Jersey, New York, Philadelphia, San Diego, San Francisco, and South Florida.

San Diego (CA). In September 2002, 10 individuals, citizens of both the United States and Mexico, were indicted in the Southern District of California on charges of conspiracy to import and distribute ketamine, conspiracy to launder money, possession of ketamine with intent to distribute, and criminal forfeiture. The ketamine seized in conjunction with this investigation or sold by these conspirators was produced legally in a commercial laboratory in Morelos, Mexico, but was diverted by the laboratory owner, who provided the drug to the other defendants for illegal distribution in the United States. The defendants usually transported the drug directly from the laboratory to their distributors in the United States; however, some ketamine also was diverted through a Tijuana-based veterinary office and then mailed to the distributors via package delivery and mail services. There are no estimates as to the total amount of ketamine distributed by this

criminal group; however, officials believe that the group supplied a significant portion of the ketamine available in U.S. drug markets. In fact, 70,000 10-milliliter and 50-milliliter vials of ketamine were seized from the group in the United States in 2002, and an additional 195,575 vials were seized in Mexico. Despite these significant seizures, ketamine availability does not appear to be decreasing. Most HIDTAs and DEA Field Divisions report that ketamine is available in their areas and that availability is increasing slightly in some regions of the country.

Missouri. On April 21, 2002, Missouri State Highway Patrol officers arrested an individual during a routine traffic stop on Interstate 44 and seized 3,998 vials of ketamine, which officers believe originated in Mexico—the largest such seizure in Missouri history. The individual, an alleged member of a ketamine trafficking group, stated to the arresting officer that she was transporting the ketamine from Los Angeles to the Borough of Queens in New York City. Further investigation revealed that several thousand vials of ketamine had previously been purchased from a Tijuana pharmacy by the criminal group and had been transported to Los Angeles by private vehicle for subsequent distribution in Queens.

Abuse

Ketamine is manufactured commercially as a powder or liquid. Users sometimes evaporate liquid ketamine on hot plates, on warming trays, or in microwave ovens, a process that results in the formation of crystals, which are then ground into powder. Powdered ketamine is cut into lines known as bumps and snorted, or it is smoked—typically in marijuana or tobacco cigarettes. Liquid ketamine is injected or ingested after being mixed into drinks.

Sexual Assault

Ketamine may be used in drug-facilitated sexual assaults because of its sedative and dissociative properties. When used in the commission of this

crime, offenders often mix ketamine into victims' drinks—usually without their knowledge—or encourage victims to try it. Ketamine is included in the Drug-Induced Rape Prevention Act of 1996, and any offender convicted of using the drug to facilitate a rape or any other violent crime may face a prison term of up to 20 years.

Ketamine is rapidly metabolized by the body and therefore is difficult to detect through urine or blood toxicology testing beyond 48 hours after ingestion. Routine urine screening is often ineffective in detecting ketamine even within 48 hours;

however, a number of advanced commercial toxicology tests will detect the drug and its metabolites.

Effects

The duration and severity of the effects of ketamine use are dose-dependent and affected by the method of administration as well as the user's weight and health (see Table 1). Common effects include amnesia, agitation, paralysis, memory loss, unconsciousness, nausea, and delirium. The onset of effects is rapid and often occurs within a few minutes of administration.

Table 1. Common Effects of Ketamine

| Administration | Dosage | Onset | Effects | Duration |
|-------------------------|----------|------------------------------|-------------------------------------------------|------------------|
| Intramuscular injection | 10–40 mg | 3–4 minutes after injection | Mild hallucinations | 45–90 minutes |
| | 60+ mg | | Out-of-body, near death hallucinations; terrors | |
| Intranasal ingestion | 10–60 mg | 5–15 minutes after ingestion | Mild hallucinations | 10–30 minutes |
| | 100+ mg | | Out-of-body, near death hallucinations; terrors | |
| Oral ingestion | 40–75 mg | 5–20 minutes after ingestion | Mild hallucinations | Up to 90 minutes |
| | 200+ mg | | Out-of-body, near death hallucinations; terrors | |

Source: *Drug Identification Bible 2001*.

Outlook

Ketamine abuse may decrease in the near term. Monitoring the Future (MTF) data indicate that rates of past year use for ketamine have trended downward among adolescents and young adults, although none of the declines have been statistically significant. MTF data show that the percentage of eighth graders reporting past year ketamine use declined from 1.3 percent in 2002 to 1.1 percent in 2003. Past year rates of use among tenth graders declined from 2.2 percent in 2002 to

1.9 percent in 2003 and for twelfth graders from 2.6 percent to 2.1 percent. The percentage of college students (aged 19 to 22) reporting past year ketamine use declined from 1.3 percent in 2002 to 1.0 in 2003, while the percentage of young adults (aged 19 to 28) declined from 1.2 to 0.9. Furthermore, the consequences of ketamine abuse appear to be decreasing. Drug Abuse Warning Network (DAWN) data indicate that emergency department mentions for ketamine decreased sharply from 679 in 2001 to 260 in 2002.

Sources

State

Missouri

State Highway Patrol

Federal

U.S. Department of Health and Human Services

National Institutes of Health

National Institute on Drug Abuse

Monitoring the Future

Substance Abuse and Mental Health Services Administration

Office of Applied Studies

Drug Abuse Warning Network

U.S. Department of Justice

Drug Enforcement Administration



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