

GHB

(Gamma Hydroxybutyrate)

A Library and Resource Center on Alcohol, Tobacco, Other Drugs, Mental Health and Wellness

Background Information

Gamma Hydroxybutyrate (GHB) is a powerful and rapidly acting central nervous system depressant that was first synthesized in the 1960s. It is produced naturally by the body in small amounts but its physiological function is unclear. GHB was once sold in health food stores as a performance-enhancing additive in body building formulas. Currently, GHB is created primarily in clandestine laboratories with no guarantee of quality or purity, making its effects less predictable and increasingly difficult to diagnose. According to the National Institute on Drug Abuse's Community Epidemiology Work Group, the illicit use of GHB is characterized by its consumption in combination with alcohol by young adults and teens at nightclubs and parties. GHB is reportedly taken primarily by younger users as a pleasure enhancer that depresses the central nervous system, thereby inducing an intoxicated state. It can also be used as a sedative both to reduce the effects of stimulants (cocaine, methamphetamine and ephedrine) or hallucinogens (LSD, mescaline) and to prevent physical withdrawal symptoms.

Use and Effects

GHB is most commonly consumed orally, either as a grainy, white or sand-colored powder that is often dissolved in water or alcohol, or as a liquid sold in vials or small bottles. GHB is typically consumed by the capful or teaspoonful, which usually costs \$5 to \$10 per dose. The average dose consumed is 1 to 5 grams. Onset of effects occurs in 15 to 30 minutes, depending on the dosage and purity, and lasts from 3 to 6 hours. With consumption of less than 1 gram, GHB acts as a relaxant, causing a loss of muscle tone and a reduction of inhibitions. With consumption of 1 to 2 grams, GHB causes a strong feeling of relaxation while slowing the heart rate and respiration. It also interferes with circulation, motor coordination, and balance. In stronger doses (2 to 4 grams),

pronounced interference with motor and speech control occurs. A deep sleep, resembling a coma, may be induced, requiring intubation to awake the user. Possible side effects associated with GHB are nausea, vomiting, delusions, depression, vertigo, hallucinations, seizures, respiratory distress, loss of consciousness, slowed heart rate, lowered blood pressure, amnesia, and coma. GHB may cause addiction and dependence with sustained use. Frequently during the clandestine production of GHB, too much of an acid solution is added to the mixture, which can cause severe esophageal erosion in users.

In the last 10 years, GHB has appeared in nightclubs across the country. A typical consumer is a young adult who takes the drug to get high or engage in sexual activity. Male users may add GHB to an unsuspecting woman's drink in order to incapacitate her. Hence, GHB is commonly called a date rape drug. GHB is particularly dangerous when mixed with alcohol since alcohol increases its potency.



Marketing and Sales

Kits containing chemicals and "recipes" for making GHB are available on the Internet and are marketed for many uses. GHB is advertised as an antidepressant that suppresses feelings of depression and anxiety. It is also promoted and sold on the Internet and on the steroid black market as an alternative to anabolic steroids for strength training, body building, and weight control. The claims that GHB functions as an antidepressant and increases muscle mass and reduces body fat by stimulating the production of growth hormones has never been substantiated by the

(continued)

U.S. Food and Drug Administration (FDA). GHB kits contain non-regulated precursor chemicals, which are marketed as legal health enhancers, under numerous pseudonyms, including Sodium Oxybate, Sodium Oxybutyrate, Gamma Hydroxybutyric Sodium Acid, Gamma Hydroxybutyric Sodium, Gamm-OH, 4-Hydroxybutyrate, Gamma Hydrate, Somatomax PM, Somasnit, and Gamma Hidroxibutirato. The FDA has declared any substance containing GHB in any form to be an unapproved drug.

Observations

According to the Drug Abuse Warning Network, GHB-related emergency room visits nationwide increased from 20 in 1992 to an estimated 629 in 1996. The majority of the episodes occurred among 18 to 25-year olds (66%), Caucasians (94%), and males (79%). When a motive for GHB use was reported, 91% reported using the drug recreationally. When a reason for the emergency room visit was shown, an overdose was listed in 65% of the episodes and an unexpected reaction was listed in 33%.

Legal Status

In 1990 the FDA issued an advisory declaring GHB unsafe and illicit unless consumed under FDA-approved, physician-supervised protocols, due to the documented severe and uncontrollable side effects reported by past users. The Drug-Induced Rape Prevention and Punishment Act of 1996 was enacted into Federal law in response to the abuse of Rohypnol, another abused sedative (with a potency about 10 times the strength of Valium) that produces similar debilitating effects. The law makes it a crime to give someone a controlled substance without his or her knowledge and with the intent to commit a crime. The law also stiffens the penalties for the possession and distribution of Rohypnol and GHB. In 1997, because of the increasing number of reported uses and overdoses, the FDA reissued a warning against the use of GHB, reiterating that the drug is not approved for any use.

Scheduling

Currently, GHB is not a controlled substance under the Federal Controlled Substances Act. Because of its increasing popularity and association with sexual assault and robbery, GHB has been controlled by numerous state legislatures. Several other states have implemented criminal sanctions for the possession of GHB even though the substance has not been controlled by their state legislatures.

On August 24, 1999, the Connecticut Legislative Regulation Review Committee approved an emergency regulation submitted by the Department of Consumer Protection (DCP) classifying GHB and a similar chemical substance, gamma butyrolactone (GBL), as Schedule IV controlled drugs. Classifying these drugs as controlled substances results in tighter restrictions on their possession and use. Also, police and government agencies, such as DCP, have added enforcement rules to combat abuses.

Slang Terms

Cherry Meth
Date Rape Drug
Easy Lay
Fantasy
Gamma 10
GBH
Georgia Home Boy
Grievous Bodily Harm
G-rriffick
Liquid E
Liquid X
Organic
Salty Water
Scoop
Soap
Somatomac
Quaalude
Zonked



Information Provided by:

Fact Sheet: Gamma Hydroxybutyrate, Office of National Drug Control Policy Information Clearinghouse

Gamma-Hydroxybutyrate Effects & Regulation, OLR Research Report, 8/17/99, State of CT