# **GHB**

## WHAT IS GHB?

Gamma-Hydroxybutyric acid (GHB) is another name for the generic drug sodium oxybate. Xyrem® (which is sodium oxybate) is the trade name of the FDA-approved prescription medication. Xyrem® is approved as a treatment to improve daytime sleepiness and muscle weakness with narcolepsy (a disorder marked by sudden, unexplained, spontaneous fatigue, napping, or falling asleep throughout the day).

Analogs that are often substituted for GHB include GBL (gamma butyrolactone) and 1,4 BD (also called just "BD"), which is 1,4-butanediol. These analogs are available legally as industrial solvents used to produce polyurethane, pesticides, elastic fibers, pharmaceuticals, coatings on metal or plastic, and other products. They are also sold illicitly as supplements for bodybuilding, fat loss, reversal of baldness, improved eyesight, and to combat aging, depression, drug addiction, and insomnia.

GBL and BD are sold as "fish tank cleaner," "ink stain remover," "ink cartridge cleaner," and "nail enamel remover" for approximately \$100 per bottle — much more expensive than comparable products. Attempts to identify the use of GHB analogs are hampered by the fact that routine toxicological screens do not detect the presence of these analogs.

## WHAT IS ITS ORIGIN?

GHB is produced illegally in both domestic and foreign clandestine laboratories. The major source of GHB on the street is through clandestine synthesis by local operators. At bars or "rave" parties, GHB is typically sold in liquid form by the capful or "swig" for \$5 to \$25 per cap. Xyrem® has the potential for diversion and misuse like any other pharmaceutical containing a controlled substance.



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GHB has been encountered in nearly every region of the country.

#### What are common street names?

Common street names include:

 Easy Lay, G, Georgia Home Boy, GHB, Goop, Grievous Bodily Harm, Liquid Ecstasy, Liquid X, and Scoop

## What does it look like?

GHB is usually sold as a liquid or as a white powder that is dissolved in a liquid, such as water, juice, or alcohol. GHB dissolved in liquid has been packaged in small vials or small water bottles. In liquid form, GHB is clear and colorless and slightly salty in taste.

### How is it used?

GHB and its analogs are misused for their euphoric and calming effects and because some people believe they build muscles and cause weight loss.

GHB and its analogs are also misused for their ability to increase libido, suggestibility, passivity, and to cause amnesia (no memory of events while under the influence of the substance) — traits that make victims who unknowingly consume GHB vulnerable to sexual

assault and other criminal acts.

GHB misuse became popular among teens and young adults at dance clubs and "raves" in the 1990s and gained notoriety as a date rape drug. GHB is taken alone or in combination with other drugs, such as alcohol (primarily), other depressants, stimulants, hallucinogens, and marijuana.

The average dose ranges from 1 to 5 grams (depending on the purity of the compound, this can be 1-2 teaspoons mixed in a beverage). However, the concentrations of these "home-brews" have varied so much that people are usually unaware of the actual dose they are drinking.

#### What is its effect on the mind?

GHB occurs naturally in the central nervous system in very small amounts. Use of GHB produces CNS depressant effects including:

 Euphoria, drowsiness, decreased anxiety, confusion, and memory impairment

GHB can also produce both visual hallucinations and — paradoxically — excited and aggressive behavior. GHB greatly increases the CNS depressant effects of alcohol and other depressants.

# What is its effect on the body?

GHB takes effect in 15 to 30 minutes, and the effects last 3 to 6 hours. Low doses of GHB produce nausea. At high doses, GHB overdose can result in:

 Unconsciousness, seizures, slowed heart rate, greatly slowed breathing, lower body temperature, vomiting, nausea, coma, and death. Regular use of GHB can lead to addiction and withdrawal that includes:

 Insomnia, anxiety, tremors, increased heart rate and blood pressure, and occasional psychotic thoughts.

Currently, there is no antidote available for GHB intoxication. GHB analogs are known to produce side effects such as:

 Topical irritation to the skin and eyes, nausea, vomiting, incontinence, loss of consciousness, seizures, liver damage, kidney failure, respiratory depression, and death

#### What are its overdose effects?

GHB overdose can cause coma and death.

# Which drugs cause similar effects?

- GHB analogs are often used in place of GHB.
  Both GBL and BD metabolize to GHB when taken and produce effects similar to GHB.
- CNS depressants such as barbiturates and methaqualone also produce effects similar to GHB.

# What is its legal status in the United States?

GHB is a Schedule I controlled substance, meaning that it has a high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision. FDA-approved GHB products are Schedule III substances under the Controlled Substances Act. In addition, GBL is a List I chemical.

GHB was placed on Schedule I of the Controlled Substances Act in March 2000. However, when sold as FDA-approved GHB products (such as Xyrem®), it is considered Schedule III, one of several drugs that are listed in multiple schedules.