# **GHB Addiction & Withdrawal Syndrome**

Fact Sheet - www.project.ghb.org By Trinka Porrata

#### **GHB—IS IT ADDICTIVE?**

Internet dribble to the contrary, gamma hydroxybutyrate (GHB) is an addictive drug. Withdrawal can be severe and prolonged. Yet recognition and treatment of GHB addiction/withdrawal isn't readily available. Knowledge of GHB by the public and in the fields of law enforcement/medicine is typically limited to its abuse as an intoxicant and use as a rape weapon. GHB addiction is characterized by around the clock dosing (every one to three hours, day/night, with heavier doses at night to achieve sleep). Addiction can develop in a few weeks. Use for four to eight months is common among the 600 GHB addicts who have come forward for help through the GHB Addiction Helpline via www.projectghb.org. Others have been using for up to ten years, making it impossible to know at what point they became addicted.

## **ADDICTION SCENARIO**

Occasional users are at risk from rape, overdose and death, but are not as likely to become addicted. Those using GHB on a daily or systematic basis as an antidepressant, a sleep aid, a workout aid, weight loss product, an anti-aging substance, etc., are at risk of addiction by virtue of their pattern of regular. frequent use. From a nightly sleep aid, for example, use casually moves into a morning "wake up" aid. Then it is needed in the afternoon, to have sex, to go out in public, etc., until it has progressed to around the clock use. Often the pattern develops without the user realizing what is happening since they typically didn't see it as a "drug" or unsafe in any way because of Internet assurances. Initially users feel they have found the perfect supplement and swear by the incredible benefits they feel they are seeing. Stage two, however, comes when the honeymoon is over but the user is the last to know. Friends, spouses, and coworkers begin to observe bizarre behavior changes, frequently with no idea of the cause. Episodes may be as subtle as a single "head snap" that occurs about 15 minutes after taking a dose, or may be several minutes of twitching, strange behavior, or black outs. These episodes may occur only following the heavier nighttime doses or after virtually every dose. Thus, breaking the bathroom mirror while getting ready for bed, or being found or waking up on the bathroom floor with a bloody (or broken) nose is not uncommon as a result of the "head snap," which may result in hitting the mirror or the edge of the sink. Frequently, the addict has no recall of such incidents. The addict grows distant from spouse, family, and friends and may begin to withdraw from public contact or become captivated by pornography or strip joints, which may be a total behavior change from that exhibited prior to GHB use. GHB addicts typically report numerous drunk/drugged driving episodes, which are frequently unidentified or unrecognized by law enforcement officers, especially if there has been no use of alcohol or other drugs. Many addicts report damage of "unknown origin" appearing on their cars and being uncertain where their car may be found in the morning, again due to the lack of memory of incidents occurring while they were intoxicated.

### WHO ARE THE G-AHOLICS?

\*Bodybuilders/other athletes, including pros, using GHB for a sleep or workout aid or weight loss tool--the largest group.

\*Business professionals who travel frequently and were introduced to GHB as a "safe" sleep aid.

\*The elderly, who have been told that GHB is an anti-aging compound.

\*People with prior depression, who have been told that GHB is an anti-

depressant. Intoxicating effects of GHB may make it seem, initially, to have this effect, but it later turns on many of them.

\*People subject to drug testing programs who use GHB as an alcohol substitute and to bypass testing.

\*Website managers, especially those selling GHB and other sports/dietary supplements, and computer programmers.

NOTE: Although GHB can be identified in tests, it remains in body fluids for a relatively short period of time compared to other drugs; it lasts in blood for four hours and in urine for twelve hours. However, GHB is not yet included in the normal testing procedures of most agencies.

## ANALOGS OF GHB

The product ingested may be actual GHB, ranging from home brew to foreign pharmaceutical grade. It is often an analog of GHB, a chemical cousin that converts to GHB in the body. This may be gamma butyrolactone (GBL) or 1,4butanediol (BD). GBL (aka 2(3)H furanone dihydroxy) is both a precursor (primary ingredient in making GHB) and an active analog (converts in the body to GHB, with the same effects). BD is an active analog. Another analog is gamma hydroxyvalerate (GHV). GBL, BD and GHV are available at gyms, chemical supply stores, and via Internet mail order. They are sold as powders, capsules, gels or liquids and can be found in a variety of concentrations, colors, and flavors. There are more than 80 street/trade names for GHB/analogs. GBL especially may be found in the hardware story are a primary ingredient in legitimate paint strippers; this level of abuse is particularly dangerous as these products contain other ingredients. Bogus Internet products are typically disguised as "ink jet cartridge cleaners," "fingernail polish removers," etc.

## **GHB OVERDOSE RE ADDICTS**

GHB addicts typically experience frequent overdoses or mini-overdoses. Thus, they are often treated as overdose victims, with no recognition of the underlying addiction that causes these frequent episodes. GHB has a steep dosage response curve and, even with development of tolerance, its effects vary greatly. Addicts may dose in one of two patterns—1) Precise dosing in regular intervals separated by one to three hours, with slightly higher doses at night for sleep; or 2—Around the clock "sipping" from a bottle of diluted product. Constant sipping is most likely to produce mini-overdoses. Even with precise dosing, effects may vary based on tiny variations in dose, differences in food intake, lack of food, or other unknown reasons. A CEO of a major corporation relayed that he would try to adjust his dose for meetings (dose at 9:30 before a meeting when the dose was really due at 10:00); this would sometimes result in a head snap episode

early in the board meeting, leaving his staff baffled by his strange behavior, which he simply tried to ignore.

#### GHB WITHDRAWAL SYMPTOMS

Missing a dose by more than a few hours sends the addict into significant withdrawal symptoms. This is first characterized by profuse sweating, anxiety attacks, and may be accompanied by soaring blood pressure and pulse. BP at dangerous levels has been documented. This may subside on its own after two or three days or in response to medication. Thus, on day three, a patient may "seem" to be doing "fine" and may be released from a treatment center unfamiliar with GHB withdrawal. The second phase of withdrawal, which may include hallucinations and altered mental state, may begin earlier, but may also be delayed to around day four or five. Thus, a patient released from a treatment center on day three was found by his frantic wife hours later wandering through the city streets, hallucinating, confused and in danger of wandering into traffic. Sometimes, clinicians assume addicts to be psychotic and fail to recognize the underlying addiction/withdrawal.

#### GHB DETOXIFICATION PROTOCOLS

Treatment of the GHB withdrawal syndrome is not yet clearly defined. Treatment may involve use of benzodiazepines, antipsychotic medications, or phenobarbital. It should be noted that although tapering GHB doses prior to detoxification may help reduce the severity of the withdrawal, attempts of some addicts to self-detoxify, without medical assistance, have been fatal, as the withdrawal syndrome may be severe and unpredictable. Further, as most addicts are unable to tolerate the ongoing symptoms of withdrawal, this method is frequently unsuccessful as well as dangerous.

1—Miotto and Roth, March 2001 article "GHB Withdrawal Syndrome," posted on the Texas Commission on Alcohol and Drug Abuse website (www.tcada.state.tx.us) describe the severe withdrawal symptoms and recommend treatment involving an aggressive 7-14 day inpatient strategy with close follow up. They note "Benzodiazepines such as lorazepam, chlordiazepoxide and diazepam are useful in ameliorating some of the signs and symptoms of GHB withdrawal. Loading doses of oral or intravenous benzodiazepines do not decrease the likelihood of withdrawal delirium, but are important for controlling psychotic agitation." This may require high doses of benzos. Anticonvulsants and antipsychotics are also discussed. Antihypertensive medications may be needed in early stages to deal with the racing heart and blood pressure issues. NOTE: Another doctor who has dealt with numerous GHB withdrawal cases reported a preference for clorazepate over other benzos and stresses the need to employ an antipsychotic (such as olanzapine) before psychosis develops.

2—Silvilotti, Burns, Aaron and Greenberg, December 2001 Annals of Emergency Medicine, discuss use of phenobarbital for withdrawal from GHB and discuss five patients presenting with severe withdrawal from GBL, resulting in admission to the ICU. They report a median hospital stay of five days. Bear in mind, each patient had already endured four or five days without GHB/GBL prior to admission, making this consistent with the 10-14 day period seen overall for

detox/withdrawal in the hundreds of cases coming through our website. Nothing is documented re follow up with these five patients.

#### AFTER THE DETOX—ONGOING AGONY

Multiple relapses are common in the majority of GHB addiction cases. Many describe that GHB leaves a "hole in your soul." Establishing a decent sleep pattern is often a problem. Depression, even at suicidal levels, is nearly standard. Anxiety attacks are also ongoing. Depression/anxiety typically decrease with time, taking a few weeks for some and months or even years for others. Many recovering addicts need medication at least temporarily to deal with the sleep/depression/anxiety issues. Those with prior depression seem to have the most difficulty finding a regime of meds that work well after GHB use. Accidental overdoses on other drugs, especially trying to detox without adequate medical supervision, are common, sometimes resulting in death. These deaths may not be recognized as related to GHB since there will be no GHB in their system. Suicides have been noted from 36 hours into detox to several months later, whether or not there were prior depression or mental health issues. Many have by now lost jobs, financial security, family, and other relationships. Many do not see themselves as "addicts" because of their unintentional involvement with this drug and shy away from AA/NA meetings. They need to recognize their status as indeed "addicted" and need understanding in treatment

and meetings to put aside this alienation. As with any drug, acceptance of their addiction is crucial to management. For further information, please visit our website: <u>www.projectghb.org</u>. Doctors & facilities experienced w/GHB withdrawal or willing to handle

these cases are asked to contact us so that they may be added to our referral list.