

The Use of GHB and Analogs to Facilitate Sexual Assault

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ABSTRACT: γ -Hydroxybutyric acid (GHB) and its metabolic precursors, γ -butyrolactone (GBL) and 1,4-butanediol (1,4-BD), may be among the most favored drugs used to commit drug-facilitated sexual assault (DFSA). In fact, federal legislation was enacted in the form of the Hillary J. Farias and Samantha Reid Date-Rape Drug Prohibition Act of 2000 to control and penalize use and distribution of GHB, GBL, and 1,4-BD. Unfortunately, solid proof of their use in many cases is difficult to obtain because GHB, GBL, and 1,4-BD have strong sedative and memory-impairing effects and are rapidly eliminated after ingestion. To further complicate the matter, GHB is a metabolite of γ -aminobutyric acid (GABA), a naturally occurring neurotransmitter in humans. This review focuses on the chemistry and pharmacology of these drugs and their use in DFSA. An overview of analytical techniques used to identify their presence is provided, as well as guidance on the toxicological interpretation of findings of GHB in biological specimens.

KEY WORDS: 1,4-BD, 1,4-butanediol, γ -butyrolactone, drug-facilitated sexual assault, GBL, GHB, γ -hydroxybutyrate.
