



NEWS RELEASE from the EU drugs agency in Lisbon

GHB AND ITS PRECURSORS — NEW STUDY OUT TODAY

EU drugs agency reports emerging trend in use of GBL

(17.3.2008, LISBON) Concerns are increasing in the EU about the use of chemicals employed in the manufacture of the recreational drug GHB. The statement comes in a new report ***GHB and its precursor GBL: an emerging trend case study***, published today by the **EU drugs agency (EMCDDA)** as part of its E-POD project to track new patterns of drug use in Europe ⁽¹⁾.

GHB (gamma-hydroxybutyric acid), commonly known as 'liquid ecstasy', surfaced on the recreational nightlife scene in parts of Europe in the 1990s, although its non-medical use began a decade earlier among body-builders consuming the drug for its hormone-growth effects. The **EMCDDA** and partners carried out a risk assessment of GHB in 2000, and the drug was placed under international control by the United Nations in March 2001⁽²⁾.

According to today's report: 'The new controls rapidly curtailed the previously open sale of GHB', but there are now concerns over the emergent use of its chemical precursor GBL (gamma-butyrolactone). GBL is both easier to obtain and cheaper than many illicit drugs and is now being used and sold as a substitute for GHB.

Unlike GHB, **GBL** and a second GHB precursor **1,4-BD** (1,4-butanediol), are not controlled internationally. Widely used in the chemical industry and commercially available, the two substances can be used to manufacture GHB with relative ease. But when ingested directly by the user, the precursors are also naturally converted in the body to GHB. And there are already reports of direct consumption of GBL resulting in hospital emergency admissions, although to date there are no official reports relating to 1,4-BD ⁽³⁾.

Some EU Member States (**Italy, Latvia, Sweden**) have chosen to control one or both precursors. The EU and its Member States have also taken additional voluntary measures to prevent their diversion, including guidance for operators (e.g. manufacturers, importers) to be vigilant when placing them on the international market.

The report identified 15 internet chemical suppliers selling GBL, located in **Germany, the Netherlands, Poland** and the **UK**. Although the drug may be marketed for various legitimate purposes (e.g. cleaning solvents, wheel cleaners), there is some awareness among suppliers that customers may be purchasing the substance for personal consumption. This is demonstrated by the fact that all except three sites provide health warnings.

Use low but health costs high

The **EMCDDA** case study reports that the use of GHB/GBL ⁽⁴⁾ is generally low in the EU. Surveys show that last-month prevalences among young people in recreational settings rarely rise above 3% (compared with prevalences ranging from 7% to 70% for ecstasy, depending on the survey). But there is evidence of use being more common in some sub-populations, settings and geographical areas (e.g. gay nightclubs).

Little is known at present about use of GHB/GBL in private settings for purposes of recreation, body-building or self medication (e.g. for alcohol problems, insomnia), although some studies suggest that it could be being used in private as often, or more often, as in public settings.

GHB/GBL appears to 'affect different people in different ways', says the report. At low doses, the effects of GHB/GBL are similar to those of alcohol, but a 'steep dose–response curve' means that even a small increase in dose can cause serious toxic effects, including impaired consciousness and coma. The toxic effects of GHB/GBL may also intensify when the drug is combined with alcohol and other psychoactive substances. As a result, associated health costs can be relatively high.

Studies in some European cities suggest that accidental overdoses relating to the recreational use of GHB/GBL account for a significant proportion of the overall illicit drug-related emergencies reported by ambulance or hospital services. A study conducted at a hospital in **Ibiza** (2005) showed that 8% of illicit drug-related emergencies were GHB/GBL-related. And in **Amsterdam** (2005), non-fatal hospital emergencies due to GHB/GBL exceeded the number of medical emergencies attributed to use of hallucinogenic mushrooms, ecstasy, amphetamine and LSD. One **London** hospital reported 158 GHB/GBL-related presentations in 2006.

EU Member States rarely report deaths associated with GHB/GBL. According to the case study: 'There is an absence of an accurate and comparable system for recording the number of deaths and non-fatal emergencies related to the use GHB and its precursors'. Forensic analysis is difficult due to the narrow time window of detection for GHB (6–8 hours in blood; 10–18 hours in urine). Also important is that GHB is present in low levels in the body naturally and occurs in post-mortem decomposition.

GHB and sexual assault

Media reports of the covert use of GHB/GBL by 'predators' in recreational settings ('drink spiking') to facilitate sexual assault ('date rape') brought the drug into the spotlight around the year 2000. However forensic evidence shows the more common presence of alcohol and benzodiazepines in cases of reported sexual assault⁽⁵⁾. 'Evidence for this type of crime is notoriously difficult to obtain and true incidence may be higher due to non or delayed reporting' says the report. And forensic assessment is only possible if samples are collected and processed in a timely way.

Researchers have suggested that the association of GHB/GBL with sexual assault and the array of problems linked to its use (e.g. nausea, vomiting, collapse) may have contributed to its reported negative image in recreational settings and thus to limiting diffusion of the trend. Prevention initiatives focusing on 'drink spiking' are among a range of responses developing in Europe to address the use of GHB/GBL. Others involve the training of nightclub staff in matters of security and first aid and the dissemination of information (internet, posters) stressing the risks of overdose and of mixing the substances with alcohol and other sedative drugs.

EMCDDA Director Wolfgang Götz says: 'Drugs can go quickly in and out of fashion. As one substance is suppressed another can rapidly take its place. This underlines the importance of the mechanisms we have developed in Europe to identify new drug threats such as those seen in today's case study. The E-POD project forms part of the EMCDDA's pan-European radar on emerging trends and can help countries build counter measures to respond quickly to new waves in drug use and their associated health risks'.

Notes:

⁽¹⁾ Today's case study was carried out under the EMCDDA's European Perspectives On Drugs project (E-POD), conceived to detect, track and understand emerging drug trends in Europe: <http://www.emcdda.europa.eu/html.cfm/index7079EN.html>

⁽²⁾ See EMCDDA risk assessment report at <http://www.emcdda.europa.eu/html.cfm/index431EN.html>. GHB was added to Schedule IV of the 1971 UN Convention on Psychotropic Substances in March 2001.

⁽³⁾ While chemical analysis of drug samples can determine whether the substance is GHB or one of its precursors, once ingested it is no longer possible analytically to determine the exact substance consumed.

⁽⁴⁾ Most information about the prevalence and patterns of GHB use is drawn from surveys which ask respondents about their drug use. Whilst users may report having consumed GHB, they may in fact have inadvertently taken one of its precursors. The term GHB/GBL is thus used in the report to cover GHB and its precursors.

⁽⁵⁾ See EMCDDA 'Technical data sheet: sexual assaults facilitated by drugs or alcohol'

<http://www.emcdda.europa.eu/html.cfm/index7291EN.html>