

# The DAWN Report

JULY 2004

## Club Drugs, 2002 Update

### In Brief

This issue of *The DAWN Report* focuses on emergency department (ED) visits related to the abuse of a group of drugs often referred to as “club drugs.”<sup>1</sup> Four such drugs are included in this analysis—GHB (gamma hydroxy butyrate), Ketamine, LSD (lysergic acid diethylamide), and MDMA (methylenedioxyamphetamine, commonly known as Ecstasy).<sup>2</sup>

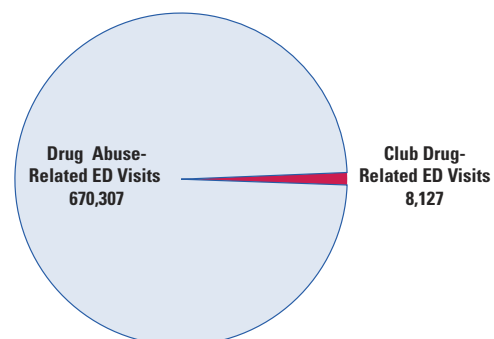
According to estimates from the Drug Abuse Warning Network (DAWN) for 2002:

- Collectively, GHB, Ketamine, LSD, and MDMA were involved in about 8,100 ED visits,<sup>3</sup> slightly more than 1 percent of total drug abuse-related ED visits, in the coterminous U.S. in 2002.
  - In 2002, MDMA was the most common club drug in drug-related ED visits, followed by GHB and LSD. The estimates of ED visits associated with Ketamine have remained low and statistically unchanged since 1998.
  - Drug abuse-related ED visits involving GHB appear to have peaked in 2000 and then declined by a third between 2000 and 2002. Similarly, ED visits involving MDMA appear to have peaked in 2001 and have been stable since.
  - Between 1994 and 2002, LSD-related ED visits declined more than 80 percent nationally (from 5,158 to 891 visits).
  - More than three-quarters of club drug-related ED visits involved multiple drugs. Alcohol, marijuana, and cocaine were the most common drugs reported in combination with club drugs.
- Although relatively rare, club drug-related ED visits more than doubled from 1994 to 1999. In contrast, drug abuse-related ED visits overall rose only 7 percent during the same period. When *The DAWN Report* examined club drugs initially in 2000, GHB-related ED visits had risen from less than 60 to around 3,000 and Ecstasy-related ED visits had risen from 250 to 2,850 in just 6 years. Even Ketamine, the least frequent club drug reported in ED visits, had grown from 19 to nearly 400 visits, according to DAWN.
- These trends now appear quite different. From 2000 to 2002, ED visits associated with GHB, Ketamine, LSD, and MDMA did not increase. Instead:
- From 2000 to 2002, ED visits associated with GHB declined by one-third;
  - Ketamine-related ED visits have remained at very low levels since 1998;
  - ED visits involving LSD were relatively stable between 1994 and 1999, but then declined rapidly from over 5,100 visits in 1999 to fewer than 900 visits in 2002; and
  - The last significant increase in ED visits associated with MDMA occurred between 1999 and 2001. From 2001 to 2002, MDMA visits remained stable<sup>5</sup> (Figure 2).

### Trends in Club Drug-related ED Visits: 1994-2002

In 2002, about 670,000, or less than 1 percent, of the more than 102 million ED visits in the coterminous U.S. were related to drug abuse. Among these, club drugs were implicated in about 1.2 percent or 8,100 ED visits in 2002 (Figure 1).<sup>4</sup>

**FIGURE 1**  
Club drug-related ED visits as a portion of total drug abuse-related ED visits, 2002



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2002 (03/2003 update).

## Club Drugs in Multi-drug ED Visits, 2002

About half (54%) of all drug abuse-related ED visits involve multiple drugs. Multi-drug visits were even more common among club drug visits. In 2002, at least one other drug was present in the majority of ED visits involving GHB (84%), Ketamine (80%), LSD (77%), and MDMA (72%). Some of these visits involved multiple club drugs, but club drugs were also frequently used in combination with alcohol, marijuana, cocaine, and heroin (Table 1).

### Characteristics of Patients, 2002

**Gender.** ED visits related to MDMA involved nearly equal numbers of males and females (50% male and 49% female). However, males were disproportionately represented in ED visits involving GHB (66%), Ketamine (77%), and LSD (87%) (Figure 3). By comparison, ED visits related to drug abuse overall were relatively evenly divided between males and females (53% of visits involved males while 46% involved females).

**Age.** Most of the patients in club drug-related ED visits were under age 26: 56 percent of GHB visits, 68 percent of Ketamine visits, 76 percent of LSD visits, and 75 percent of MDMA visits involved patients younger than

26 (Figure 4). By contrast, less than one-third of all drug-related ED visits involved patients younger than 26 years old.

### Discussion

An increase or decrease in ED visits associated with a particular drug may or may not be an accurate reflection of the nature or extent of the drug's prevalence in the population at large. For example, use of a less potent drug could lead to fewer ED visits even if the use itself had risen. New or different combinations of drugs or drugs with alcohol could lead to greater or fewer health effects requiring emergency care. Other factors unrelated to drug use, such as insurance coverage, can affect whether a person seeks care in an ED versus another health care setting or at all.

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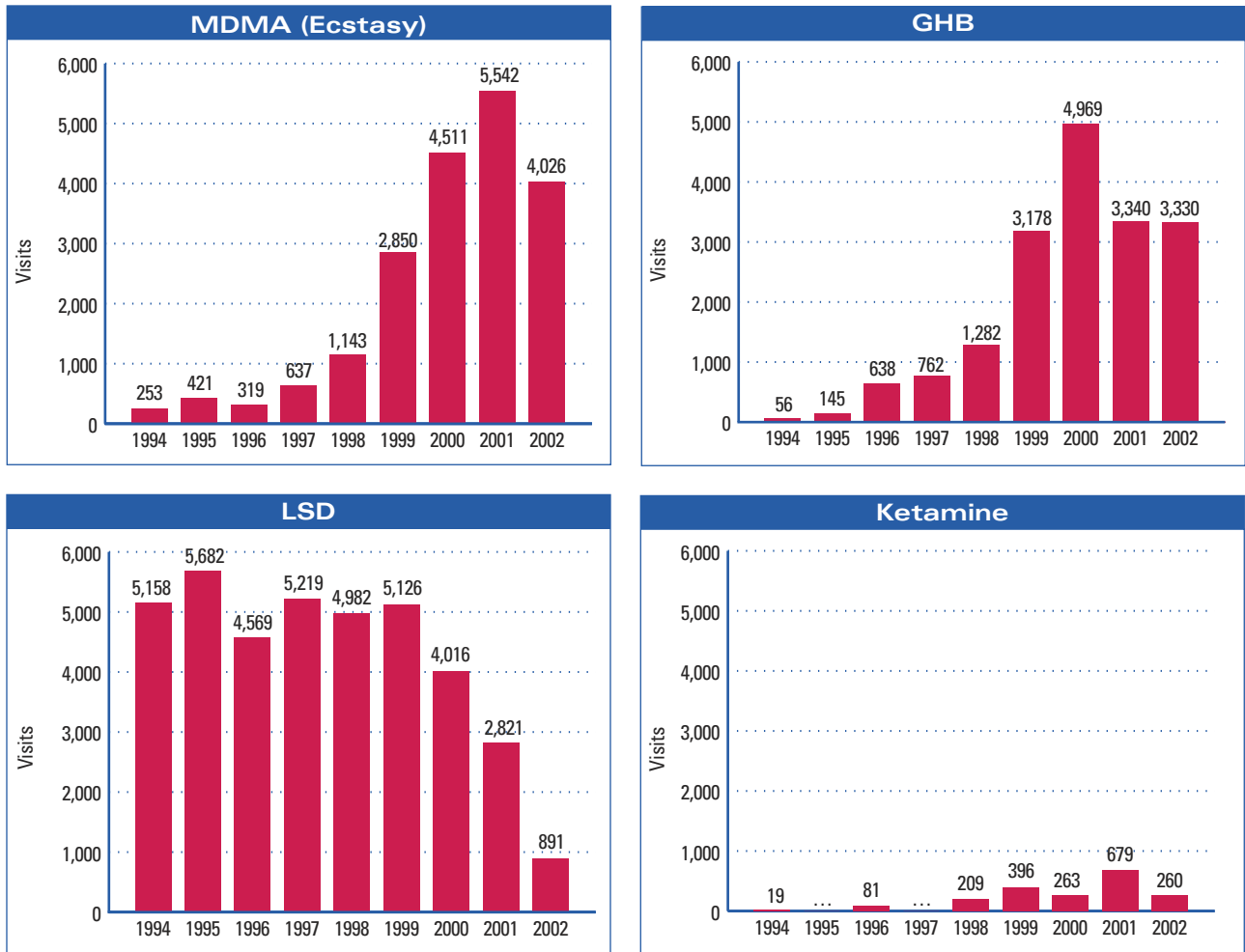
**TABLE 1**

### Presence of other drugs in ED visits involving club drugs: Estimates for the coterminous U.S., 2002

Drug categories and visits characteristics	GHB	Ketamine	LSD	MDMA (Ecstasy)
<b>Drug concomitance</b>				
Single-drug visits	531 (16%)	52 (20%)	204 (23%)	1,121 (28%)
Multi-drug visits	2,799 (84%)	208 (80%)	687 (77%)	2,905 (72%)
<b>TOTAL CLUB DRUG VISITS</b>	<b>3,330</b>	<b>260</b>	<b>891</b>	<b>4,026</b>
<b>Selected drug combinations</b>				
GHB		9 (3%)	5 (1%)	198 (5%)
Ketamine	9 (<1%)		9 (1%)	31 (1%)
LSD	5 (<1%)	9 (3%)		122 (3%)
MDMA (Ecstasy)	198 (6%)	31 (12%)	122 (14%)	
Alcohol-in-combination	2,131 (64%)	76 (29%)	402 (45%)	1,594 (40%)
Amphetamines	184 (6%)	10 (4%)	18 (2%)	75 (2%)
Cocaine	501 (15%)	34 (13%)	175 (20%)	815 (20%)
Heroin	7 (<1%)	63 (24%)	130 (15%)	184 (5%)
Marijuana	458 (14%)	50 (19%)	382 (43%)	1,555 (39%)
Methamphetamine	240 (7%)	18 (7%)	42 (5%)	173 (4%)

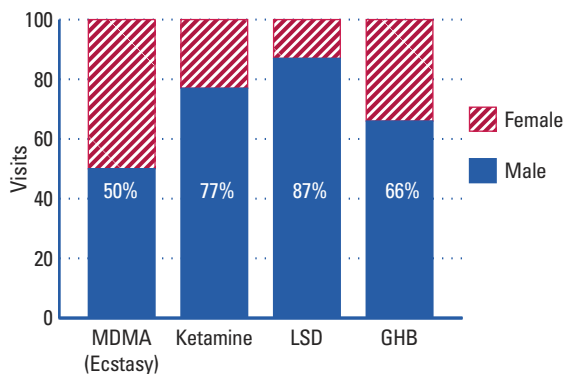
SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2002 (03/2003 update).

**FIGURE 2**  
**Club drug abuse-related ED visits: 1994-2002**



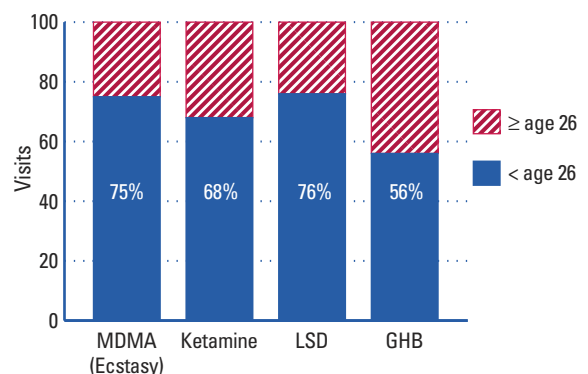
SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2002 (03/2003 update). Dots (...) indicate that an estimate with an RSE greater than 50% has been suppressed.

**FIGURE 3**  
**Drug abuse-related ED visits, by club drug and gender, 2002**



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2002 (03/2003 update).

**FIGURE 4**  
**Drug abuse-related ED visits, by club drug and age group, 2002**



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2002 (03/2003 update).

## End Notes

- <sup>1</sup> Recent data suggest that the term “club drugs,” which developed from the association of a group of drugs with “raves” and dance clubs, may be outdated, as the use of these drugs may have expanded beyond the club scene. We retain the term here for consistency with prior reports. Source: Community Epidemiology Work Group, National Institute on Drug Abuse. (2003, June). *Epidemiologic Trends in Drug Abuse: Advance Report*. Retrieved [December 2, 2003], from <http://www.drugabuse.gov/PDF/CEWG/AdvReport603.pdf>
- <sup>2</sup> Flunitrazepam (Rohypnol) estimates are not included in this update because the estimates have proven to be too imprecise, with relative standard errors exceeding 50 percent of the estimate in most years. Methamphetamine, which was included in previous publications related to club drugs, will be addressed in a separate issue of *The DAWN Report*. It will be available from the DAWN web site at <http://DAWNinfo.samhsa.gov/>.
- <sup>3</sup> Up to 4 drugs plus alcohol can be reported for a single ED visit in DAWN. Among the 8,127 visits involving club drugs in 2002, 374 visits involved multiple club drugs.
- <sup>4</sup> Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2003). *Emergency Department Trends From Drug Abuse Warning Network, Final Estimates 1995-2002* (DHHS Publication No. SMA 03-3780, DAWN Series D-24). Rockville, MD.
- <sup>5</sup> “Stable” means that the estimates for the 2 years were within the margin of error. In a statistical sense, there is no significant difference between the two estimates.

## About DAWN

The **Drug Abuse Warning Network (DAWN)** is a national surveillance system that collects data on drug abuse-related visits to emergency departments (EDs) and drug abuse-related deaths reviewed by medical examiners and coroners. Data on ED visits are collected from a national probability sample of non-Federal, short-stay hospitals, with oversampling in 21 major metropolitan areas. Data from the sample are used to generate estimates for the coterminous U.S. and the 21 metropolitan areas.

ED visits are reportable to DAWN if a patient between the ages of 6 and 97 was treated for a condition associated with intentional drug abuse, including recreational use, dependence, or suicide attempt. Visits involving chronic health conditions resulting from drug abuse are reportable. Abuse of prescription and over-the-counter medications is reportable. Adverse reactions associated with appropriate use of these drugs and accidental ingestion or inhalation of any drug are not reportable.



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