

The DAWN Report

JULY 2004

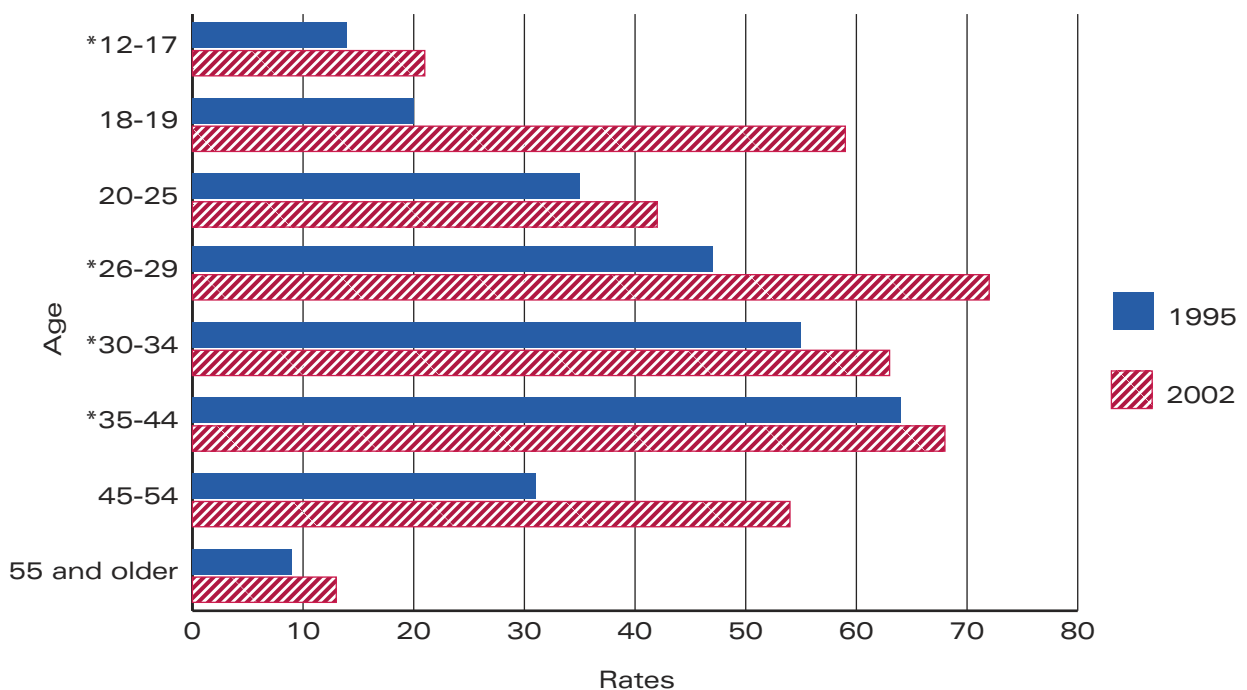
Demographic Characteristics of Benzodiazepine-involved ED Visits

In Brief

Benzodiazepines are psychotherapeutic sedatives used to treat anxiety, insomnia, and seizures. Examples of some common brands include Valium®, Xanax®, Klonopin®, and Ativan®.

- In 2002, 100,784 drug abuse-related emergency department (ED) visits involved benzodiazepines.¹
- In 1995 and 2002, patients age 26 to 44 had the highest rates of benzodiazepine-involved ED visits, but the greatest rate increase from 1995 to 2002 was for patients age 18 and 19 (Figure 1).
- In 1995, the rate of drug abuse-related ED visits involving benzodiazepines among female patients was greater than among male patients (37 vs. 23 visits per 100,000 population). By 2002, however, there was no statistically significant difference between the rates for female and male patients.
- Nearly half of the drug abuse-related ED visits involving benzodiazepines were the result of suicide attempts.
- Suicide-related visits involving benzodiazepines have been stable since 1995, but visits attributed to drug dependence and drug-taking for psychic effects have been increasing.

FIGURE 1
Rates† of drug abuse-related ED visits involving benzodiazepines, by age: 1995, 2002



† Per 100,000 population.

* Change from 1995 to 2002 not statistically significant.

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

Background

Benzodiazepines were involved in over 100,000 drug abuse-related ED visits in 2002 and were the most frequently reported type of psychotherapeutic drug. From 1995 to 2002, drug abuse-related ED visits involving benzodiazepines increased 41 percent.

A report recently released by the Drug Abuse Warning Network (DAWN) examined trends for individual benzodiazepines and polydrug abuse in benzodiazepine-involved ED visits.² This report focuses on other characteristics of drug abuse-related ED visits that involved benzodiazepines.

Age

Because age groups in a population vary by size, it is inappropriate to make direct comparisons between the number of ED visits for each group. However, comparisons can be made of rates, which take into account the size of the age group as well as the number of ED visits.

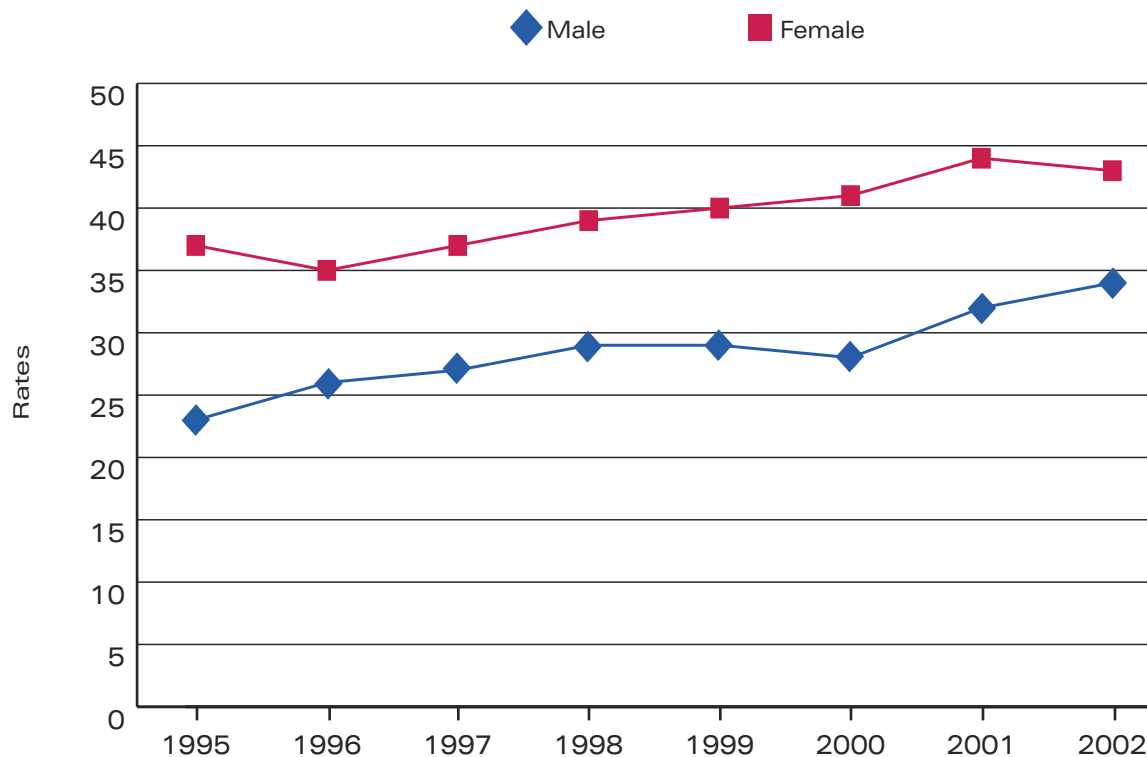
In 2002, the highest rates of benzodiazepine-involved ED visits were for adults age 26 to 44³ (Figure 1). The lowest rates were in the youngest and oldest age groups (12 to 17 and 55 and older).

During the period 1995 to 2002, however, the fastest growing group was patients age 18 to 19. The rate of benzodiazepine-involved ED visits for this group nearly tripled from 1995 to 2002 (from 20 to 59 per 100,000 population), with much of the increase occurring between 2000 and 2002. In comparison, the rate for patients age 20 to 25 grew 21 percent from 1995 to 2002 (from 35 to 42 visits per 100,000) including an increase of 6 percent from 2000 to 2002.

The rate for patients age 45 to 54 increased 72 percent from 1995 to 2002 (from 31 to 54 visits per 100,000 population), including a 27 percent increase from 2000 to 2002 (from 42). Rates for ED visits involving benzodiazepines for patients age 12 to 17 and 26 to 44 were stable from 1995 to 2002.

FIGURE 2

Trends in rates[†] of drug abuse-related ED visits involving benzodiazepines, by gender: 1995-2002



[†] Per 100,000 population.

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

Gender

In 1995, the rate of ED visits involving benzodiazepines was higher for female patients (37 per 100,000 population) than for male patients (23 per 100,000 population) (Figure 2). While the rates for drug abuse-related visits involving benzodiazepines increased for both female and male patients from 1995 to 2002, the male rate increased more rapidly. By 2002, there was no significant difference between the rate of benzodiazepine-involved ED visits for male patients (34 per 100,000 population) and the rate for female patients (43 per 100,000 population).

Motive for drug abuse

Since 1995, suicide has been the most frequent motive underlying benzodiazepine-involved ED visits, responsible for 45 percent (44,989) of these visits in 2002.

While the number of suicide-related visits involving benzodiazepines has been stable since 1995, visits attributed to other motives have been increasing. From 1995 to 2002, benzodiazepine visits related to drug dependence increased 178 percent, and visits by patients who abused drugs for psychic effects increased 59 percent (Figure 3).

For patients age 26 and older, attempted suicide was the most common reason for the drug abuse-related ED

visits involving benzodiazepines. For patients age 12 to 25, however, there was no significant difference between the number of suicide-related visits (1,540) and visits where the motive for drug-taking was to achieve psychic effects (2,017).

For female patients, attempted suicide was the most common drug use motive leading to benzodiazepine-involved ED visits; for male patients, the most frequent motive was equally likely to be suicide or drug dependence.

Outcome of visits

Most drug abuse-related ED visits involving benzodiazepines resulted in hospital admission (63%; 63,701 cases). In approximately one-third of the visits, patients were treated and released (34%; 34,062). In the remainder of visits (3,021), the patients left against medical advice, died, or the visit outcome was unknown.

Notes

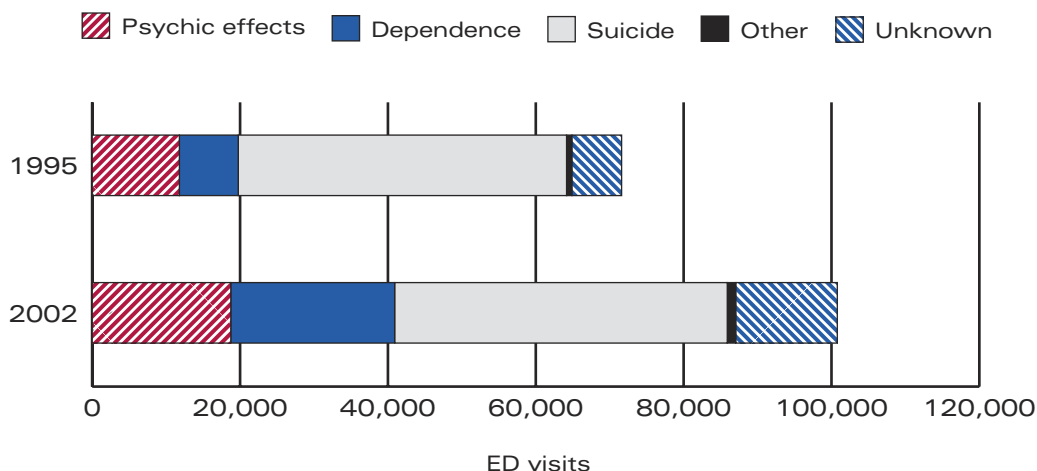
¹ For a more extensive list of drug estimates for the Nation and the 21 metropolitan areas, see *ED Trends From DAWN, Final Estimates 1995-2002* online at <http://DAWNinfo.samhsa.gov/>.

² *Benzodiazepines in Drug Abuse-Related Emergency Department Visits: 1995-2002* available at http://dawninfo.samhsa.gov/pubs_94_02/shortreports/.

³ The rates for the 3 age groups shown in Figure 1—26 to 29, 30 to 34, and 35 to 44—were statistically equivalent.

FIGURE 3

Drug abuse-related ED visits involving benzodiazepines, by motive: 1995, 2002



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

About DAWN

The **Drug Abuse Warning Network (DAWN)** is a national public health 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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