

# The DAWN Report

August 24, 2010

## Emergency Department Visits Involving Methamphetamine: 2004 to 2008

**M**ethamphetamine use has been in the public eye since the late 1990s, when use of this drug—which began as a West Coast phenomenon—began moving eastward and increasing; this trend began to

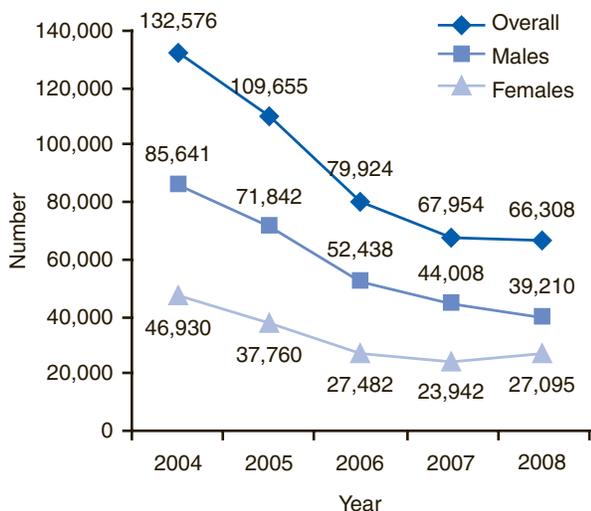
taper off in 2006. According to the National Survey on Drug Use and Health, the number of people using methamphetamine in the past year fluctuated from 1.6 to 1.9 million persons between 2002 and 2006, before decreasing to 850,000 in 2008.<sup>1</sup> The Treatment Episode Data Set shows that treatment admissions for primary use of methamphetamine increased steadily from 54,000 admissions in 1994 to 154,000 admissions in 2005 and then declined to 137,000 admissions in 2007.<sup>2</sup>

The recent decline in treatment admissions for methamphetamine may be attributed to a variety of supply and demand reduction efforts. In 2005, the Federal Government enacted the Combat Methamphetamine Epidemic Act of 2005, which limited the amount of pseudoephedrine and ephedrine that could be sold over the counter and required secure storage of these drugs in pharmacies.<sup>3</sup> In response to serious public health concerns regarding methamphetamine use, several local prevention efforts were launched, which culminated in a Federal initiative through the Office of National Drug Control Policy that provided communities with methamphetamine prevention tools.<sup>4</sup> Also, treatment providers and researchers have demonstrated that methamphetamine addiction—which once was thought untreatable—can be effectively addressed.<sup>5</sup>

### In Brief

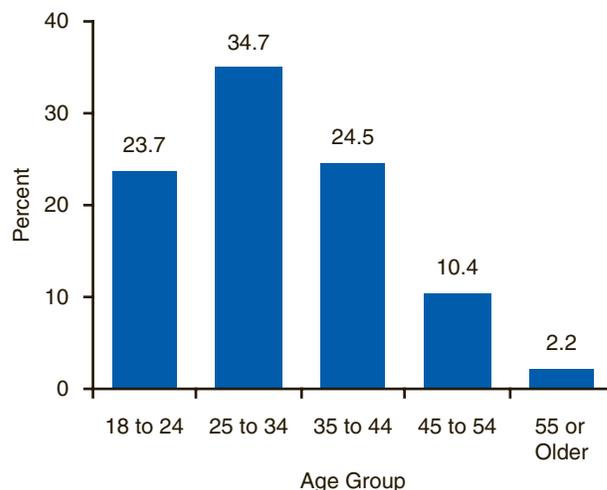
- In 2004, 8.2 percent (or 132,576 visits) of all ED visits involving drug misuse or abuse were related to methamphetamine use; however, by 2008, only 3.3 percent (or 66,308 visits) of such visits involved methamphetamine
- More than one quarter (27.6 percent) of methamphetamine-related ED visits during 2008 involved methamphetamine combined with one other drug, and 34.2 percent involved methamphetamine combined with two or more other drugs
- Almost one quarter of the methamphetamine-related ED visits also involved alcohol (24.0 percent) or marijuana (22.9 percent)
- Of all methamphetamine-involved ED visits, 6 in 10 (60.0 percent) resulted in patients being treated and released

**Figure 1. Trends in Emergency Department (ED) Visits Involving Methamphetamine, Overall and by Gender: 2004 to 2008**



Note: The changes for ED visits related to methamphetamine were statistically significant between 2005 and 2007.  
 Source: 2008 (08/2009 update) SAMHSA Drug Abuse Warning Network (DAWN).

**Figure 2. Percentage of Emergency Department (ED) Visits Involving Methamphetamine, by Age Group\*: 2008**



\* The data for ED visits made by patients aged 17 or younger were suppressed because of low precision.  
 Source: 2008 (08/2009 update) SAMHSA Drug Abuse Warning Network (DAWN).

The Drug Abuse Warning Network (DAWN) is a public health surveillance system that monitors drug-related emergency department (ED) visits in the United States and is a source for monitoring methamphetamine use. DAWN offers a unique perspective by examining use severe enough to warrant an ED visit. To be a DAWN case, the ED visit must have involved a drug, either as the direct cause of the visit or as a contributing factor. This issue of *The DAWN Report* focuses on ED visits related to methamphetamine use, including data on trends between 2004 and 2008 and on the characteristics of ED visits made during 2008.

however, by 2008, only 3.3 percent (or 66,308 visits) of such visits involved methamphetamine (Figure 1). By gender, between 2005 and 2007, there were statistically significant declines in the number of ED visits involving methamphetamine misuse or abuse for both male (a decrease of 39 percent) and female patients (a decrease of 37 percent).

In 2008, visits to the ED involving methamphetamine varied by age and gender.<sup>6</sup> During 2008, 34.7 percent of these visits were made by patients aged 25 to 34, 24.5 percent were made by patients aged 35 to 44, and 23.7 percent were made by patients aged 18 to 24 (Figure 2).

illicit drugs, or pharmaceutical drugs. More than one quarter (27.6 percent) involved methamphetamine combined with one other drug, and 34.2 percent involved methamphetamine combined with two or more other drugs.

The top five drugs reportedly used in combination with methamphetamine in 2008 are shown in Table 1. Almost one quarter of the methamphetamine-related ED visits also involved alcohol (24.0 percent) or marijuana (22.9 percent). Almost one in five visits related to methamphetamine use involved cocaine (19.7 percent) or opioids/opiates (17.4 percent); 9.5 percent involved benzodiazepines.

### Methamphetamine-Involved ED Visits, by Gender and Age

In 2004, 8.2 percent (or 132,576 visits) of all drug misuse or abuse ED visits involved methamphetamine use;

### Methamphetamine Combined with Other Drugs

Most methamphetamine-related ED visits during 2008 involved some combination with alcohol, other

### Discharge from the ED

Of all methamphetamine-involved ED visits in 2008, 6 in 10 (60.0 percent) resulted in patients being treated and released (Figure 3). Nearly one quarter (24.2 percent) of methamphetamine-involved ED visits resulted in patients

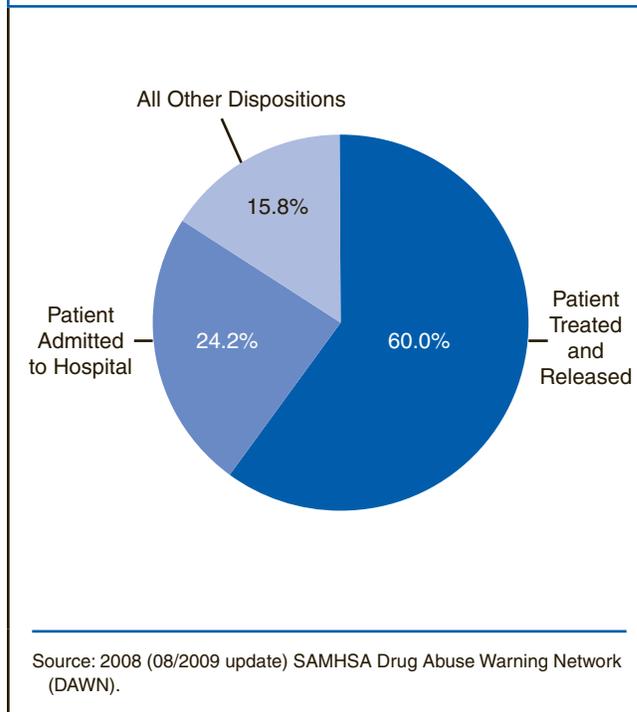
**Table 1. Emergency Department (ED) Visits of Drugs Most Frequently Combined with Methamphetamine: 2008**

Drug	Estimated Number of ED Visits*	Percentage of ED Visits*
All ED Visits Involving Methamphetamine	66,308	100.0
Alcohol	15,901	24.0
Marijuana	15,181	22.9
Cocaine	13,034	19.7
Opioids/Opiates	11,508	17.4
Benzodiazepines	6,306	9.5

\* Because multiple drugs may be involved in each visit and only the top five drugs are presented, visit estimates may not add to the total and percentages may not add to 100 percent.

Source: 2008 (08/2009 update) SAMHSA Drug Abuse Warning Network (DAWN).

**Figure 3. Patient Disposition of Emergency Department (ED) Visits Involving Methamphetamine: 2008**



being admitted to a hospital, and 15.8 percent resulted in another type of discharge (e.g., patient transfers, patient leaving against medical advice, death, or some other type of discharge).

## Discussion

Confirming the findings of other studies, ED visits involving methamphetamine generally declined between 2004 and 2008. Although overall methamphetamine use has decreased nationally, many people continue to use this highly addictive drug so that it remains a serious health concern among particular subpopulations and in certain regions of the country (e.g., the West Coast).<sup>7</sup>

Given that three fifths of patients seen for medical emergencies involving methamphetamine were simply treated and released in 2008, an ED visit may present an important opportunity to intervene with methamphetamine users. Hospital staff can be instrumental in educating

patients and their families about the negative physical and mental health consequences of continued use, as well as providing referrals to treatment or counseling services. Since the majority of ED visits involving methamphetamine also involved other drugs, ED staff could also be instrumental in educating patients on the dangers of polydrug use.

### End Notes

- Office of Applied Studies. (2009, September). *Results from the 2008 National Survey on Drug Use and Health: Detailed tables*. Rockville, MD: Substance Abuse and Mental Health Services Administration. [Available at <http://oas.samhsa.gov/NSDUH/2k8NSDUH/tabs/TOC.htm>]
- Office of Applied Studies. (2009). *Treatment Episode Data Set (TEDS). Highlights—2007. National admissions to substance abuse treatment services* (DHHS Publication No. SMA 09-4360, DASIS Series S-45). Rockville, MD: Substance Abuse and Mental Health Services Administration. [Available at <http://www.dasis.samhsa.gov/teds07/tedshigh2k7.pdf>]
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- The data for ED visits made by patients aged 17 or younger were suppressed because of low precision.
- Community Epidemiology Work Group. (2009, June). *Volume II: Proceedings of the Community Epidemiology Work Group in Drug Abuse*. Bethesda, MD: National Institute on Drug Abuse. [Available at <http://www.drugabuse.gov/about/organization/cewg/Reports.html>]

### Suggested Citation

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Findings from SAMHSA's 2008 (08/2009 update) Drug Abuse Warning Network (DAWN)

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The Drug Abuse Warning Network (DAWN) is a public health surveillance system that monitors drug-related morbidity and mortality. DAWN uses a probability sample of hospitals to produce estimates of drug-related emergency department (ED) visits for the United States and selected metropolitan areas annually. DAWN also produces annual profiles of drug-related deaths reviewed by medical examiners or coroners in selected metropolitan areas and States.

Any ED visit related to recent drug use is included in DAWN. All types of drugs—licit and illicit—are covered. Alcohol is included for adults when it occurs with another drug. Alcohol always is reported for minors even if no other drug is present. DAWN's method of classifying drugs was derived from the Multum *Lexicon*, Copyright 2008, Multum Information Services, Inc. The Multum Licensing Agreement can be found in DAWN annual publications and at <http://www.multum.com/license.htm>.

DAWN is one of three major surveys conducted by the Substance Abuse and Mental Health Services Administration's Office of Applied Studies (SAMHSA/OAS). For more information on other OAS surveys, go to <http://oas.samhsa.gov>. SAMHSA has contracts with Westat (Rockville, MD) and RTI International (Research Triangle Park, NC) to operate the DAWN system and produce publications.

For publications and additional information about DAWN, go to <http://DAWNinfo.samhsa.gov>.



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