

New The DAWN Report

Issue 19, 2006

DRUG ABUSE WARNING NETWORK

Opiate-Related Drug Misuse Deaths in Six States: 2003

The misuse of prescription pain medications, especially those containing natural or synthetic opiates, is a problem attracting nationwide attention. According to the 2004 National Survey on Drug Use and Health, an estimated 4.4

million persons aged 12 or older had used opiate pain medications nonmedically in the past month.¹ The consequences of this can be severe: in 2004, opiate pain medications were involved in an estimated 158,281 emergency department (ED) visits attributed to drug misuse/abuse.²

In Brief

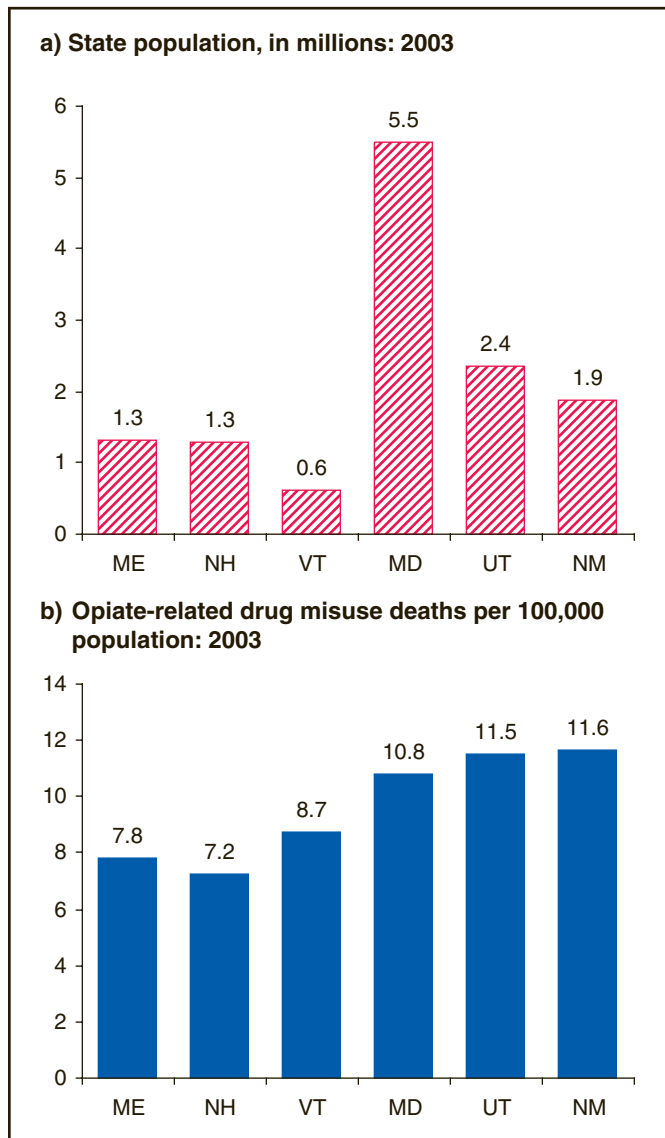
According to the Drug Abuse Warning Network (DAWN):

- In the six States that participate in the mortality component of the Drug Abuse Warning Network (DAWN)—Maine, New Hampshire, Vermont, Maryland, Utah, and New Mexico—the rates of opiate-related drug misuse deaths in 2003 ranged from 7.2 per 100,000 population in New Hampshire to 11.6 per 100,000 population in New Mexico.
- In each of these six States, most opiate-related drug misuse deaths involved multiple drugs.
- In five of the six States, adults aged 35 to 54 had the highest rates of opiate misuse deaths. In the remaining State (Maine), the highest rate was for adults aged 21 to 34.

This report examines the involvement of opiates in deaths related to drug misuse in Maine, New Hampshire, Vermont, Maryland, Utah, and New Mexico. These States were selected because they participated in the Drug Abuse Warning Network (DAWN) in 2003. DAWN is a public health surveillance system that monitors drug-related morbidity and mortality.³ Although DAWN is best known for estimates of drug-related ED visits for the Nation, DAWN also provides valuable information about drug-related deaths because of the participation of medical examiners and coroners in selected metropolitan areas and States. By analyzing States, deaths in rural as well as urban areas are included, and the State's population can be used to calculate rates.

DAWN collects data on all deaths where drugs played a role, either directly (such as an overdose) or indirectly (such as a fatal car crash where drugs were involved). A *drug misuse death* is defined as a drug-related death caused by homicide by drugs, overmedication, all other accidental causes, and where the cause could not be determined. This report includes all deaths related to drug misuse where an opiate (including natural and synthetic opiates) contributed to the death. Opiates include

Figure 1. State population and opiate-related drug misuse deaths: 2003



Source: a) U.S. Census Bureau; b) Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2003 (September 2004 update).

prescription pain medications as well as heroin, which is included because its metabolite cannot always be distinguished from the metabolites of other opiates. The drugs acquired through legitimate prescriptions cannot be differentiated from diverted prescription medications or illicit drugs because information on the source is not available.

Opiate-related misuse deaths in the six participating States

The six States vary considerably in size and in the number of opiate-related fatalities. Maryland, the largest participating State, had a population of 5.5 million and 595 drug misuse deaths involving opiates in 2003 (Figure 1, Table 1). In comparison, Vermont, the smallest state, had a population of only 619,000 and 54 opiate-related drug misuse deaths. When population size is taken into account, however, it becomes clear that these States face problems of similar magnitude. Although the smaller New England States had lower rates of opiate-related misuse deaths than the three other States, the difference between Vermont and Maryland was only two deaths per 100,000 population.

Because its data are from medical examiner records, DAWN is able to capture very specific information about drugs. The involvement of three opiate pain medications—oxycodone, hydrocodone, and methadone—is of particular interest (Table 1). Oxycodone was involved in 30 percent of the opiate-related misuse deaths in Vermont, but was relatively uncommon in Maryland (14%) and New Mexico (13%). The involvement of hydrocodone ranged from 3 percent in Maryland to 17 percent in Utah.

In five of the six States, methadone outnumbered oxycodone or hydrocodone in opiate-related misuse deaths (the exception was Vermont). Nearly half (46%)

Table 1. Involvement of oxycodone, hydrocodone, and methadone in opiate misuse deaths: 2003

State	Oxycodone		Hydrocodone		Methadone		Total Opiate Misuse Deaths
	Deaths	Percent	Deaths	Percent	Deaths	Percent	
Maine	24	24%	7	7%	47	46%	102
New Hampshire	19	20%	7	8%	34	37%	93
Vermont	16	30%	8	15%	12	22%	54
Maryland	86	14%	15	3%	142	24%	595
Utah	72	27%	47	17%	93	34%	270
New Mexico	29	13%	22	10%	36	17%	218

Source: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2003 (September 2004 update).

of Maine’s and more than one third of opiate-related misuse deaths in New Hampshire and Utah (37% and 34%, respectively) involved methadone. In comparison, methadone was implicated in only 17 percent of the opiate-related misuse deaths in New Mexico. Methadone is used to treat addiction to heroin and other opiates and also can be used to treat chronic pain. As discussed above, DAWN cannot identify which type of methadone was involved in these deaths. Also, DAWN cannot distinguish the persons who misused methadone from the persons who were in methadone treatment and misusing other drugs at the same time.

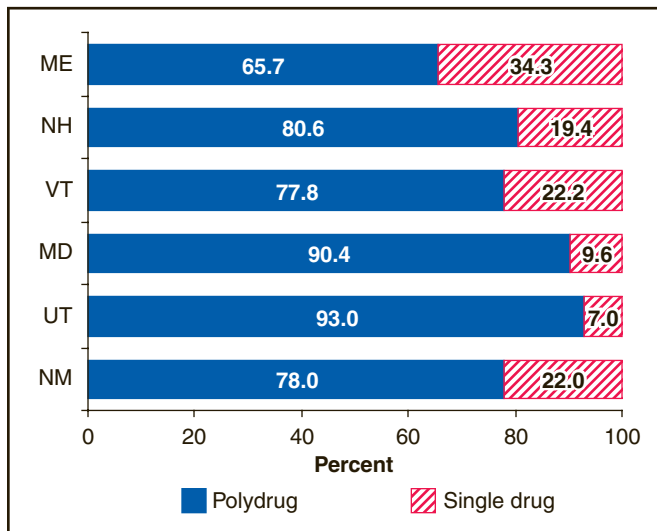
In each of the six States, most of the opiate-related misuse deaths involved more than one drug (Figure 2). Utah had the highest percentage of polydrug deaths (93%), while Maine had the lowest (66%).

Demographic characteristics

In each participating State, more men than women died from opiate-related drug misuse in 2003. The proportion of males ranged from 58 percent in Utah to 78 percent in Vermont.

In the six participating States, opiate-related misuse deaths were not evenly distributed across age groups. In all of these States, the lowest rates were among the youngest and oldest age groups (under age 21 and 55 years or older) (Figure 3). In five of the six States, adults aged 35 to 54 had the highest fatality rates from opiate-related drug misuse. However, in Maine, young adults aged 21 to 34 had the highest rate.

Figure 2. Polydrug involvement in opiate-related misuse deaths: 2003

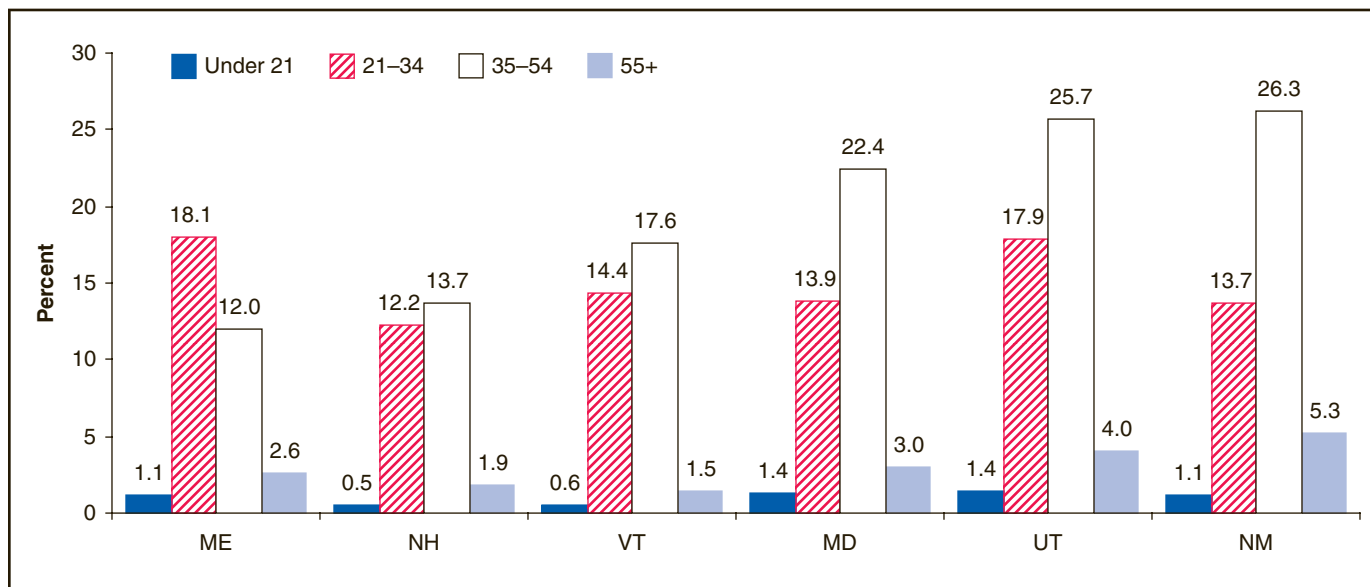


Source: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2003 (September 2004 update).

Notes

- Office of Applied Studies. (2005). *Results from the 2004 National Survey on Drug Use and Health: National Findings* (DHHS Publication No. SMA 05-4062, NSDUH Series H-28). Rockville, MD: Substance Abuse and Mental Health Services Administration. [Available <http://www.oas.samhsa.gov/nsduh/2k4nsduh/2k4Results/2k4Results.htm#fig2.2>]
- Office of Applied Studies. (in press). *Drug Abuse Warning Network, 2004: National Estimates of Drug-Related Emergency Department Visits*. Rockville, MD: Substance Abuse and Mental Health Services Administration. [To be available at <http://dawninfo.samhsa.gov/pubs/edpubs/default.asp>]
- Information about DAWN is available in the “About DAWN” box in this publication, and on the Internet at <http://dawninfo.samhsa.gov/>.

Figure 3. Opiate-related drug misuse deaths by age group, per 100,000 population: 2003



Source: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2003 (September 2004 update).

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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 or death 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 is always included for minors. DAWN's method of classifying drugs was derived from the Multum Lexicon, Copyright © 2005, 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 information on other OAS surveys, go to <http://www.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>.