OFFICE OF APPLIED STUDIES

Mortality Data From the Drug Abuse Warning Network, 2001

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HIGHLIGHTS

Mortality Data From the Drug Abuse Warning Network, 2001 provides information on deaths involving drug abuse that were identified and submitted by participating death investigation jurisdictions across the United States. Two types of drug abuse deaths are reportable to DAWN: those that were drug-induced (i.e., the drug(s) caused the death) and those that were drug-related (i.e., the drug played a contributory role in the death). The Office of Applied Studies (OAS) of the Substance Abuse and Mental Health Services Administration (SAMHSA) is responsible for the operation of DAWN. **Drug abuse deaths described in this document do not represent the Nation as a whole, nor do they necessarily represent the total number of deaths in which drug abuse was a causal or contributing factor in any given metropolitan area.** Rather, DAWN cases reflect the number of drug abuse deaths reviewed, identified, and reported by participating medical examiners and coroners in selected metropolitan areas. These findings can be used to monitor changes over time.

In 2001, 128 jurisdictions in 42 metropolitan areas submitted data to DAWN. The 42 metropolitan areas range in size from Casper, WY, (population 66,798) to Chicago (population 8,342,190). Likewise, there was a wide range across metropolitan areas in the number of deaths reviewed by participating medical examiners and coroners. Within metropolitan areas, participating jurisdictions identified between 2 and 874 drug abuse-related deaths in 2001; DAWN-reportable deaths accounted for 0.3 to 18 percent of all deaths reviewed in these metropolitan areas.

A total of 33 metropolitan areas reported at least 30 drug abuse deaths to DAWN for 2001. Full "metropolitan area profiles" are provided for each of these areas. These profiles include a number of tables that together show the number and characteristics of drug abuse deaths reported to DAWN, along with recent trends among participating jurisdictions. These "Highlights" will focus on these 33 metropolitan areas.

Some metropolitan areas saw substantial changes in the number of drug abuse cases from 2000 to 2001. Notably, Wilmington (DE) reported a 113 percent increase in cases in 2001 compared to 2000 (from 54 to 115). Other cities reporting substantially more cases in 2001 than in 2000 include the following: Providence (a 49% increase, from 35 to 52), Buffalo (44%, from 89 to 128), and Denver (28%, from 242 to 310). Conversely, facilities in Seattle reported 29 percent fewer drug abuse deaths in 2001 compared to 2000 (264 versus 188), Salt Lake City reported 24 percent fewer DAWN cases (129 versus 98), and Phoenix reported 23 percent fewer DAWN cases (587 versus 453).

Characteristics of Drug Abuse Deaths

In every metropolitan area, men constituted more than half of all DAWN cases, ranging from 63 percent of drug abuse deaths in Seattle and Salt Lake City to 80 percent of drug deaths in Baltimore. Drug abuse deaths among adolescents and young adults were relatively rare. Decedents under age 25 accounted for less than 20 percent of DAWN cases across all metropolitan areas and 10 percent or less of all drug abuse deaths in about half of the participating areas. In contrast, decedents over the age of 45 accounted for more than one-third of all drug abuse deaths in 20 cities, ranging as high as 51 percent of all DAWN cases (San Francisco). Readers should note that DAWN collects data only on decedents between the ages of 6 and 97.

DAWN collects data on both drug-induced and drug-related deaths. In 32 out of the 33 metropolitan areas, drug-induced (e.g., overdose) deaths accounted for more than half of all deaths reported to DAWN (mean = 76%). However, deaths reported to DAWN are not limited to drug overdoses. Participating jurisdictions are also asked to report the number of deaths in which drug abuse was a contributing factor, but not the direct cause of death. In only 1 of the 33 metropolitan areas (Omaha) deaths were more commonly classified as drug-related than drug-induced.

In the average metropolitan area, 17 percent of all drug abuse deaths were ruled as suicides, while 48 percent were ruled accidental and 35 percent were due to undetermined or other causes. The proportion of suicide deaths ranged from 0 in Wilmington to 31 percent of drug abuse deaths in St. Louis. One-quarter or more of drug abuse deaths were determined to be suicides in: Dallas (28%), Oklahoma City (27%), San Antonio (27%), Minneapolis-St. Paul (26%), and Chicago (25%). No single drug accounted for the majority of suicide deaths.

Drug Combination Patterns

Up to 6 drugs can be mentioned in conjunction with a reportable case; therefore, the total number of drug "mentions" always exceeds the total number of deaths. When multiple drugs are involved in a single case, the cause of death cannot be attributed to any one particular substance in DAWN. To facilitate interpretation of the findings, tables produced for each of the participating metropolitan areas differentiate those deaths involving only one drug (termed "single-drug" deaths) and those involving more ("multiple-drug" deaths). Participating areas reported, on average, that only 23 percent of all deaths involved a single drug. All other deaths, ranging from 53 percent in Atlanta to 91 percent in Louisville, Phoenix, and San Antonio involved 2 or more substances.

The most common drugs reported to DAWN singly were cocaine, heroin/morphine, narcotic analgesics, and marijuana. The most common drug combinations reported to DAWN were alcohol and cocaine; alcohol and heroin/morphine; cocaine and heroin/morphine; alcohol, cocaine, and heroin/morphine; heroin/morphine and other narcotic analgesics; alcohol and narcotic analgesics (other than heroin/morphine); and amphetamines and methamphetamine. The number of cases involving these combinations varied across participating metropolitan areas, and many other combinations were reported.

The tendency for deaths to involve multiple drugs is evident even among those involving heroin/morphine, the other narcotic analgesics, and cocaine. Across metropolitan areas, nearly 9 out of 10 deaths (89%, ranging from 66% to 100%) involving heroin/morphine also had mentions of at least one other drug. Likewise, 9 out of 10 deaths (90%, range 66% to 100%) involving other narcotic analgesics, which include substances such as methadone, codeine, oxycodone, and hydrocodone, involved multiple drugs. Nearly 8 out of 10 deaths (78%, range 46% to 96%) involving cocaine also had mentions of at least one other drug.

Major Drugs of Abuse

As in prior years, the typical DAWN case involved between 2 and 4 different drugs. Although hundreds of individual drugs were mentioned in DAWN case reports, 3 drugs accounted for the vast majority of mentions. In 22 of the 33 metropolitan areas, heroin/morphine, cocaine, and alcohol (in combination with other drugs) were the 3 most frequently mentioned drugs in reported cases. In 16 cities, these 3 drugs accounted for 40 percent or more of all

mentions. They accounted for the vast majority of all drug mentions in reported cases in Chicago (77%) and over half of mentions in Newark (55%), Baltimore (53%), and Cleveland (52%).

There were some notable changes across participating metropolitan areas in heroin/morphine, cocaine, and alcohol-in-combination mentions. In 2001, 19 metropolitan areas represented in DAWN saw a decrease in the number of heroin/morphine mentions, while 9 metropolitan areas reported more heroin/morphine mentions than last year. Likewise, 14 cities reported a decrease in the frequency of cocaine involvement in drug abuse deaths, while 14 cities saw an overall increase in cocaine relative to 2000. Across the 33 metropolitan areas, alcohol was involved in an average of 33 percent of all drug abuse deaths.

Other Drugs of Abuse

All of the 33 metropolitan areas had heroin/morphine, cocaine, or alcohol-in-combination as the most frequently mentioned substance in their DAWN cases, and (as noted above) for most areas, these were the 3 most frequently reported. An unnamed narcotic analgesic (i.e., narcotic analgesics-NOS) was the most frequently mentioned drug in Louisville (37 of 332 drug mentions) and Providence (35 of 96 drug mentions).

Marijuana was reported in a number of cases, but at a much lower frequency than alcohol, cocaine, or heroin/morphine. Cannabis ranked among the 10 most common drugs in 16 cities, including Detroit (74 deaths), Dallas (65), and Kansas City (63). Marijuana is very often reported in combination with other substances; in metropolitan areas that reported any marijuana in drug abuse deaths, an average of 79 percent of those deaths involved marijuana and at least one other substance. Importantly, some jurisdictions do not conduct toxicology tests for the presence of marijuana and do not report marijuana to DAWN. The full extent of the under-reporting of marijuana to DAWN is unknown.

Methamphetamine continues to be geographically concentrated in the Midwest and West. Metropolitan areas reporting the most methamphetamine mentions were Phoenix (122), San Diego (94), and Las Vegas (53). Fifteen metropolitan areas reported fewer than 5 methamphetamine mentions. Long Island (49) was the only metropolitan area in the east that reported more than a few methamphetamine mentions. Among metropolitan areas reporting any methamphetamine mentions, the drug was reported with at least one other drug in 9 out of 10 cases (91%), on average.

Club Drugs

The DAWN metropolitan area summary tables include information on "club drugs" as a group, combining all mentions of methylenedioxymethamphetamine (MDMA or Ecstasy), Ketamine, gamma hydroxy butyrate (GHB) and its precursor gamma butyrolactone (GBL), and flunitrazepam (Rohypnol). As in prior years, these substances together accounted for very few deaths in any of the DAWN metropolitan areas. Only 6 cities reported more than 5 mentions of club drugs; the cities with the most mentions were Philadelphia (16), Miami (15), Dallas (11), San Diego (9), New Orleans (7), and Boston (6). Club drugs were rarely reported alone.

Abuse of Prescription and Over-the-Counter Substances

Participating jurisdictions reported a number of prescription and over-the-counter drugs involved in drug abuse deaths; most were benzodiazepines or narcotic analgesics. The following substances ranked among the 10 most common drugs reported in at least 15 cities:

- Codeine ranked in the top 10 drugs mentioned in 21 cities, including Detroit (118), Philadelphia (113), Phoenix (91), and Newark (77).
- Diazepam (a benzodiazepine) ranked among the top 10 drugs mentioned in 24 cities, including Detroit (103), Philadelphia (82), Phoenix (45), Dallas (36), and Las Vegas (36).
- Diphenhydramine[1] ranked in the top 10 in 19 cities, notably Detroit (71), Philadelphia (67), Phoenix (54), Baltimore (50), and Dallas (40).
- Hydrocodone ranked among the 10 most common drugs in 18 cities, including Detroit (63), Las Vegas (46), Dallas (36), New Orleans (33), and Oklahoma City (31).
- Methadone ranked in the top 10 in 24 cities, including Baltimore (52), Detroit (47), Newark (44), Chicago (41), and Phoenix (40).
- Oxycodone ranked among the 10 most common drugs in 19 cities, including Philadelphia (88), Baltimore (34), Boston (34), Phoenix (34), and Miami (28).

[1] Diphenhydramine is neither a benzodiazepine nor a narcotic analgesic. It is classified in DAWN under miscellaneous anxiolytics, sedatives, and hypnotics.

INTRODUCTION

This publication presents information on deaths related to drug abuse that was collected through the Drug Abuse Warning Network (DAWN) for calendar year 2001. DAWN is an ongoing, national data system that collects information on drug abuse deaths from participating medical examiners and coroners. DAWN also collects information on drug-related visits to emergency departments from a national sample of hospitals. The Office of Applied Studies (OAS) of the Substance Abuse and Mental Health Services Administration (SAMHSA) has been responsible for DAWN operations since 1992.

Except for a few modifications to the emergency department sample in the mid-1980s, DAWN has changed little since its inception by the Drug Enforcement Administration (DEA) in the early 1970s. In late 1997, OAS began a comprehensive assessment of DAWN's design in response to concerns about uses and limitations of DAWN findings. An independent evaluation of DAWN was undertaken in 1999, and recommendations for an alternative design were delivered in 2001. This assessment has motivated many recent changes to the content and operation of the DAWN system, as well as to the findings and information available from DAWN, and many more changes are expected over the coming years.

This is the second edition of *Mortality Data From the Drug Abuse Warning Network,* which was redesigned and renamed beginning with the publication of 2000 findings. It replaced the publication series entitled *DAWN Annual Medical Examiner Data.* Data on drug abuse deaths are collected from a variety of jurisdictions, including medical examiners, coroners, and other death investigation systems. While the data may originate from different sources, all of the information is about mortality related to drug abuse. *Mortality Data From DAWN* is published annually, detailing data collected in the previous calendar year.

DAWN relies on a detailed "drug vocabulary" to categorize the thousands of substances that are reported each year. The drug vocabulary is, quite literally, the language—the codes and terminology—that DAWN uses to record and classify drugs and other substances involved in emergency department visits and deaths. Beginning with mortality data from the year 2000, we implemented substantial changes to the existing vocabulary to ensure that reported substances are accurately and consistently classified. The overhaul and replacement of the DAWN drug vocabulary has been described in detail elsewhere.[2]

In the next section, we describe the sources and methods used in collecting data for DAWN, and highlight certain limitations of the data. We then provide an overview of the publication layout, including a detailed description of each table and its proper interpretation. Subsequent chapters provide DAWN mortality findings for each participating metropolitan area and for selected counties.

[2] See Substance Abuse and Mental Health Services Administration, Office of Applied Studies. *Emergency Department Trends From DAWN, Preliminary Estimates January-June 2001 with Revised Estimates 1994-2000,* DAWN Series D-20, DHHS Publication No. (SMA) 02-3634, Rockville, MD, 2001. The classification of drugs currently in use by DAWN is derived from the Multum Lexicon, Copyright (c) 2001, Multum Information Services, Inc. The classification has been modified to meet DAWN's unique requirements (2001). The Multum Licensing Agreement governing use of the Lexicon is provided in an appendix to the ED Trends report and can be found on the Internet at www.multum.com.

Data Collection Procedures

DAWN is an ongoing drug abuse data collection system. The major objectives of the system include the following:

- Identify substances associated with drug abuse deaths that are reported by participating jurisdictions;
- Monitor drug abuse patterns and trends and detect new drugs of abuse and new drug combinations;
- Assess adverse health outcomes associated with drug abuse; and
- Provide data for national, state, and local drug abuse policy and program planning.

Case Criteria – Medical Examiners/Coroner Cases

To be reported to DAWN, a case must involve a decedent between the ages of 6 and 97 and must meet all of the following criteria:

- The death was drug-induced (i.e., one or more drugs directly caused the death) or drug-related (i.e., drug abuse was a contributing factor in the death);
- The death was caused by or related to drug abuse—that is, the use of an illegal drug or the nonmedical use of a legal drug; and
- The decedent used the substance due to dependence, to commit suicide, or to achieve psychic effects.

Nonmedical uses of legal drugs include the use of prescription drugs in a manner inconsistent with acceptable medical practice, or the use of over-the-counter (OTC) drugs contrary to approved labeling or indications for specific physiological conditions (e.g., diabetes, heart disease).

Deaths involving the following circumstances are not reportable to DAWN:

- Drug abuse that is unrelated to the death (e.g., a history of drug abuse when no drugs were detected in the decedent's system);
- Accidental ingestion or inhalation of a substance with no intent to abuse it;
- Adverse reactions to prescription or OTC medications taken as prescribed or labeled;
- Noncompliance cases in which an individual took less or accidentally took more medication than prescribed or directed by label instructions; and
- Drug consumption to conceal substances from law enforcement and avoid arrest.

These criteria mean that DAWN does not include any deaths in which the decedent had not personally used a drug. For example, an individual who dies in a drive-by shooting associated with drug-related activity or a pedestrian who is struck and killed by a driver under the influence of methamphetamine might be considered "drug-related deaths" in terms of broader policy issues. However, those cases are not reportable to DAWN unless the decedents themselves had been abusing a reportable substance at the time of their deaths. DAWN also excludes deaths by homicide.

For each case that is determined to meet the reportability criteria described above, the facility's designated DAWN reporter completes an electronic or paper form to document the following:

- Date of death;
- Demographic characteristics (gender, age, race/ethnicity);
- Cause of death (i.e., whether the death was drug-induced or drug-related);
- For drug-related cases, whether the drug abuse combined with a physiological condition or external physical event or caused a medical disorder that resulted in death; and whether the relationship of the drug abuse to the death was confirmed or presumed (see Glossary);
- The manner of death (accidental, suicide, undetermined, natural);
- Whether alcohol was involved (in the presence of at least one other drug);
- The specific drug(s) involved; and
- The route of administration for each drug (oral, injection, inhalation, smoked, snorted, other, unknown).

Report forms for each case are then transmitted to the central data collection office for processing.[3] The DAWN case report form is included in Appendix A.

A number of quality control procedures are used to ensure that DAWN data are as accurate and methodologically consistent as possible. These procedures include the following:

- Training personnel responsible for collecting the data in participating facilities;
- Providing printed and on-line manuals and other materials that specify data collection methods, definitions, and requirements;
- Monitoring reporting practices and problem resolution by a staff of traveling field liaisons;
- In-house manual editing of paper data collection forms, and automated error-checks for electronic data collection forms, with followup to resolve problems; and
- Periodic "reabstracting" studies at participating facilities to assess the accuracy and completeness of reporting.

Data Limitations

DAWN data are gathered from medical examiners, coroners, and other death investigation jurisdictions. Not all deaths are reviewed by these facilities. In fact, it has been estimated that only about 20 percent of all deaths are reviewed by a medical examiner or coroner.[4] However, given state and local statutes establishing jurisdiction over death investigations, it is likely that most drug abuse deaths are reviewed by jurisdictions eligible for inclusion in DAWN.

Participation in DAWN is voluntary, and there are minor variations in the number of participants from year to year. Participating death investigation jurisdictions are not the result of a statistical sample. **Therefore, counts of drug abuse deaths do not represent the Nation as a whole, nor do they represent any metropolitan area with less than full participation.** This limitation has led to misinterpretations of the DAWN mortality findings in the past. Previous DAWN publications contained this warning, yet they also provided aggregated totals for the entire DAWN system. Those totals were often misinterpreted as national estimates. Likewise, metropolitan area totals were also misinterpreted as being representative of the entire metropolitan statistical area (MSA), or as being comparable from one MSA to another.

[3] As of fall 2002, more than 80% of the participating jurisdictions were no longer submitting their data to DAWN on paper forms. Instead, they were submitting their data electronically. Full conversion to electronic reporting, which speeds data processing and improves accuracy, is expected within the next year.

[4] More information on death investigation statutes and procedures is available from the Centers for Disease Control and Prevention's Medical Examiner and Coroner Information Sharing Project homepage, at www.cdc.gov/epo/dphsi/mecisp/index.htm.

The format of this publication (initiated with the 2000 publication) seeks to avoid these problems of interpretation by aggregating data only at the metropolitan area level and by clearly showing the degree of participation within each MSA. *Mortality Data From DAWN, 2001* does not include any system-wide summaries, either in the text or in tables. Each metropolitan area is presented separately, with participating and nonparticipating jurisdictions listed. This is intended to discourage aggregation of data across MSAs and direct comparison between MSAs. Population data are provided so that consumers may understand the context of any comparisons they choose to make, either within or across MSAs (e.g., 2 counties may have reported the same number of drug abuse deaths, but they may have vastly different populations).

DAWN collects information about only those drug abuse episodes that have resulted in a death and, subsequently, have been identified and reported as drug-induced or drug-related by a participating facility. Although standard instruction manuals and training are provided to each DAWN reporter, the specific methods and procedures used to identify drug abuse deaths and the associated drugs may vary from facility to facility. For example, some jurisdictions may report cases involving circumstantial evidence; others may report only drug abuse deaths confirmed through toxicological analyses.

Cases reported to DAWN may have multiple drug mentions. Up to 6 different substances can be recorded for each reportable case, and the typical case in recent years has involved between 2 and 4 drugs. Alcohol is reported in a separate field, but only when at least one other reportable drug is recorded. DAWN does not capture information on deaths in which alcohol is the only substance involved. In addition, it is likely that some number of abused substances go undetected and, thus, unreported.

DAWN data are extracted from source records—death investigation case files—which may vary in the specificity with which particular drugs are documented. A drug may be documented by brand (trade) name, by generic name, by chemical name, by street name, as a metabolite, or as a nonspecific term. The level of specificity sometimes depends on the testing protocols followed in death investigations. Drug data submitted to DAWN contain the terms used in the source record at whatever level of detail is available. After receipt of the data, drugs are recoded into generic categories and duplicate entries are eliminated. Because of the variation in the raw drug data from source records, DAWN data on individual brands are deemed unreliable and are not published.

Each DAWN case represents an individual decedent. However, because multiple drugs can be, and typically are, reported, the total number of drug mentions will always exceed the total number of cases reported to DAWN. In addition, DAWN cases include both drug-induced and drug-related deaths. As a result, readers should not assume that any given substance was, by itself, the cause of death. To address this issue, several tables provide separate entries for single-drug deaths (deaths in which only one drug was involved), drug-induced deaths, and various drug combinations.

In some instances, deaths related to drug abuse are reported to DAWN some time after the death occurred. Reporting delays are common because death investigations are often lengthy and involved. Reporters may have to await the results of autopsies and laboratory tests to determine that a death involved drug abuse. This publication was prepared with data for deaths that occurred in 2001 and were submitted by the end of August 2002.

How to Use This Publication

Mortality Data From DAWN, 2001 provides information on drug-induced and drug-related deaths identified and submitted by participating death investigation jurisdictions across the United States. In 2001, 128 jurisdictions in 42 metropolitan areas submitted data to DAWN. In this publication, tabulations are displayed for each of these metropolitan areas, and for selected large counties within those areas.

MSA definitions used in DAWN are consistent with those established by the Office of Management and Budget (OMB) and used in tabulating data from the decennial Census. Death investigation jurisdictions tend to be consistent with county borders, whereas MSAs often comprise multiple counties and, therefore, multiple death investigation jurisdictions. We use the term "jurisdiction" synonymously with "county" to reflect the fact that data are requested and reported at the county level, regardless of the actual jurisdiction boundaries. (See Glossary.)

Table 1 lists the MSAs represented in DAWN, the total number of death investigation jurisdictions (counties) in each MSA, the number and percentage of counties for which data were reported to DAWN for at least 10 months in 2001, and the proportion of the MSA's total population that is covered by DAWN-participating jurisdictions (counties). Information on jurisdiction coverage is provided to emphasize the fact that most of the metropolitan areas are not fully represented in DAWN. Information about population coverage is important because it shows that, although jurisdiction coverage is incomplete in most areas, the most populous counties are often represented. For example, Table 1 shows that although only 5 (25%) of the 20 counties in the Atlanta MSA participated in DAWN in 2001, those 5 counties are home to 67 percent of the metropolitan area's total population. An awareness of the extent of DAWN's coverage within a given MSA should provide the reader a better perspective on what DAWN represents.

The following changes in participation and reporting from 2000 are notable:

- The Kansas City MSA previously included findings from only Jackson County. Wyandotte County, which reported data for at least 10 months in 2001, is included with Jackson County in this publication. An "Area Spotlight" for Kansas City has also been added to this publication.
- Rankin County, MS reported data for at least 10 months in 2001 so the Jackson MSA was added to this publication.
- Findings from the following counties were excluded from this publication because they reported data for fewer than 10 months in 2001: Paulding County, GA (Atlanta MSA), Rockwall County, TX (Dallas PMSA), St. Bernard Parish, LA (New Orleans MSA), and Madison County, MO (St. Louis MSA). Other counties in these metropolitan areas reported drug abuse deaths for 2001.
- Los Angeles County reported data for fewer than 10 months in 2001 so the Los Angeles Primary MSA (PMSA) is not included in this publication.
- Incomplete data were received for the New York metropolitan area (but not Long Island) for 2001. Instead of reporting data we know to be incomplete and potentially misleading, New York was omitted from this publication.

Table 1. Overview of Participation in DAWN, 2001

Metropolitan area	Total jurisdictions (counties)	Participating jurisdictions (counties)		% MSA population in participating jurisdictions
		N	% of total	
Atlanta, GA	20	5	25%	67%
Baltimore, MD	7	7	100%	100%
Birmingham, AL	4	1	25%	71%
Boston, MA	7	5	71%	75%
Boulder, CO	1	1	100%	100%
Buffalo, NY	2	2	100%	100%
Casper, WY	1	1	100%	100%
Chicago, IL	9	5	56%	91%
Cleveland, OH	6	1	17%	61%
Dallas, TX	8	5	63%	94%
Denver, CO	5	5	100%	100%
Detroit, MI	6	4	67%	95%
Fargo, ND	2	2	100%	100%
Indianapolis, IN	9	2	22%	60%
Jackson, MS	3	1	33%	27%
Kansas City, MO-KS	11	2	18%	45%
Las Vegas, NV	3	1	33%	88%
Long Island, NY	2	2	100%	100%
Louisville, KY	7	1	14%	67%
Manchester-Nashua, NH	3	1	33%	49%
Miami, FL	1	1	100%	100%
Middlesex-Somerset, NJ	3	1	33%	25%
Milwaukee, WI	4	2	50%	86%
Minneapolis-St. Paul, MN	13	9	69%	83%
New Orleans, LA	8	4	50%	88%
Newark, NJ	5	3	60%	88%
Norfolk, VA	15	3	20%	48%
Oklahoma City, OK	6	1	17%	61%
Omaha, NE	5	3	60%	84%
Philadelphia, PA	9	8	89%	99%
Phoenix, AZ	2	1	50%	94%
Portland, OR	6	3	50%	75%
Providence, RI	4	2	50%	82%
St. Louis, MO	13	8	62%	86%
Salt Lake City, UT	3	2	67%	85%
San Antonio, TX	4	1	25%	87%
San Diego, CA	1	1	100%	100%
San Francisco, CA	3	3	100%	100%
Seattle, WA	3	2	67%	97%
Sioux Falls, SD	2	1	50%	85%
Washington, DC	25	14	56%	92%
Wilmington, DE	2	1	50%	85%

Metropolitan Area Profiles

We provide metropolitan area profiles for 33 areas. **Figure 1** depicts the general layout of each 2-page profile, with the 8 component tables and graphs labeled A through H. Each is described in this section. A Glossary in **Appendix B** provides definitions of terms used in this overview and in the tables.

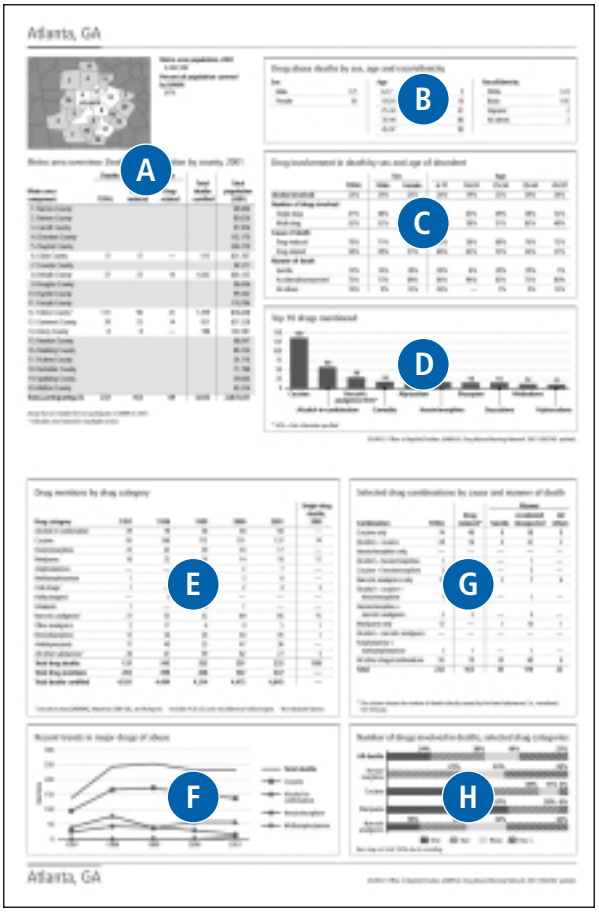


Figure 1. Sample metropolitan area profile layout

Table A

Each metropolitan area profile begins with a map displaying the boundaries of the MSA and its component counties. Those jurisdictions within the metropolitan area that did not provide complete data in 2001 are shaded. Also provided is information on the area's total population and the proportion of the population residing in DAWN-reporting counties. This information is consistent with that shown in Table 1. Table A then lists each of the component jurisdictions for the MSA, which are numbered to correspond to their location on the area map. For ease of reference, nonparticipating areas are shaded. Jurisdictions marked with an asterisk (*) are highlighted in separate "Area Spotlights."

An overview of the MSA's data is displayed in the remaining columns in Table A. From left to right, the table lists the total number of drug abuse deaths reported in 2001 for each participating jurisdiction and the number of those deaths that were drug-induced and drug-related. The next column shows the total number of deaths processed and certified by that jurisdiction in 2001—the figures in this column reflect all deaths certified, not only the drug abuse deaths. Finally, the last column provides population data for each county for 2001. Population data are also shown for nonparticipating jurisdictions, so that readers can assess the extent of DAWN's coverage of the MSA.

The final line of Table A provides a summary of the data for the metropolitan area. The summary includes only the DAWN-participating areas. All subsequent tables are based on aggregated data for the participating jurisdictions in the metro area. The denominator for total drug abuse deaths is the figure at the bottom of the "Total" column in Table A.

Table B

Table B presents summary demographic data on all drug abuse deaths reported to DAWN by participating jurisdictions in the metropolitan area in 2001. The number of drug abuse deaths by sex, age, and race/ethnicity are shown. Readers should note that DAWN does not collect data on decedents under age 6 or over age 97.

Beginning in January 2000, the race and ethnicity categories collected on DAWN report forms changed to match a new standard protocol.[5] The new protocol permitted separate reporting of race and Hispanic ethnicity; the ability to capture more than one race for an individual; a few modifications in nomenclature (e.g., "Black" was changed to "Black or African American"); division of certain categories ("Asian or Pacific Islander" was split into 2 categories, "Asian" and "Native Hawaiian or Other Pacific Islander"); and elimination of the "Other" category. Despite the increased detail allowed by the new categories, the actual race/ethnicity data reported to DAWN changed very little. As a result, we have retained the classification used previously to tabulate DAWN data. The one exception is that the less commonly used categories are now collapsed into a category termed "All others," representing those not otherwise tabulated.

Table C

Table C provides an overview of the distribution of drug abuse deaths by type and demographic category. Drug involvement is described using the following categories:

- **Alcohol involved.** The proportion of all reported drug abuse deaths in which alcohol was involved. Recall that alcohol is only reportable to DAWN in the presence of another drug, so it is incorrect to conclude that alcohol was the direct or sole cause of death.
- **Number of drugs involved.** Users of the DAWN data have asked for a clearer representation of the number of drugs involved in a case. This row shows the proportion of all drug abuse deaths that involved only one drug ("single-drug") as well as the proportion involving multiple drugs ("multi-drug").
- **Cause of death.** This row indicates the number of deaths that were drug-induced (i.e., directly caused by drug abuse) and drug-related (i.e., drug abuse was a contributing factor). The total number of drug-induced and drug-related deaths is consistent with the figures shown in the last row of Table A.
- **Manner of death.** This row classifies drug abuse deaths into three categories: suicide, accidental/unexpected, and all others. The "All others" category includes cases in which manner of death was recorded as natural or unknown, or for which data were missing.

Table D

This bar chart shows the 10 most common drugs mentioned in cases reported to DAWN, and the number of mentions, across the participating jurisdictions in the metropolitan area. Therefore, the specific drugs appearing in this chart vary from one MSA to the next.

As noted previously, the level of specificity with which drug data are reported to DAWN varies based on the documentation in the source record. For example, cocaine may be reported to DAWN as the metabolite "benzoylecgonine," the street term "crack," or simply "cocaine." Each of these terms would be accepted into the DAWN database, but all such mentions would be recoded to "cocaine" for this publication. If a particular DAWN case report contained both "benzoylecgonine" and "cocaine," we would convert the 2 mentions into a single mention of "cocaine," using a process known as de-duplication.

[5] See Office of Management and Budget, *Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity,* Federal Register, 62 FR 58782, October 30, 1997.

Even more variability is possible for prescription and OTC medications reported to DAWN. For example, the prescription drug meperidine might be reported to DAWN as the brand "Darvon," the metabolite "norpropoxyphene," or the chemical term "propoxyphene hydrochloride." For this publication, all such mentions would be recoded to "meperidine" and de-duplicated.

DAWN also receives case reports containing only nonspecific drug terms such as "opiate," "tricyclic antidepressant," "benzodiazepine," or "herbal." Because it is impossible to assign such nonspecific terms to a specific drug, categories such as "narcotic analgesics-NOS," "tricyclic antidepressants-NOS," "benzodiazepines-NOS," and "herbal products-NOS" (where "NOS" means "not otherwise specified") were created and appear in Table D. The reader should understand that terms are classified into an "NOS" category only when assignment to a more specific category is not possible. For example, the 4 NOS categories noted here would never include specific terms such as "morphine," "doxepin," "diazepam," or "echinacea," respectively.

Table E

Table E presents the number of drug mentions reported each year from 1997-2001 for participating jurisdictions within the MSA. Drugs are classified into 14 categories, using a list specifically designed for this publication. Single-drug deaths for the latest year are also shown.

Drug categories. Table E uses 14 drug categories. Some categories include only a single, specific drug (e.g., cocaine), while others include a number of different substances sharing similar properties. For categories that include only one drug (i.e., alcohol-in-combination, cocaine, heroin/morphine, marijuana, and methamphetamine), the number of mentions is equivalent to the number of deaths involving that drug. For the remainder of the categories, which are collections of multiple drugs, the number of mentions may exceed the number of deaths.

These categories are as follows:

- **Alcohol-in-combination.** Recall that alcohol is only reportable to DAWN if at least one other reportable substance was also detected. Therefore, the number of single-drug deaths for alcohol-in-combination will always be zero.
- **Cocaine.** Includes both crack and powder cocaine.
- **Heroin/morphine.** Although heroin may be the ingested drug, it metabolizes to morphine so that, depending on the toxicology testing protocols used, heroin and morphine may not be distinguishable in a given decedent. For this reason, both heroin and morphine are reported in a single category. If a case is reported to have involved both heroin and morphine, those drug mentions are "de-duplicated" and count as only one heroin/morphine mention.
- **Marijuana.** Includes marijuana and hashish.
- **Amphetamines.** Includes amphetamines and dextroamphetamines. Does not include other central nervous system stimulants, such as caffeine or methylphenidate.
- **Methamphetamine.** Includes methamphetamine and substances reported as "speed."
- **Club drugs.** This category is included because of the recent interest in the group of substances commonly known as "designer" or "club drugs." Because of their small numbers, these substances have been aggregated into a single category for presentation in this table. For this publication, "club drugs" include methylenedioxymethamphetamine (MDMA or "Ecstasy"); Ketamine; gamma hydroxy butyrate (GHB) and its

precursor gamma butyrolactone (GBL); and flunitrazepam (Rohypnol). Readers should note that in other settings, the definition of "club drugs" may include LSD, methamphetamine, or other substances, so caution should be exercised in comparing the data in Table E to data obtained from other sources.

- **Hallucinogens.** This is a general category that includes LSD, PCP, and miscellaneous hallucinogens.
- **Inhalants.** This broad category includes anesthetic gases and any psychoactive nonpharmaceutical substance for which the documented route of administration was inhalation.
- **Narcotic analgesics.** This category includes all legal and illegal narcotic analgesics and narcotic analgesic combinations, except for heroin/morphine, which was classified separately above. Analysts interested in tracking trends in narcotic-related deaths should sum the "narcotic analgesics" category with the heroin/morphine category.
- **Other analgesics.** This category includes analgesics other than those classified above. These include antimigraine agents, Cox-2 inhibitors, nonsteroidal anti-inflammatory agents, salicylates, analgesic combinations, and miscellaneous analgesics. Analysts interested in tracking trends in deaths related to the abuse of analgesics should sum this category with the heroin/morphine and narcotic analgesics categories.
- **Benzodiazepines.** This category includes all benzodiazepines except flunitrazepam, which is classified as a club drug.
- **Antidepressants.** This category includes all types of antidepressants, including monoamine oxidase inhibitors (MAOIs), selective serotonin reuptake inhibitors (SSRIs), and tricyclic antidepressants.
- **All other substances.** This row contains all other substances reported to DAWN but not tabulated in the preceding rows. The sum of "all other substances" and the preceding 13 categories yields the "total drug mentions" shown in the next-to-last row of the table.

Readers should note that the total number of deaths in any given drug category (with the exception of alcohol-in-combination, cocaine, and heroin/morphine) is usually quite small, even in metropolitan areas with a relatively large number of drug abuse deaths. The presentation of these data, despite their low frequency, represents a deliberate effort to provide useful information about the relative occurrence of deaths due to the abuse of different types of substances. The publication, *Emergency Department Trends From DAWN,* provides more detailed information about which specific drugs fall into particular categories.

Single-drug deaths. For each drug category listed, the far right-hand column of Table E shows the number of deaths in 2001 that involved only the listed drug and no others. Since the previous columns in Table E are expressed in mentions, not deaths, comparisons of single-drug deaths should be limited to those categories where the number of mentions is equivalent to the number of deaths (i.e., for cocaine, heroin/morphine, marijuana, and methamphetamine). In other rows, the grouping of drugs into categories may result in more mentions than deaths. In most instances, the number of deaths involving only a single drug will be lower than the total number of deaths in which that drug was reported. Even in single-drug deaths, however, readers should not assume that the drug was necessarily the direct and sole cause of death.

Data gaps. Because DAWN mortality data are actual counts rather than statistical estimates, trends over time can be affected by data gaps (due to facility nonresponse) as well as by the introduction of new jurisdictions. In this publication, trend data for 4 metropolitan areas are affected by such factors, and Table E has been modified accordingly for each area. Specifically, the following adaptations to Table E have been made:

- **Kansas City.** In 1997, 1998, 1999, and 2001, both Wyandotte and Jackson Counties in the Kansas City MSA reported data to DAWN. In 2000, only Jackson County provided data. As a result, Kansas City's Table E shows data

for the 2 jurisdictions combined for only 4 of the 5 years (1997, 1998, 1999, and 2001). Data for Jackson County for all 5 years are shown in a separate Area Spotlight, described below.

- **Milwaukee.** Until 2000, the Milwaukee MSA was represented in DAWN only by Waukesha County. Milwaukee County began reporting data in 2000. In order to show comparable data over the 5-year period, only Waukesha County's data are shown in Table E of the metropolitan area profile. Data for Milwaukee County are shown in a separate Area Spotlight, described below.
- **Philadelphia.** In 1997, 1999, 2000, and 2001, 8 counties in the Philadelphia MSA reported data to DAWN. In 1998, only 7 counties provided data. In order to show comparable data for the entire 5-year period, Philadelphia's Table E is based only on the 7 jurisdictions that reported data in each of the 5 years.
- **Providence.** Two counties in the Providence MSA participate in DAWN. In 1999, neither county provided data for more than 10 months of the year. As a result, Table E shows data for only 4 of the 5 years (1997, 1998, 2000, and 2001).
- **Wilmington, DE.** There is only one DAWN-participating county in the Wilmington MSA. In 1998, that county did not provide data for the full year. As a result, Table E shows data for only 4 of the 5 years (1997 and 1999-2001).

Table F

Table F is a line graph showing recent trends in 4 major drugs of abuse: cocaine, alcohol-in-combination, heroin/morphine, and methamphetamine. The data in this graph exactly match the data in Table E for these 4 categories. Thus, for the 5 MSAs affected by data gaps in Table E (Kansas City, Milwaukee, Philadelphia, Providence, and Wilmington), the line graph in Table F has less than the full complement of data represented, as described above.

Table G

This table shows selected drug combinations by cause and manner of death as reported by all participating jurisdictions in the metropolitan area in 2001. (That is, the "Total" figure in Table G equals the total number of drug abuse deaths shown in Table A.)

Information on drug combinations is provided to demonstrate that drug abuse deaths often involve multiple substances. The 11 categories shown in this table include the most common 1-drug, 2-drug, and 3-drug combinations reported to DAWN by all participating jurisdictions in 2001. That is, all deaths submitted for 2001 were reviewed to determine which drugs and drug combinations were most commonly reported, then ranked in descending frequency. The top 11 categories form the standard combination list used in Table G.[6] The same 11 categories are reported for every metropolitan area, although the relative frequency of any given combination will vary from MSA to MSA.

Each death is assigned to one and only one category in Table G. A case is tallied under the listed drug combination if the decedent had used all and only those substances. For example, a decedent who had used alcohol and cocaine would be included in the totals for the "Alcohol + Cocaine" row, but not in the "Cocaine only" row. A decedent who had used alcohol, cocaine, and heroin/morphine would be included in the totals for "Alcohol + Cocaine + Heroin/morphine," but not in the "Alcohol + Cocaine" row. A decedent who had used alcohol, cocaine, heroin, and

[6] Overall, deaths involving single mentions of cocaine were more common than deaths involving both alcohol and cocaine, which were in turn more common than deaths involving only heroin/morphine, and so forth.

methamphetamine would be included in the "All other drugs/combinations" row, because that specific 4-drug combination is not shown in the preceding rows.

For each drug or combination, information on the cause and manner of death are provided. The column labeled "Drug-induced" shows the number of all cases involving the listed drug combination that were determined to be drug-induced, or directly caused by the abuse of those drugs. The difference between "Total" and "Drug-induced" deaths for any given combination is the number of "Drug-related" deaths (i.e., deaths in which the abuse of the listed substance(s) was a contributory but not a causal factor). As before, this information is provided so that readers can differentiate "overdose" deaths from deaths in which drug abuse played a less central role.

The remaining columns in Table G show the distribution of deaths for each listed drug or drug combination across the three "manner of death" categories used previously. Specifically, the table shows the number of deaths in each category that were classified as suicide, accidental/unexpected, or other. The "All others" category includes cases in which the manner of death was reported as natural or undetermined, or for which manner of death was missing. Together, the 3 manner of death categories equal the total number of deaths in each drug combination category.

Readers should note that for Table G and Table H, the use of the term "combination" refers to cases in which multiple drugs were reported. Facilities are not asked to report (and likely could not determine) whether the reported substances were in fact used in combination (i.e., simultaneously). Some street drugs are themselves combinations of multiple substances and are reported as such only when this can be determined from the case file (e.g., the street term "speedball" refers to a combination of heroin and cocaine). Several prescription and OTC substances are also combinations (compounds) of multiple substances (e.g., acetaminophen with codeine), and are classified as such when reported. Classification of multi-drug compounds in the DAWN drug reference vocabulary is shown in detail elsewhere.[7]

Table H

Table H uses a horizontal stacked bar chart to represent graphically the number of drugs involved in all drug abuse deaths, as well as in deaths involving heroin, cocaine, marijuana, and narcotic analgesics. This chart provides somewhat different information than Table G. This information is provided to illustrate the fact that most drug abuse deaths reported to DAWN involve multiple substances. The chart should be interpreted as follows:

- **All Drug Deaths.** The top-most horizontal bar shows the number of substances involved in all drug abuse deaths reported by the participating jurisdictions in the metropolitan area. The bar shows the proportion of all drug abuse deaths in the MSA that involved 1 drug, 2 drugs, 3 drugs, and 4 or more drugs. So, for example, the bar may show that 15 percent of all drug abuse deaths in the MSA involved only 1 drug, 30 percent involved 2 drugs, 35 percent involved 3 drugs, and 20 percent involved 4 or more drugs. The denominator for this bar is the total number of drug abuse deaths shown in Table A. The proportion of deaths involving only 1 drug is consistent with the number of "single-drug deaths" reported in Table C; likewise, the combined proportion of deaths involving 2 drugs, 3 drugs, and 4 or more drugs is consistent with the number of "multi-drug deaths" reported in Table C.

[7] See Substance Abuse and Mental Health Services Administration, Office of Applied Studies. *Emergency Department Trends From DAWN, Final Estimates 1994-2001,* DAWN Series D-21, DHHS Publication No. (SMA) 02-3635, Rockville, MD, 2001.

- **Heroin/morphine.** This bar shows the distribution of the number of drugs mentioned in all deaths that involved heroin/morphine. As described above, readers should note that any death for which both heroin and morphine were reported has been reclassified as a single heroin/morphine mention. The bar is coded to show first the proportion of deaths related to heroin/morphine that involved only one drug—that is, they involved heroin/morphine only. The remaining segments of the bar show the number of deaths involving 2 drugs (i.e., heroin/morphine plus one other drug), 3 drugs (i.e., heroin/morphine plus 2 other drugs), and 4 or more drugs (i.e., heroin/morphine plus 3 or more other drugs).
- **Cocaine.** Interpretation of this bar is the same as described for heroin/morphine.
- **Marijuana.** Interpretation of this bar is the same as described for heroin/morphine. However, readers should note that there are two common patterns with marijuana that will affect the data displayed in this chart. First, marijuana is rarely the only drug involved in a drug abuse death. Thus, in many MSAs, the proportion of marijuana-involved cases labeled as "One drug" (i.e., marijuana only) will be zero or nearly zero. Second, many medical examiners and coroners do not run toxicology tests to detect the presence of marijuana. As a result, some facilities report no marijuana mentions to DAWN. This does not mean that marijuana is never involved in a drug abuse death in those jurisdictions—it means only that those data are unavailable. For these areas, there may be no bar for marijuana shown on the graph in Table H. This illuminates a limitation in our ability to interpret single-drug deaths-other drugs may actually have been involved in the "single-drug" deaths but went unreported to DAWN.
- **Narcotic analgesics.** This category is shown in Table H because of increasing interest in certain narcotics other than heroin, and because there is a sufficient number of these cases to warrant further description for most metropolitan areas. As noted above, this category does not include heroin/morphine.

Abbreviated Profiles for Areas with Few Cases

Abbreviated profiles are provided for metropolitan areas with too few cases to produce all 8 tables described above. In order to publish a full 2-page profile for a given metropolitan area, all participating jurisdictions in the MSA must have reported a combined total of at least 30 drug abuse deaths in the reporting year. In 2001, 9 areas reported fewer than 30 drug abuse deaths.

For these MSAs, we provide only Table A. This allows us to show the specific counties included in the metropolitan area, the population of each, the identities of those component jurisdictions that participated in DAWN in 2001, and the number of drug abuse deaths reported by each participating jurisdiction. If the number of participating jurisdictions or reported deaths increases in future years such that total drug abuse deaths exceed 30, then full 2-page metropolitan area profiles will be provided for these areas. Likewise, if any other metropolitan area drops below the 30-case threshold in future years, only Table A will be published for that MSA.

Area Spotlights

The next section shines a spotlight on key counties and/or cities within the participating metropolitan areas. This section reviews the criteria used for selecting spotlight areas and the tables provided for each.

Selection of Area Spotlights

As a general rule, spotlight reports are provided for the county representing the population center of a metropolitan area and/or the county containing the city for which the MSA is named. Spotlight reports are not produced for population centers when fewer than 30 drug abuse deaths are reported. The following examples and exceptions apply:

- We spotlight Fulton County in the Atlanta metropolitan area because it is both the major population center and contains the city of Atlanta. This is the pattern followed for most participating MSAs.
- In the Boston metropolitan area, we spotlight both Middlesex County (the most populous county in the MSA) and Suffolk County (the county containing the city of Boston). This approach applies similarly to Minneapolis-St. Paul and St. Louis.
- As noted above, data for Milwaukee County are not reflected in Tables E and F of the Milwaukee Metropolitan Area Profile. However, these data are provided in a separate spotlight on Milwaukee County.

In a few metropolitan areas, we spotlight multiple counties when their large populations and/or local interest warrant separate listings. These include the following:

- Long Island: Separate spotlights are shown for Nassau and Suffolk counties, which are nearly equal in population.
- Philadelphia: We spotlight both Philadelphia County and Camden County (NJ).
- Washington, DC: We spotlight the District of Columbia and 2 of the most populous counties in suburban Maryland (Montgomery County and Prince George's County).

For some very large metropolitan areas, no spotlight reports need to be produced because the metropolitan area contains only one county or had only one participating county. This occurred in the following areas:

- The Miami and San Diego metropolitan areas each contain only one county. Because deaths are reported to DAWN at the county level, there are no sub-areas that can be presented separately for these MSAs.
- Eight metropolitan areas contain multiple counties, only one of which participated in DAWN in 2001. Thus, there are no areas for which to produce separate summaries in these MSAs: Birmingham, Cleveland, Las Vegas, Louisville, Oklahoma City, Phoenix, San Antonio, and Wilmington (DE).

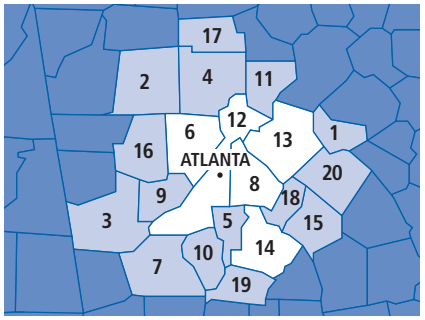
Content of Area Spotlight Reports

Spotlights provide data in essentially the same format as the full metropolitan area profiles. However, spotlights contain only Tables A through E as described above. Interpretation of these tables is the same as noted above, with the following exceptions:

- Table A provides a map showing the location of the spotlighted area relative to the rest of the MSA, and it provides summary counts of drug abuse deaths, total certified deaths, and county population for 2001.
- Table D shows the 10 most common drugs reported by the spotlighted area in 2001. These may differ from the 10 substances reported in Table D of the Metropolitan Area Profile.
- Table E includes trends only for the spotlighted jurisdiction. If the area did not provide data for all years displayed in the table, cells will be empty for those years.

METROPOLITAN AREA PROFILES

Atlanta, GA



Metro area population, 2001
4,262,584

Percent of population covered by DAWN
67%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Barrow County					48,946
2. Bartow County					80,026
3. Carroll County					91,956
4. Cherokee County					152,170
5. Clayton County					246,779
6. Cobb County	17	17	—	515	631,767
7. Coweta County					94,571
8. DeKalb County	37	23	14	1,642	665,133
9. Douglas County					96,006
10. Fayette County					95,542
11. Forsyth County					110,296
12. Fulton County*	131	90	41	1,359	816,638
13. Gwinnett County	39	25	14	931	621,528
14. Henry County	8	8	—	198	132,581
15. Newton County					68,047
16. Paulding County					89,734
17. Pickens County					24,776
18. Rockdale County					71,798
19. Spalding County					59,066
20. Walton County					65,224
Total, participating (5)	**232**	**163**	**69**	**4,645**	**2,867,647**

Areas that are shaded did not participate in DAWN in 2001.
* Indicates area featured in Spotlight section

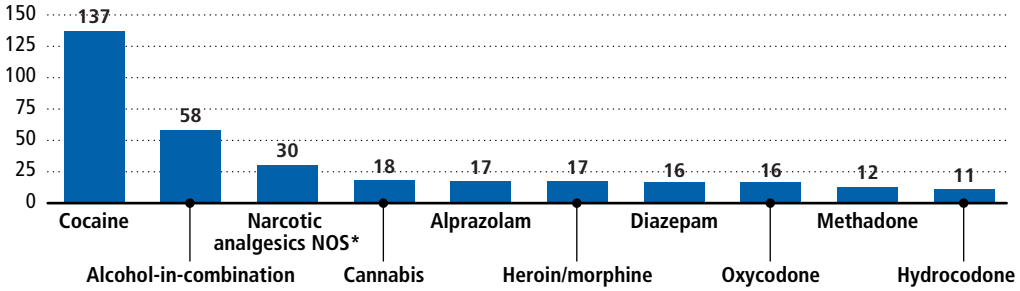
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	171	6-17	5	White	123
Female	61	18-24	16	Black	105
		25-34	41	Hispanic	2
		35-44	80	All others	2
		45-97	90		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	25%	25%	25%	20%	19%	22%	29%	24%
Number of drugs involved								
Single-drug	47%	48%	44%	40%	63%	49%	38%	52%
Multi-drug	53%	52%	56%	60%	38%	51%	63%	48%
Cause of death								
Drug-induced	70%	71%	69%	40%	38%	68%	76%	73%
Drug-related	30%	29%	31%	60%	63%	32%	24%	27%
Manner of death								
Suicide	15%	14%	18%	20%	6%	29%	19%	7%
Accidental/unexpected	75%	77%	69%	60%	94%	63%	73%	80%
All others	10%	9%	13%	20%	—	7%	9%	13%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	39	78	38	58	58	—
Cocaine	95	166	172	151	137	74
Heroin/morphine	25	43	39	30	17	—
Marijuana	16	23	14	14	18	12
Amphetamines	—	—	6	2	7	—
Methamphetamine	1	1	3	3	8	—
Club drugs[1]	1	—	6	2	4	3
Hallucinogens[2]	—	1	—	—	—	—
Inhalants	1	—	4	1	—	—
Narcotic analgesics[3]	27	53	52	89	85	15
Other analgesics	2	11	4	9	5	1
Benzodiazepines	13	36	26	44	45	1
Antidepressants	17	40	25	47	36	—
All other substances[3]	28	47	59	82	27	3
Total drug deaths	**137**	**243**	**253**	**231**	**232**	**109**
Total drug mentions	**265**	**499**	**448**	**532**	**447**	—
Total deaths certified	**4,181**	**4,494**	**4,314**	**4,475**	**4,645**	—

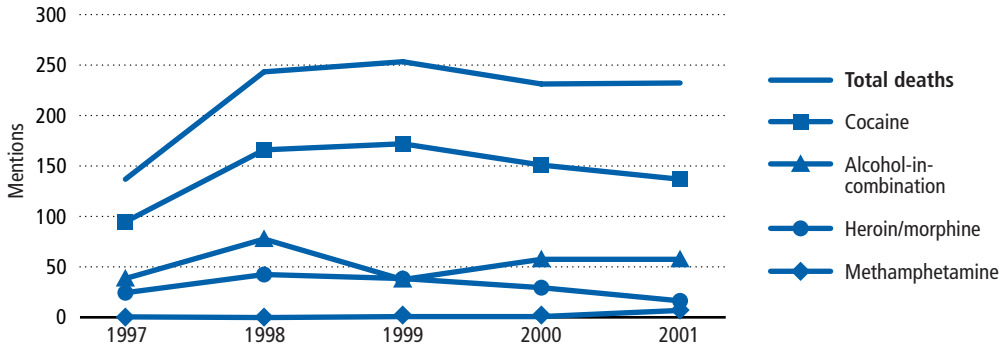
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

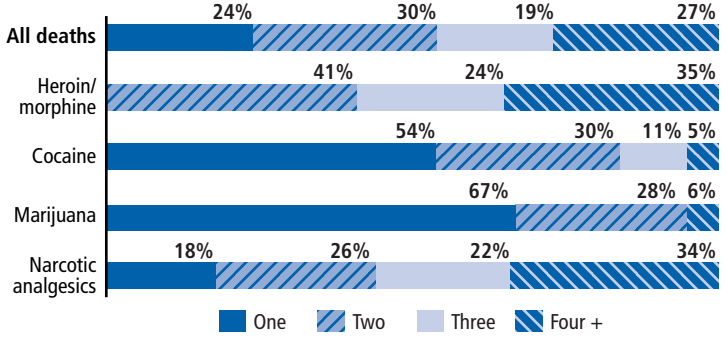
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	74	48	8	58	8
Alcohol + cocaine	28	16	4	22	2
Heroin/morphine only	—	—	—	—	—
Alcohol + heroin/morphine	1	1	—	1	—
Cocaine + heroin/morphine	3	3	—	3	—
Narcotic analgesics only	15	12	2	7	6
Alcohol + cocaine + heroin/morphine	1	1	—	1	—
Heroin/morphine + narcotic analgesics	2	2	—	2	—
Marijuana only	12	—	1	10	1
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	1	1	—	1	—
All other drugs/combinations	95	79	20	69	6
Total	**232**	**163**	**35**	**174**	**23**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

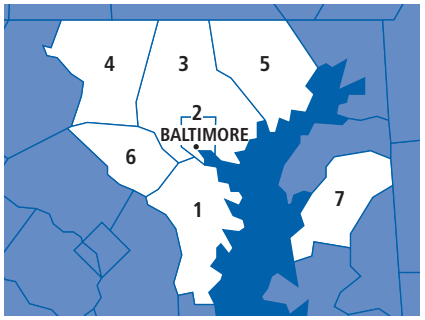


Bars may not total 100% due to rounding.

Atlanta, GA

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Baltimore, MD



Metro area population, 2001
2,572,945

Percent of population covered by DAWN
100%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Anne Arundel County	24	20	4	331	497,893
2. Baltimore City*	329	305	24	3,246	635,210
3. Baltimore County	73	67	6	632	762,378
4. Carroll County	15	15	—	111	155,654
5. Harford County	27	25	2	198	224,208
6. Howard County	17	16	1	108	255,707
7. Queen Anne's County	1	1	—	31	41,895
Total, participating (7)	**486**	**449**	**37**	**4,657**	**2,572,945**

* Indicates area featured in Spotlight section

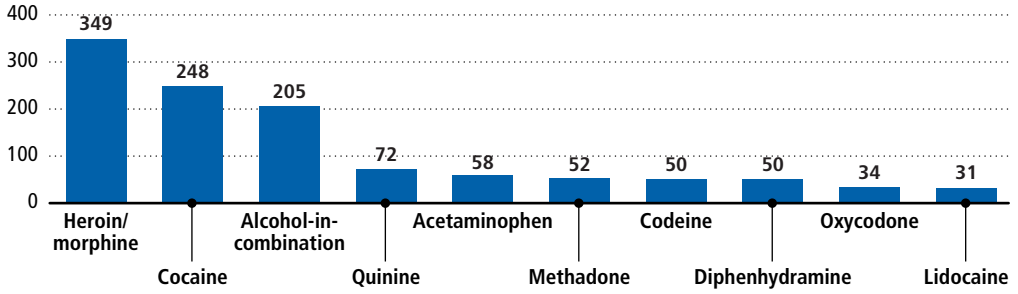
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	390	6-17	5	White	247
Female	96	18-24	27	Black	239
		25-34	85	Hispanic	—
		35-44	215	All others	—
		45-97	146		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	42%	46%	28%	40%	37%	28%	49%	41%
Number of drugs involved								
Single-drug	11%	11%	11%	20%	15%	14%	8%	14%
Multi-drug	89%	89%	89%	80%	85%	86%	92%	86%
Cause of death								
Drug-induced	92%	92%	94%	80%	85%	89%	95%	92%
Drug-related	8%	8%	6%	20%	15%	11%	5%	8%
Manner of death								
Suicide	3%	3%	6%	20%	15%	1%	2%	3%
Accidental/unexpected	3%	3%	3%	20%	4%	4%	1%	3%
All others	94%	95%	91%	60%	81%	95%	96%	94%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	236	253	227	286	205	—
Cocaine	301	311	303	243	248	18
Heroin/morphine	356	394	451	397	349	29
Marijuana	—	—	—	—	—	—
Amphetamines	—	—	—	1	—	—
Methamphetamine	—	—	16	1	—	—
Club drugs[1]	—	3	3	3	2	—
Hallucinogens[2]	1	3	2	7	3	2
Inhalants	1	1	2	1	—	—
Narcotic analgesics[3]	154	179	122	147	164	4
Other analgesics	43	44	57	51	65	1
Benzodiazepines	34	35	11	26	26	—
Antidepressants	104	139	116	118	131	1
All other substances[3]	448	534	424	316	323	—
Total drug deaths	**485**	**527**	**557**	**532**	**486**	**55**
Total drug mentions	**1,678**	**1,896**	**1,734**	**1,597**	**1,516**	**—**
Total deaths certified	**4,622**	**4,738**	**4,953**	**4,897**	**4,657**	**—**

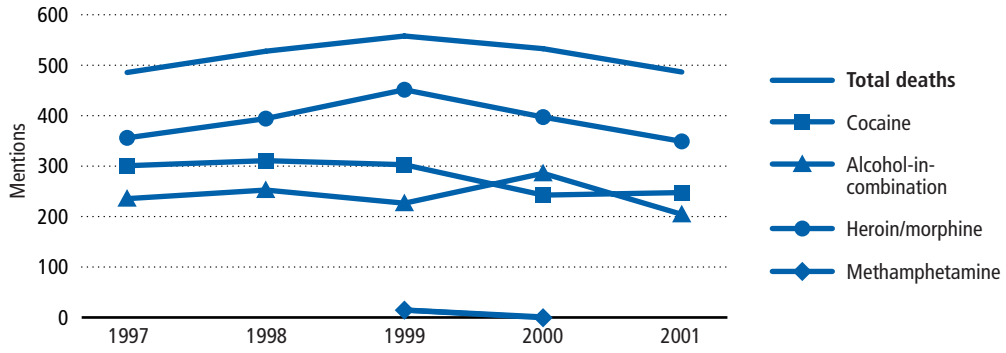
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

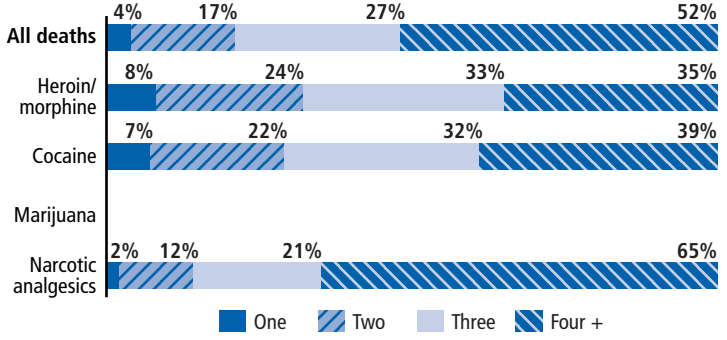
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	18	11	—	1	17
Alcohol + cocaine	18	11	2	4	12
Heroin/morphine only	29	29	—	—	29
Alcohol + heroin/morphine	32	32	—	—	32
Cocaine + heroin/morphine	26	24	1	—	25
Narcotic analgesics only	4	4	—	—	4
Alcohol + cocaine + heroin/morphine	35	35	—	—	35
Heroin/morphine + narcotic analgesics	5	5	—	—	5
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	319	298	13	8	298
Total	**486**	**449**	**16**	**13**	**457**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

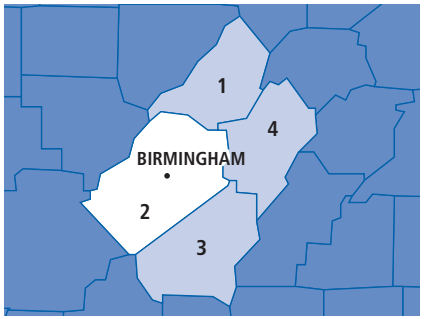


Bars may not total 100% due to rounding.

Baltimore, MD

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Birmingham, AL



Metro area population, 2001
928,108

Percent of population covered by DAWN
71%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Blount County					52,239
2. Jefferson County	110	69	41	619	659,743
3. Shelby County					149,724
4. St. Clair County					66,40
Total, participating (1)	**110**	**69**	**41**	**619**	**659,743**

Areas that are shaded did not participate in DAWN in 2001.

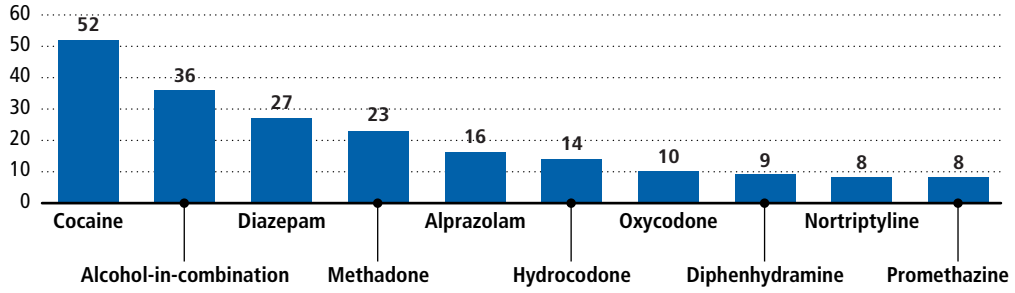
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	71	6-17	—	White	75
Female	39	18-24	14	Black	35
		25-34	24	Hispanic	—
		35-44	33	All others	—
		45-97	39		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	33%	37%	26%	—	36%	33%	27%	36%
Number of drugs involved								
Single-drug	14%	14%	13%	—	14%	13%	21%	8%
Multi-drug	86%	86%	87%	—	86%	88%	79%	92%
Cause of death								
Drug-induced	63%	62%	64%	—	64%	46%	70%	67%
Drug-related	37%	38%	36%	—	36%	54%	30%	33%
Manner of death								
Suicide	20%	25%	10%	—	29%	25%	9%	23%
Accidental/unexpected	62%	58%	69%	—	64%	63%	76%	49%
All others	18%	17%	21%	—	7%	13%	15%	28%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	34	33	29	33	36	—
Cocaine	47	47	39	41	52	12
Heroin/morphine	2	—	4	3	7	—
Marijuana	3	2	—	2	2	—
Amphetamines	—	1	—	1	—	—
Methamphetamine	—	—	—	1	—	—
Club drugs[1]	—	1	—	3	4	1
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	—	—	1	—	1	—
Narcotic analgesics[3]	19	31	40	69	60	1
Other analgesics	11	9	14	16	11	—
Benzodiazepines	42	32	26	47	58	—
Antidepressants	22	36	40	60	51	—
All other substances[3]	39	37	33	63	59	1
Total drug deaths	**88**	**92**	**79**	**111**	**110**	**15**
Total drug mentions	**219**	**229**	**226**	**339**	**341**	—
Total deaths certified	**682**	**684**	**654**	**576**	**619**	—

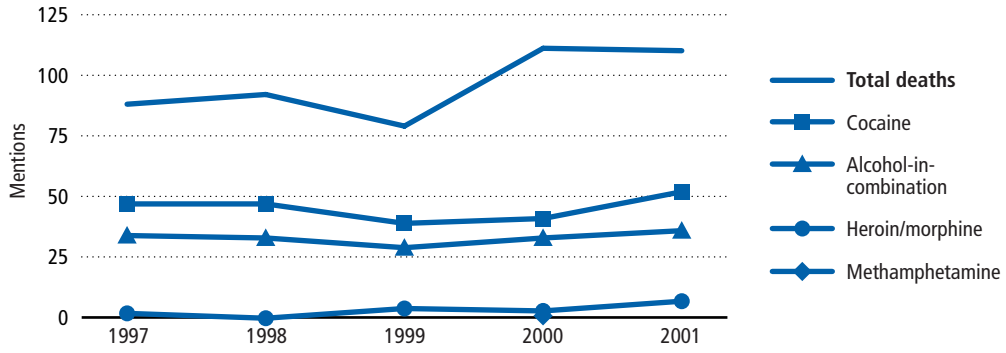
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

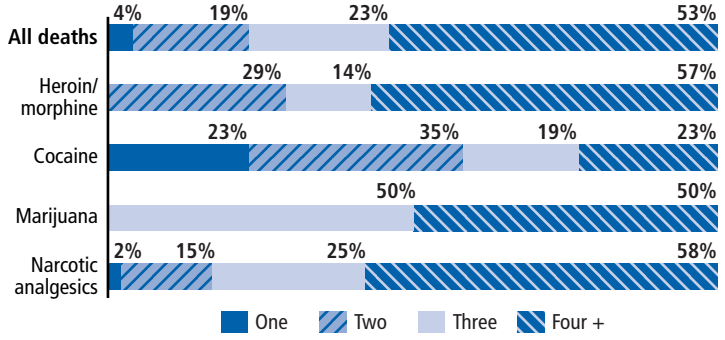
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	12	6	3	7	2
Alcohol + cocaine	11	4	2	5	4
Heroin/morphine only	—	—	—	—	—
Alcohol + heroin/morphine	1	1	—	1	—
Cocaine + heroin/morphine	—	—	—	—	—
Narcotic analgesics only	1	1	—	—	1
Alcohol + cocaine + heroin/morphine	—	—	—	—	—
Heroin/morphine + narcotic analgesics	1	—	1	—	—
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	84	57	16	55	13
Total	**110**	**69**	**22**	**68**	**20**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

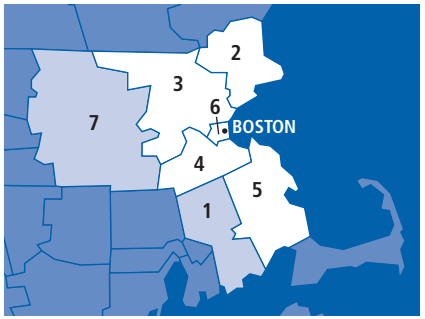


Bars may not total 100% due to rounding.

Birmingham, AL

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Boston, MA



Metro area population, 2001
5,312,670

Percent of population covered by DAWN
75%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Bristol County					540,360
2. Essex County	88	83	5	403	730,296
3. Middlesex County*	121	112	9	642	1,463,454
4. Norfolk County	43	36	7	244	653,232
5. Plymouth County	5	5	—	141	481,059
6. Suffolk County*	117	106	11	850	682,062
7. Worcester County					762,207
Total, participating (5)	**374**	**342**	**32**	**2,280**	**4,010,103**

Areas that are shaded did not participate in DAWN in 2001.
* Indicates area featured in Spotlight section

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	265
Female	109

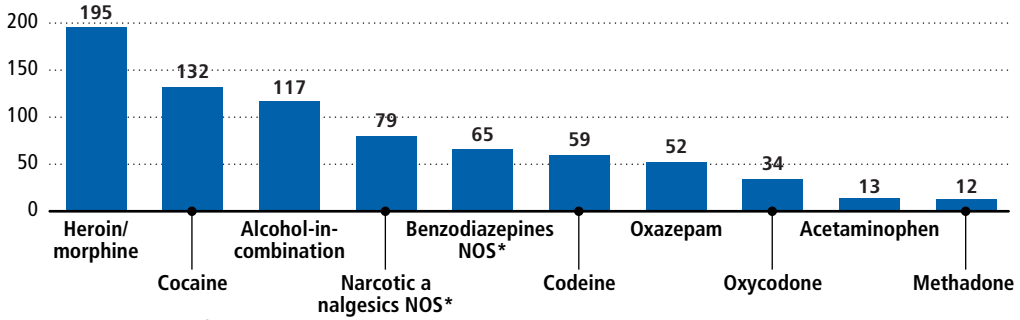
Age	
6-17	3
18-24	42
25-34	78
35-44	146
45-97	105

Race/Ethnicity	
White	319
Black	27
Hispanic	22
All others	6

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	31%	35%	22%	—	19%	36%	35%	29%
Number of drugs involved								
Single-drug	22%	22%	24%	—	24%	22%	16%	31%
Multi-drug	78%	78%	76%	100%	76%	78%	84%	69%
Cause of death								
Drug-induced	91%	91%	93%	100%	93%	96%	92%	86%
Drug-related	9%	9%	7%	—	7%	4%	8%	14%
Manner of death								
Suicide	12%	9%	19%	—	14%	3%	10%	21%
Accidental/unexpected	1%	1%	—	—	2%	—	1%	—
All others	88%	91%	81%	100%	83%	97%	90%	79%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	100	143	116	115	117	—
Cocaine	107	145	117	118	132	21
Heroin/morphine	171	186	168	183	195	27
Marijuana	1	1	—	4	8	—
Amphetamines	2	1	—	—	5	—
Methamphetamine	2	—	10	—	1	—
Club drugs[1]	—	—	—	1	6	2
Hallucinogens[2]	—	—	—	1	—	—
Inhalants	5	6	5	—	—	—
Narcotic analgesics[3]	97	108	74	118	206	18
Other analgesics	37	24	13	12	25	4
Benzodiazepines	26	51	15	25	136	6
Antidepressants	66	110	66	54	44	1
All other substances[3]	70	72	26	36	45	5
Total drug deaths	**302**	**368**	**344**	**343**	**374**	**84**
Total drug mentions	**684**	**847**	**610**	**667**	**920**	—
Total deaths certified	**2,271**	**2,296**	**2,224**	**2,088**	**2,280**	—

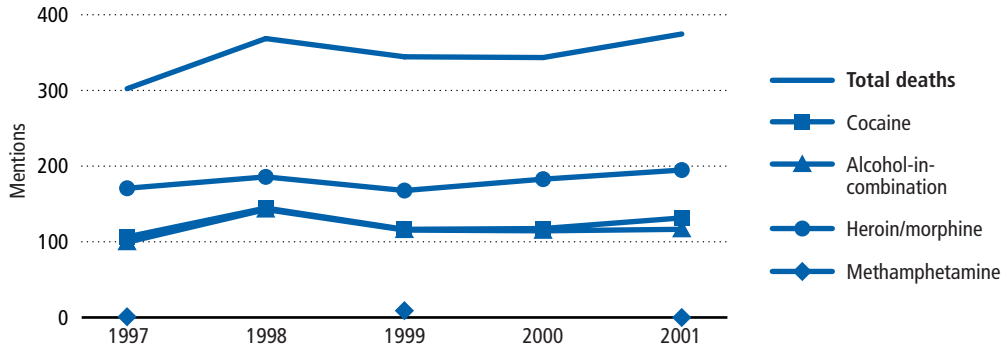
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

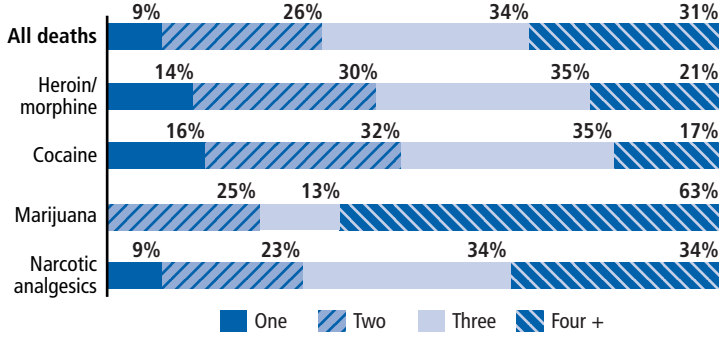
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	21	13	2	—	19
Alcohol + cocaine	4	2	1	—	3
Heroin/morphine only	27	27	—	—	27
Alcohol + heroin/morphine	15	15	—	—	15
Cocaine + heroin/morphine	12	12	—	—	12
Narcotic analgesics only	18	18	1	—	17
Alcohol + cocaine + heroin/morphine	10	9	1	—	9
Heroin/morphine + narcotic analgesics	17	17	—	—	17
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	250	229	39	2	209
Total	**374**	**342**	**44**	**2**	**328**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

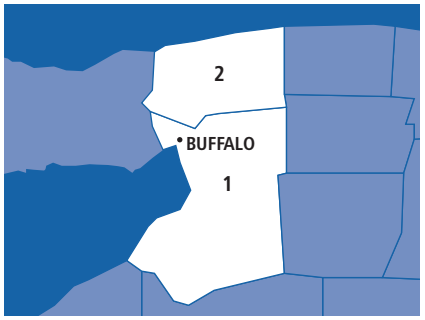


Bars may not total 100% due to rounding.

Boston, MA

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Buffalo, NY



Metro area population, 2001
1,162,917

Percent of population covered by DAWN
100%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Erie County*	114	54	60	1,017	944,408
2. Niagara County	14	12	2	891	218,509
Total, participating (2)	**128**	**66**	**62**	**1,908**	**1,162,917**

* Indicates area featured in Spotlight section

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	92
Female	36

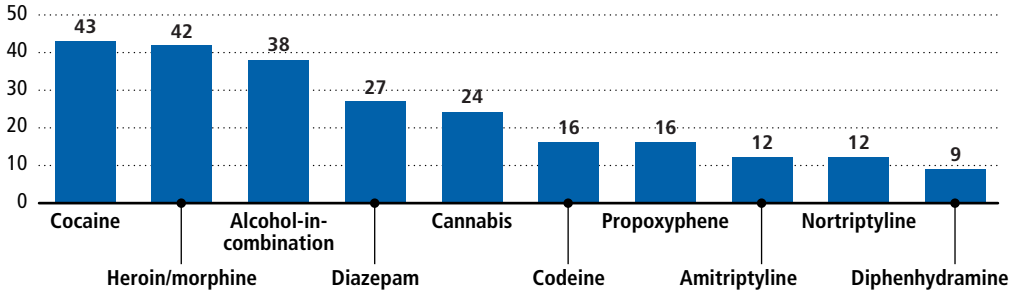
Age	
6-17	1
18-24	10
25-34	16
35-44	39
45-97	62

Race/Ethnicity	
White	94
Black	30
Hispanic	3
All others	1

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	30%	29%	31%	—	—	31%	38%	29%
Number of drugs involved								
Single-drug	17%	20%	11%	100%	50%	13%	21%	10%
Multi-drug	83%	80%	89%	—	50%	88%	79%	90%
Cause of death								
Drug-induced	52%	48%	61%	—	30%	63%	59%	48%
Drug-related	48%	52%	39%	100%	70%	38%	41%	52%
Manner of death								
Suicide	16%	15%	19%	—	30%	6%	10%	21%
Accidental/unexpected	11%	12%	8%	100%	20%	6%	21%	3%
All others	73%	73%	72%	—	50%	88%	69%	76%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	35	35	33	43	38	—
Cocaine	31	30	38	29	43	8
Heroin/morphine	43	24	37	30	42	4
Marijuana	13	17	12	19	24	6
Amphetamines	—	—	1	—	—	—
Methamphetamine	—	1	1	—	—	—
Club drugs[1]	—	1	1	2	1	1
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	1	3	—	—	—	—
Narcotic analgesics[3]	52	34	29	42	63	—
Other analgesics	15	4	9	2	10	—
Benzodiazepines	27	14	19	23	41	—
Antidepressants	57	30	40	30	60	1
All other substances[3]	89	44	43	32	56	2
Total drug deaths	**129**	**87**	**106**	**89**	**128**	**22**
Total drug mentions	**363**	**237**	**263**	**252**	**378**	—
Total deaths certified	**1,880**	**1,877**	**1,900**	**1,779**	**1,908**	—

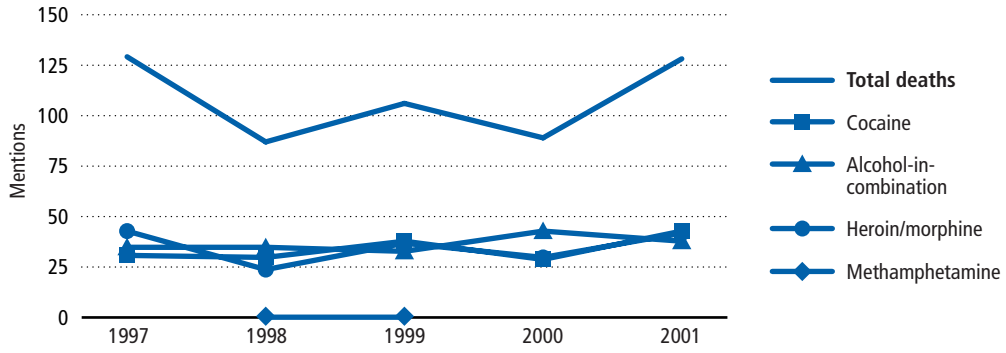
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

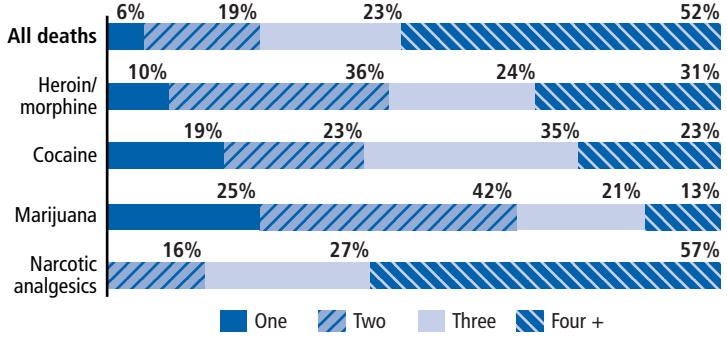
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	8	2	—	—	8
Alcohol + cocaine	4	—	—	1	3
Heroin/morphine only	4	1	—	—	4
Alcohol + heroin/morphine	1	1	—	—	1
Cocaine + heroin/morphine	3	2	—	—	3
Narcotic analgesics only	—	—	—	—	—
Alcohol + cocaine + heroin/morphine	3	2	—	—	3
Heroin/morphine + narcotic analgesics	8	6	—	—	8
Marijuana only	6	—	2	2	2
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	91	52	19	11	61
Total	**128**	**66**	**21**	**14**	**93**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

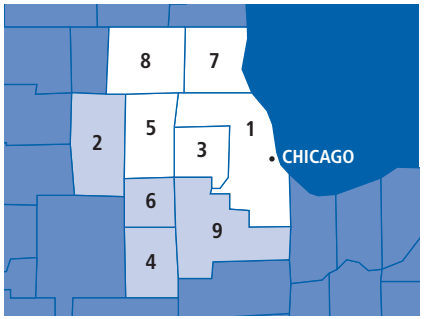


Bars may not total 100% due to rounding.

Buffalo, NY

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Chicago, IL



Metro area population, 2001
8,342,190

Percent of population covered by DAWN
91%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Cook County*	679	504	175	5,161	5,350,269
2. DeKalb County					89,743
3. DuPage County	65	55	10	3,770	912,044
4. Grundy County					38,331
5. Kane County	44	25	19	360	425,545
6. Kendall County					58,227
7. Lake County	40	33	7	2,953	661,111
8. McHenry County	26	15	11	215	270,504
9. Will County					536,416
Total, participating (5)	**854**	**632**	**222**	**12,459**	**7,619,473**

Areas that are shaded did not participate in DAWN in 2001.

* Indicates area featured in Spotlight section

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	643
Female	200

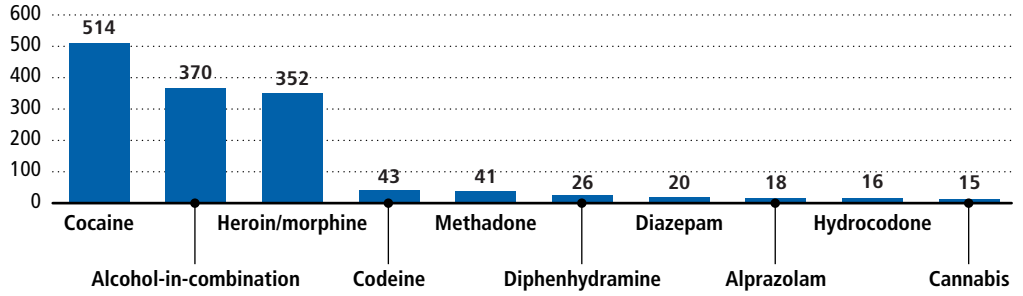
Age	
6-17	6
18-24	73
25-34	196
35-44	331
45-97	246

Race/Ethnicity	
White	391
Black	355
Hispanic	94
All others	14

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	43%	47%	33%	50%	38%	45%	44%	43%
Number of drugs involved								
Single-drug	36%	35%	40%	33%	33%	30%	38%	39%
Multi-drug	64%	65%	61%	67%	67%	70%	62%	61%
Cause of death								
Drug-induced	74%	74%	75%	33%	60%	68%	75%	83%
Drug-related	26%	26%	26%	67%	40%	32%	25%	17%
Manner of death								
Suicide	25%	24%	28%	67%	37%	30%	24%	17%
Accidental/unexpected	25%	25%	26%	—	30%	24%	21%	30%
All others	50%	51%	47%	33%	33%	46%	54%	53%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	313	373	365	387	370	—
Cocaine	390	468	511	464	514	177
Heroin/morphine	357	404	456	499	352	78
Marijuana	16	26	17	23	15	7
Amphetamines	1	1	1	4	2	1
Methamphetamine	2	—	—	2	1	—
Club drugs[1]	—	—	3	9	4	1
Hallucinogens[2]	6	3	4	6	4	—
Inhalants	4	1	1	—	6	1
Narcotic analgesics[3]	136	155	175	171	142	18
Other analgesics	26	28	32	27	26	6
Benzodiazepines	38	36	37	43	47	—
Antidepressants	68	47	48	60	54	8
All other substances[3]	61	42	90	86	75	11
Total drug deaths	**710**	**802**	**878**	**869**	**854**	**308**
Total drug mentions	**1,418**	**1,584**	**1,740**	**1,781**	**1,612**	—
Total deaths certified	**11,694**	**12,093**	**12,731**	**12,439**	**12,459**	—

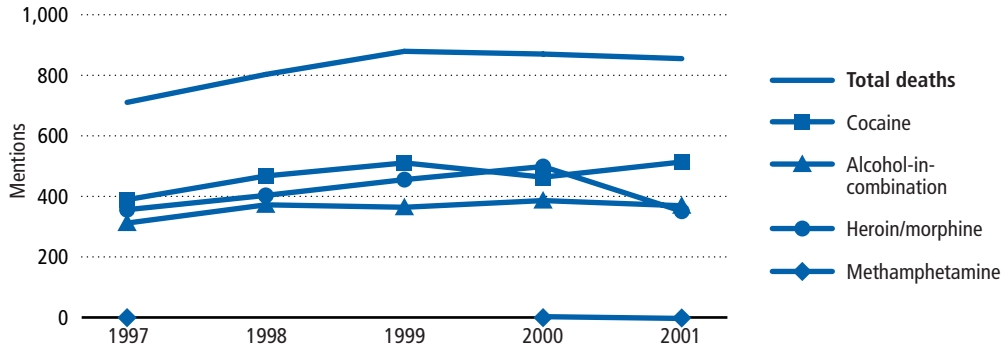
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

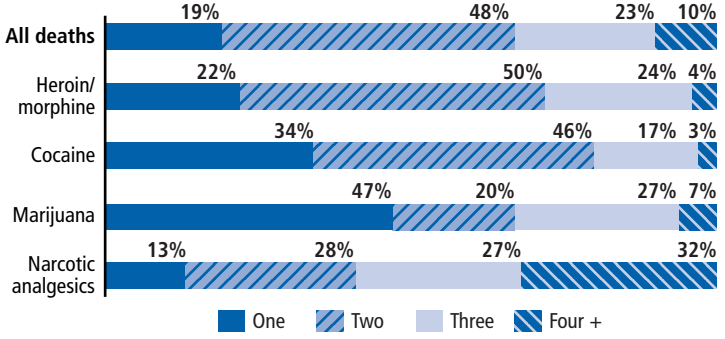
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	177	114	63	50	64
Alcohol + cocaine	150	61	79	22	49
Heroin/morphine only	78	71	5	16	57
Alcohol + heroin/morphine	87	85	3	10	74
Cocaine + heroin/morphine	76	66	11	14	51
Narcotic analgesics only	18	17	5	4	9
Alcohol + cocaine + heroin/morphine	59	53	4	9	46
Heroin/morphine + narcotic analgesics	11	9	2	4	5
Marijuana only	7	2	3	2	2
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	1	1	—	—	1
All other drugs/combinations	190	153	36	85	69
Total	**854**	**632**	**211**	**216**	**427**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

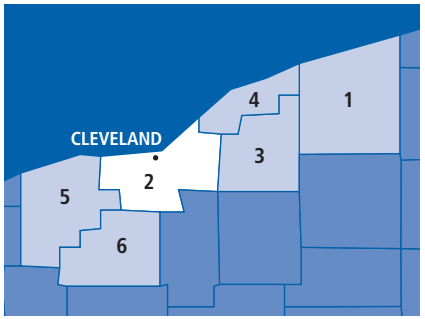


Bars may not total 100% due to rounding.

Chicago, IL

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Cleveland, OH



Metro area population, 2001
2,245,681

Percent of population covered by DAWN
61%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Ashtabula County					102,514
2. Cuyahoga County	176	175	1	3,873	1,380,421
3. Geauga County					92,180
4. Lake County					228,100
5. Loraine County					286,768
6. Medina County					155,698
Total, participating (1)	**176**	**175**	**1**	**3,873**	**1,380,421**

Areas that are shaded did not participate in DAWN in 2001.

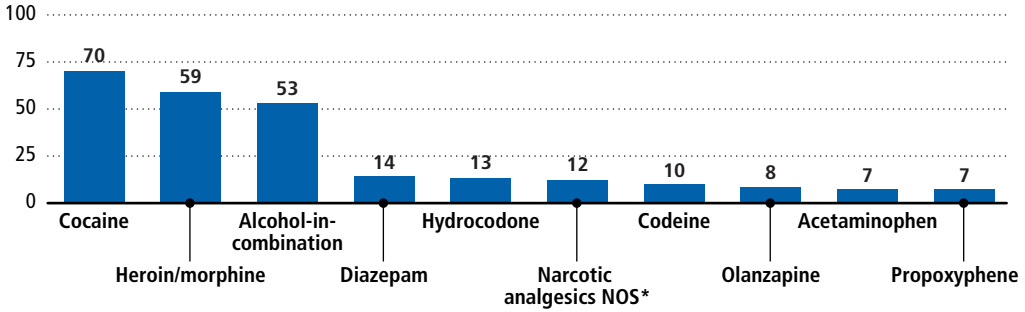
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	122	6-17	—	White	108
Female	54	18-24	9	Black	67
		25-34	23	Hispanic	—
		35-44	65	All others	1
		45-97	77		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	30%	36%	17%	—	11%	26%	35%	29%
Number of drugs involved								
Single-drug	44%	39%	54%	—	89%	43%	45%	38%
Multi-drug	56%	61%	46%	—	11%	57%	55%	62%
Cause of death								
Drug-induced	99%	99%	100%	—	100%	100%	100%	99%
Drug-related	1%	1%	—	—	—	—	—	1%
Manner of death								
Suicide	13%	9%	22%	—	—	4%	18%	13%
Accidental/unexpected	86%	91%	74%	—	100%	96%	80%	86%
All others	1%	—	4%	—	—	—	2%	1%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	45	38	31	56	53	—
Cocaine	36	46	53	66	70	34
Heroin/morphine	45	30	26	48	59	20
Marijuana	6	2	1	2	—	—
Amphetamines	—	—	—	—	—	—
Methamphetamine	—	1	1	1	1	—
Club drugs[1]	—	—	2	—	1	1
Hallucinogens[2]	—	—	2	—	—	—
Inhalants	—	—	—	1	—	—
Narcotic analgesics[3]	44	37	34	63	58	9
Other analgesics	6	8	7	4	12	1
Benzodiazepines	19	20	17	22	21	1
Antidepressants	25	23	19	22	31	6
All other substances[3]	30	26	25	32	42	5
Total drug deaths	**112**	**108**	**117**	**143**	**176**	**77**
Total drug mentions	**256**	**231**	**218**	**317**	**348**	—
Total deaths certified	**2,536**	**2,682**	**3,426**	**3,637**	**3,873**	—

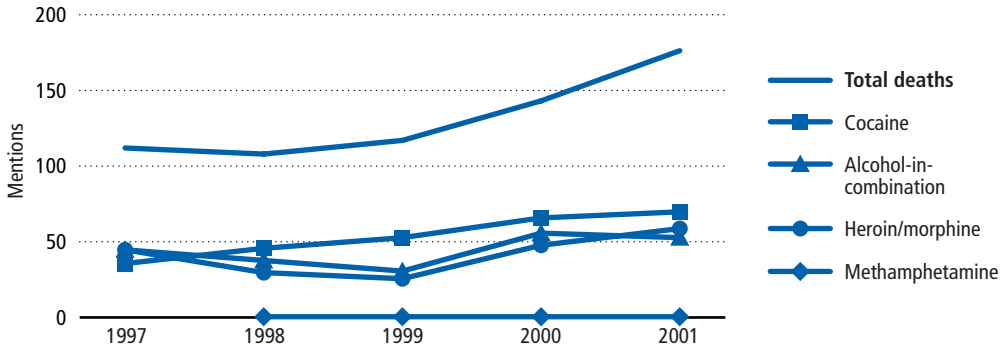
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

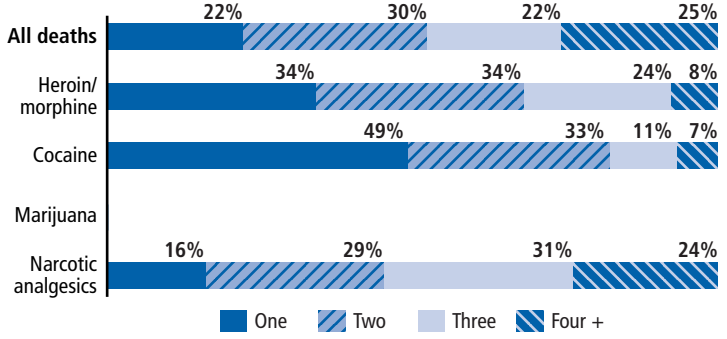
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	34	34	2	32	—
Alcohol + cocaine	13	13	—	13	—
Heroin/morphine only	20	20	—	19	1
Alcohol + heroin/morphine	12	12	—	12	—
Cocaine + heroin/morphine	4	4	—	4	—
Narcotic analgesics only	9	9	—	9	—
Alcohol + cocaine + heroin/morphine	3	2	—	3	—
Heroin/morphine + narcotic analgesics	4	4	—	4	—
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	77	77	21	55	1
Total	**176**	**175**	**23**	**151**	**2**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

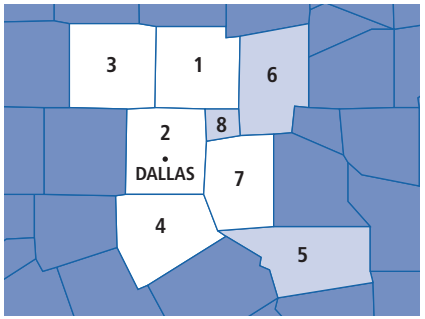


Bars may not total 100% due to rounding.

Cleveland, OH

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Dallas, TX



Metro area population, 2001
3,646,217

Percent of population covered by DAWN
94%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Collin County	25	24	1	334	541,403
2. Dallas County*	285	189	96	2,562	2,245,398
3. Denton County	39	28	11	248	466,240
4. Ellis County	8	5	3	46	116,555
5. Henderson County					74,868
6. Hunt County					77,960
7. Kaufman County	8	2	6	58	75,810
8. Rockwall County					47,983
Total, participating (5)	**365**	**248**	**117**	**3,248**	**3,445,406**

Areas that are shaded did not participate in DAWN in 2001.

* Indicates area featured in Spotlight section

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	268
Female	90

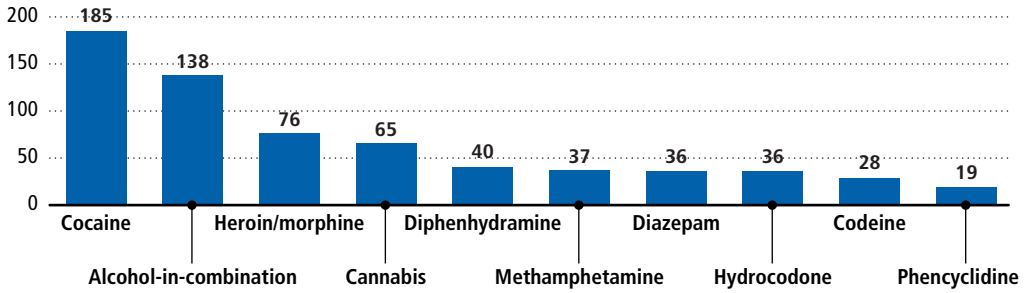
Age	
6-17	3
18-24	59
25-34	78
35-44	108
45-97	117

Race/Ethnicity	
White	206
Black	102
Hispanic	51
All others	6

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	38%	41%	30%	—	39%	49%	35%	33%
Number of drugs involved								
Single-drug	22%	21%	20%	33%	15%	22%	23%	23%
Multi-drug	78%	79%	80%	67%	85%	78%	77%	77%
Cause of death								
Drug-induced	68%	67%	68%	67%	53%	58%	69%	82%
Drug-related	32%	33%	32%	33%	47%	42%	31%	18%
Manner of death								
Suicide	28%	28%	29%	33%	34%	40%	23%	21%
Accidental/unexpected	22%	22%	18%	67%	24%	17%	22%	23%
All others	50%	50%	53%	—	42%	44%	55%	56%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	194	147	134	116	138	—
Cocaine	140	138	153	157	185	41
Heroin/morphine	73	69	77	94	76	5
Marijuana	109	90	98	74	65	2
Amphetamines	14	7	5	8	4	1
Methamphetamine	18	7	9	22	37	13
Club drugs[1]	4	2	3	10	11	1
Hallucinogens[2]	—	—	4	7	19	5
Inhalants	—	—	—	4	1	—
Narcotic analgesics[3]	67	60	61	101	115	6
Other analgesics	40	36	43	30	30	1
Benzodiazepines	62	56	52	73	60	—
Antidepressants	83	84	78	86	71	3
All other substances[3]	221	176	139	189	110	1
Total drug deaths	**379**	**355**	**321**	**320**	**365**	**79**
Total drug mentions	**1,025**	**872**	**856**	**971**	**922**	—
Total deaths certified	**3,784**	**4,005**	**3,997**	**4,031**	**3,248**	—

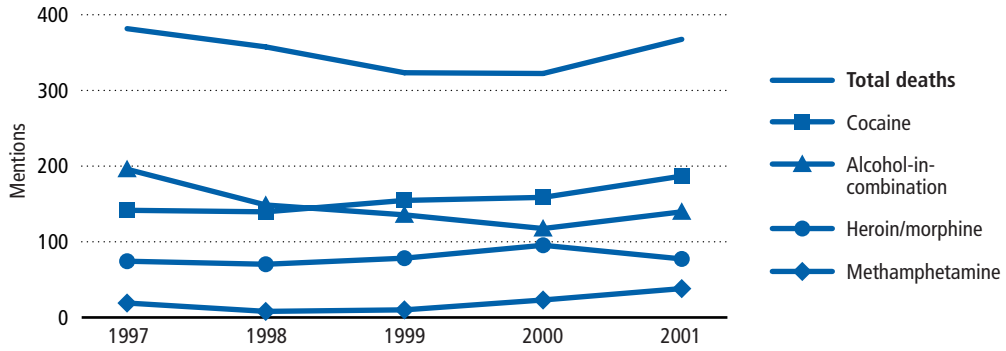
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

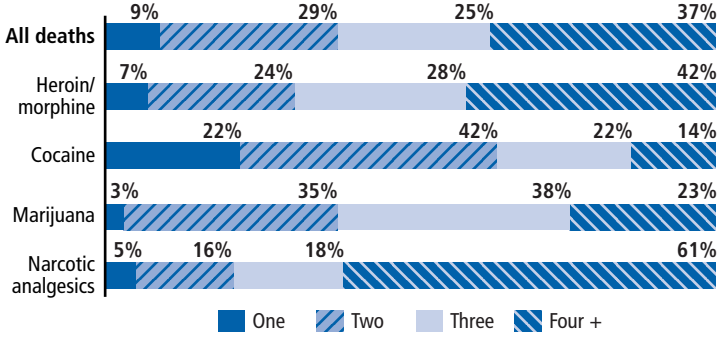
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	41	27	17	8	16
Alcohol + cocaine	52	16	25	13	14
Heroin/morphine only	5	5	—	2	3
Alcohol + heroin/morphine	5	5	1	—	4
Cocaine + heroin/morphine	3	3	—	1	2
Narcotic analgesics only	6	6	1	3	2
Alcohol + cocaine + heroin/morphine	7	7	—	1	6
Heroin/morphine + narcotic analgesics	2	2	—	—	2
Marijuana only	2	2	—	1	1
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	2	1	1	—	1
All other drugs/combinations	240	174	57	51	132
Total	**365**	**248**	**102**	**80**	**183**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

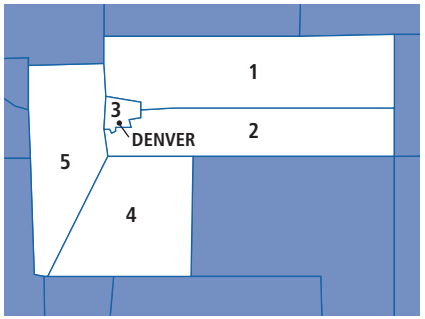


Bars may not total 100% due to rounding.

Dallas, TX

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Denver, CO



Metro area population, 2001
2,160,841

Percent of population covered by DAWN
100%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Adams County	41	41	—	1,798	374,891
2. Arapahoe County	83	45	38	2,518	500,785
3. Denver County*	147	101	46	2,867	554,446
4. Douglas County	2	2	—	344	199,753
5. Jefferson County	37	37	—	2,839	530,966
Total, participating (5)	**310**	**226**	**84**	**10,366**	**2,160,841**

* Indicates area featured in Spotlight section

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	219
Female	79

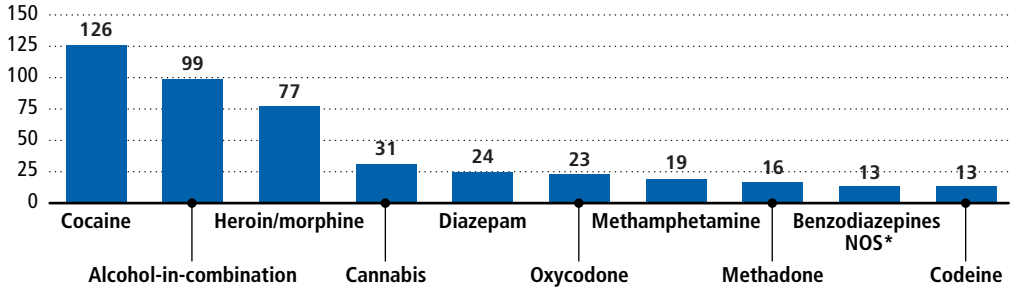
Age	
6-17	2
18-24	28
25-34	66
35-44	108
45-97	106

Race/Ethnicity	
White	206
Black	30
Hispanic	69
All others	5

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	32%	35%	28%	—	29%	38%	36%	25%
Number of drugs involved								
Single-drug	35%	37%	25%	—	43%	32%	31%	39%
Multi-drug	65%	63%	75%	100%	57%	68%	69%	61%
Cause of death								
Drug-induced	73%	73%	68%	100%	68%	67%	75%	75%
Drug-related	27%	27%	32%	—	32%	33%	25%	25%
Manner of death								
Suicide	23%	18%	33%	—	25%	24%	21%	24%
Accidental/unexpected	53%	58%	42%	100%	64%	58%	60%	40%
All others	24%	24%	25%	—	11%	18%	19%	37%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	49	61	74	75	99	—
Cocaine	56	66	82	80	126	41
Heroin/morphine	53	51	79	66	77	18
Marijuana	4	3	20	20	31	6
Amphetamines	5	3	5	9	8	—
Methamphetamine	6	3	8	10	19	4
Club drugs[1]	—	—	—	2	4	2
Hallucinogens[2]	—	—	—	1	—	—
Inhalants	1	2	—	1	—	—
Narcotic analgesics[3]	38	40	71	64	106	16
Other analgesics	4	6	4	16	22	1
Benzodiazepines	11	11	39	28	55	3
Antidepressants	18	25	33	37	38	2
All other substances[3]	20	27	37	68	79	14
Total drug deaths	**154**	**164**	**236**	**242**	**310**	**107**
Total drug mentions	**265**	**298**	**452**	**477**	**664**	—
Total deaths certified	**8,425**	**8,623**	**8,864**	**9,667**	**10,366**	—

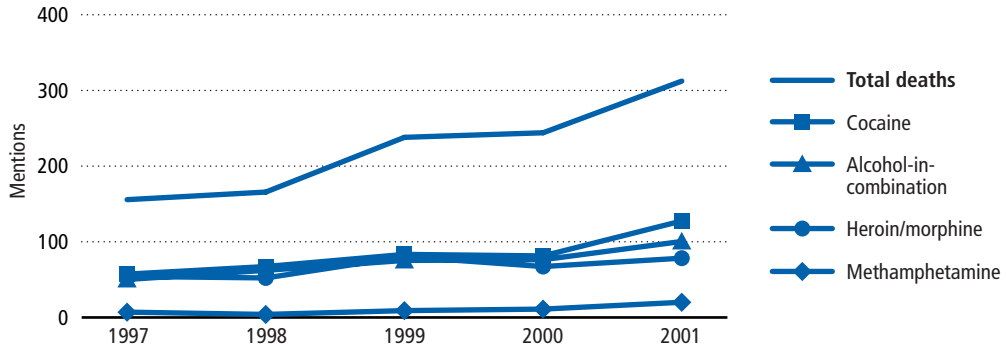
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

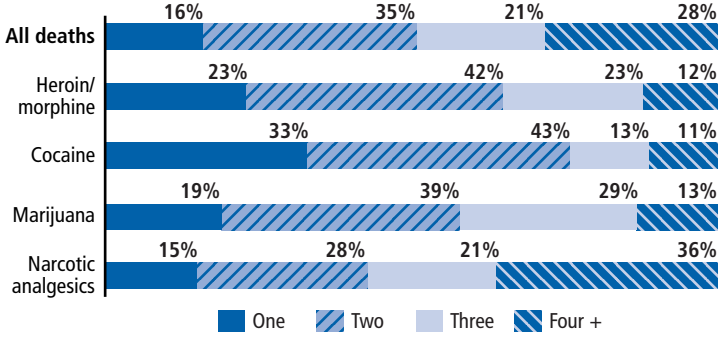
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	41	34	6	27	8
Alcohol + cocaine	32	14	8	21	3
Heroin/morphine only	18	16	2	12	4
Alcohol + heroin/morphine	15	15	—	14	1
Cocaine + heroin/morphine	12	11	—	11	1
Narcotic analgesics only	16	13	3	4	9
Alcohol + cocaine + heroin/morphine	8	7	1	7	—
Heroin/morphine + narcotic analgesics	2	2	—	1	1
Marijuana only	6	1	2	2	2
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	1	—	—	1	—
All other drugs/combinations	159	113	49	65	45
Total	**310**	**226**	**71**	**165**	**74**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

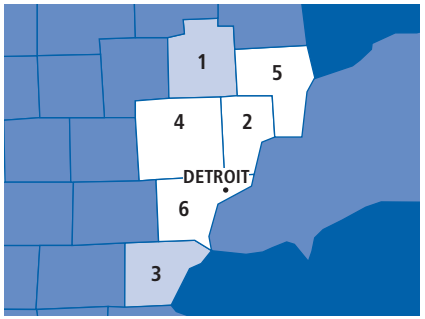


Bars may not total 100% due to rounding.

Denver, CO

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Detroit, MI



Metro area population, 2001
4,448,235

Percent of population covered by DAWN
95%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Lapeer County					89,728
2. Macomb County	85	71	14	1,510	799,954
3. Monroe County					147,946
4. Oakland County	184	140	44	3,953	1,198,593
5. St. Clair County	14	5	9	545	166,541
6. Wayne County*	446	237	209	3,256	2,045,473
Total, participating (4)	**729**	**453**	**276**	**9,264**	**4,210,561**

Areas that are shaded did not participate in DAWN in 2001.
* Indicates area featured in Spotlight section

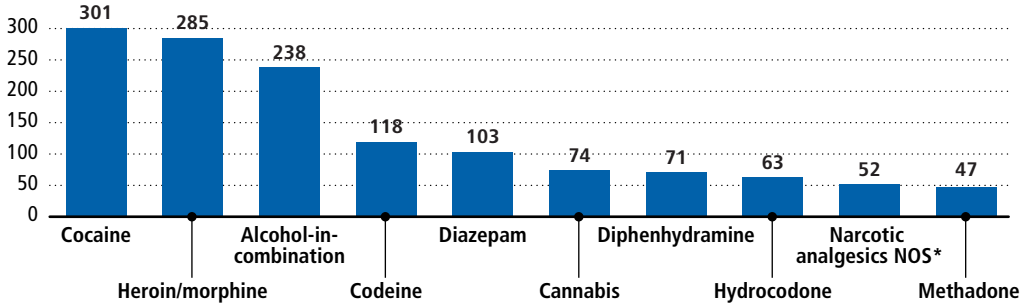
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	531	6-17	5	White	438
Female	197	18-24	29	Black	267
		25-34	120	Hispanic	15
		35-44	236	All others	9
		45-97	338		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	33%	37%	22%	—	41%	36%	34%	30%
Number of drugs involved								
Single-drug	22%	21%	25%	40%	24%	13%	19%	27%
Multi-drug	78%	79%	75%	60%	76%	87%	81%	73%
Cause of death								
Drug-induced	62%	63%	59%	20%	69%	71%	67%	55%
Drug-related	38%	37%	41%	80%	31%	29%	33%	45%
Manner of death								
Suicide	12%	12%	12%	—	34%	13%	15%	9%
Accidental/unexpected	41%	42%	40%	40%	41%	51%	41%	38%
All others	46%	46%	49%	60%	24%	36%	44%	53%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	172	193	214	276	238	—
Cocaine	231	269	275	303	301	51
Heroin/morphine	213	211	221	296	285	34
Marijuana	90	50	93	98	74	27
Amphetamines	—	2	3	8	5	—
Methamphetamine	—	—	—	2	5	—
Club drugs[1]	—	1	2	5	5	1
Hallucinogens[2]	—	2	1	—	1	—
Inhalants	3	1	1	—	—	—
Narcotic analgesics[3]	206	245	284	298	354	21
Other analgesics	37	41	38	42	35	5
Benzodiazepines	135	147	177	189	193	5
Antidepressants	104	137	131	138	148	2
All other substances[3]	337	338	402	348	318	15
Total drug deaths	**585**	**635**	**695**	**704**	**729**	**161**
Total drug mentions	**1,528**	**1,637**	**1,842**	**2,003**	**1,962**	—
Total deaths certified	**9,476**	**9,330**	**10,033**	**9,896**	**9,264**	—

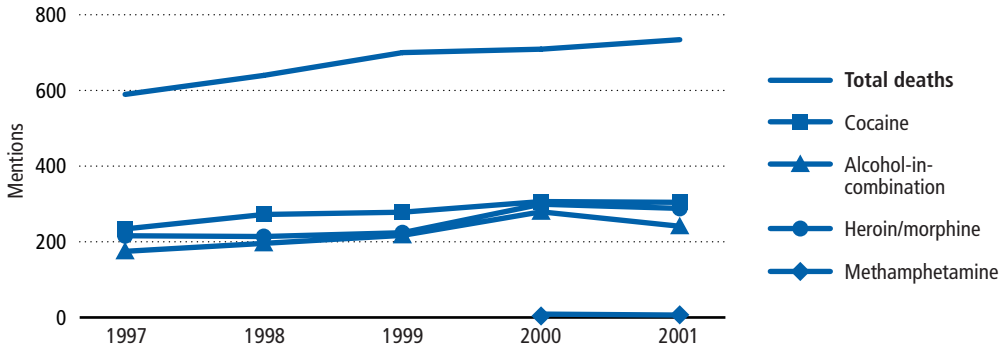
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

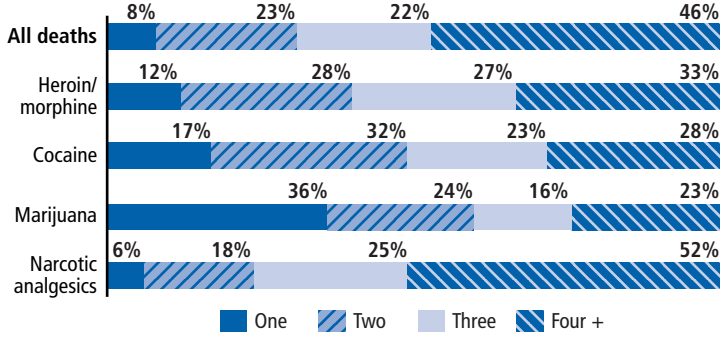
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	51	22	4	21	26
Alcohol + cocaine	32	10	7	18	7
Heroin/morphine only	34	17	4	7	23
Alcohol + heroin/morphine	19	16	—	13	6
Cocaine + heroin/morphine	33	23	1	17	15
Narcotic analgesics only	21	7	5	1	15
Alcohol + cocaine + heroin/morphine	21	18	—	14	7
Heroin/morphine + narcotic analgesics	17	7	—	7	10
Marijuana only	27	14	5	8	14
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	474	319	64	195	215
Total	**729**	**453**	**90**	**301**	**338**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

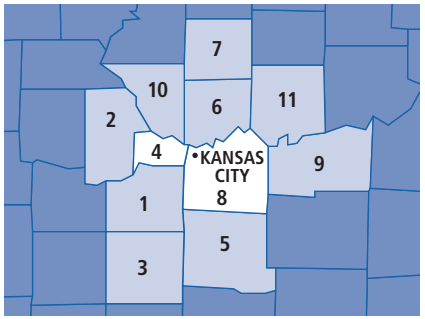


Bars may not total 100% due to rounding.

Detroit, MI

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Kansas City, MO



Metro area population, 2001
1,803,445

Percent of population covered by DAWN
45%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
Kansas jurisdictions					
1. Johnson County, KS					465,058
2. Leavenworth County, KS					70,261
3. Miami County, KS					28,780
4. Wyandotte County, KS	6	6	—	206	157,461
Missouri jurisdictions					
5. Cass County, MO					85,630
6. Clay County, MO					188,241
7. Clinton County, MO					19,530
8. Jackson County, MO*	252	146	106	2,028	655,855
9. Lafayette County, MO					32,975
10. Platte County, MO					76,223
11. Ray County, MO					23,431
Total, participating (2)	**258**	**152**	**106**	**2,234**	**813,316**

Areas that are shaded did not participate in DAWN in 2001.
* Indicates area featured in Spotlight section

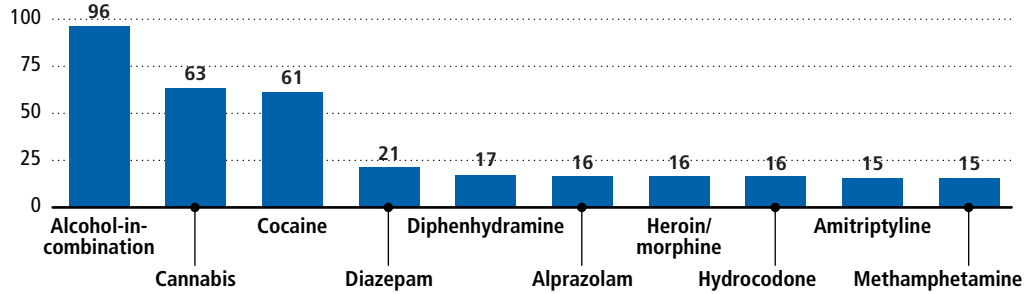
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	174	6-17	8	White	178
Female	84	18-24	32	Black	71
		25-34	39	Hispanic	8
		35-44	70	All others	1
		45-97	109		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	37%	41%	30%	38%	41%	46%	40%	31%
Number of drugs involved								
Single-drug	33%	31%	36%	25%	38%	18%	27%	40%
Multi-drug	67%	69%	64%	75%	63%	82%	73%	60%
Cause of death								
Drug-induced	59%	55%	67%	38%	25%	46%	66%	71%
Drug-related	41%	45%	33%	63%	75%	54%	34%	29%
Manner of death								
Suicide	22%	23%	21%	13%	41%	26%	20%	18%
Accidental/unexpected	45%	45%	43%	63%	53%	51%	53%	33%
All others	33%	32%	36%	25%	6%	23%	27%	49%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	34	65	67	—	96	—
Cocaine	36	55	63	—	61	15
Heroin/morphine	10	21	21	—	16	5
Marijuana	33	51	55	—	63	17
Amphetamines	24	16	14	—	13	—
Methamphetamine	28	16	13	—	15	2
Club drugs[1]	—	1	—	—	2	—
Hallucinogens[2]	2	—	7	—	10	5
Inhalants	1	—	—	—	—	—
Narcotic analgesics[3]	28	58	44	—	65	15
Other analgesics	6	10	14	—	11	2
Benzodiazepines	30	83	79	—	55	4
Antidepressants	36	45	74	—	73	9
All other substances[3]	50	68	106	—	98	10
Total drug deaths	**140**	**236**	**244**	**—**	**258**	**84**
Total drug mentions	**318**	**489**	**557**	**—**	**578**	**—**
Total deaths certified	**1,900**	**1,985**	**2,246**	**—**	**2,234**	**—**

Because Wyandotte County did not provide data for 2000, this table shows data for Jackson and Wyandotte Counties only for 1997, 1998, 1999, and 2001. Data for Jackson County for all 5 years are provided in an Area Spotlight.

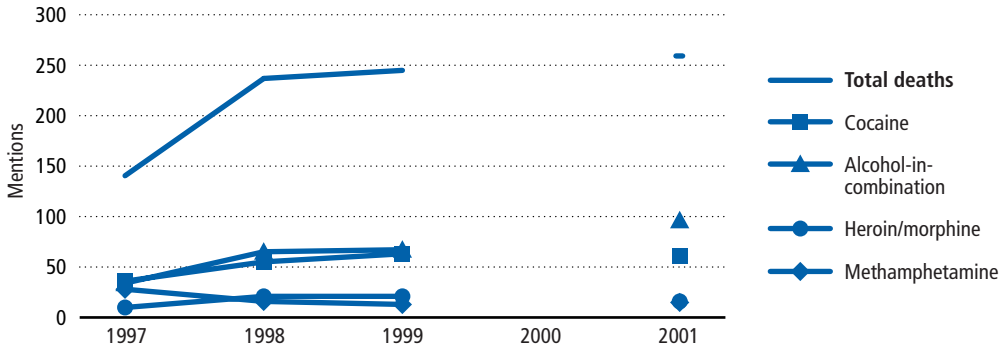
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

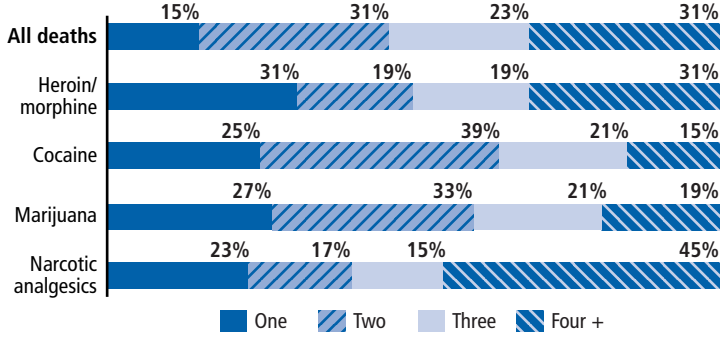
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	15	10	2	7	6
Alcohol + cocaine	18	13	2	12	4
Heroin/morphine only	5	2	1	1	3
Alcohol + heroin/morphine	—	—	—	—	—
Cocaine + heroin/morphine	—	—	—	—	—
Narcotic analgesics only	15	10	2	4	9
Alcohol + cocaine + heroin/morphine	—	—	—	—	—
Heroin/morphine + narcotic analgesics	—	—	—	—	—
Marijuana only	17	6	4	6	7
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	5	5	—	3	2
All other drugs/combinations	183	106	47	82	54
Total	**258**	**152**	**58**	**115**	**85**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

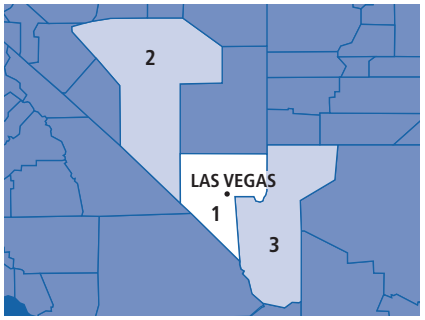


Bars may not total 100% due to rounding.

Kansas City, MO

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Las Vegas, NV



Metro area population, 2001
1,660,516

Percent of population covered by DAWN
88%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
Nevada jurisdictions					
1. Clark County	273	219	54	8,074	1,464,653
2. Nye County					34,075
Arizona jurisdictions					
3. Mohave County					161,788
Total, participating (1)	**273**	**219**	**54**	**8,074**	**1,464,653**

Areas that are shaded did not participate in DAWN in 2001.

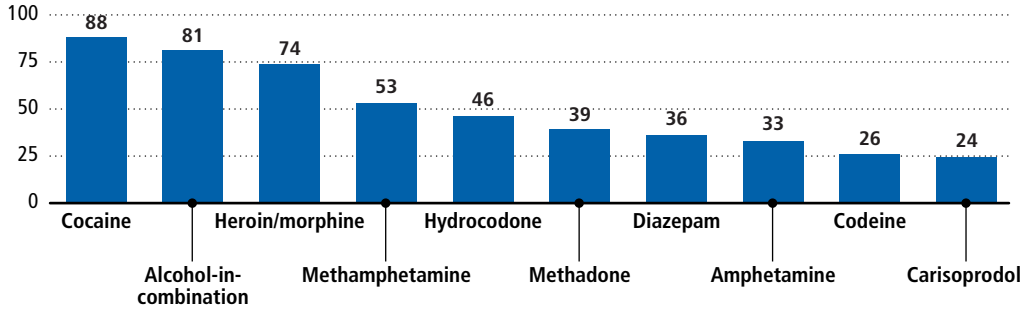
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	190	6-17	5	White	221
Female	83	18-24	17	Black	30
		25-34	47	Hispanic	16
		35-44	92	All others	6
		45-97	107		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	30%	33%	22%	—	41%	28%	28%	31%
Number of drugs involved								
Single-drug	19%	22%	13%	20%	12%	15%	22%	20%
Multi-drug	81%	78%	87%	80%	88%	85%	78%	80%
Cause of death								
Drug-induced	80%	79%	82%	80%	59%	66%	85%	86%
Drug-related	20%	21%	18%	20%	41%	34%	15%	14%
Manner of death								
Suicide	23%	21%	30%	20%	29%	32%	14%	27%
Accidental/unexpected	38%	39%	36%	40%	41%	49%	39%	32%
All others	38%	41%	34%	40%	29%	19%	47%	41%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	73	77	80	97	81	—
Cocaine	87	89	76	95	88	17
Heroin/morphine	71	90	97	93	74	4
Marijuana	3	1	2	24	22	9
Amphetamines	34	35	31	32	33	—
Methamphetamine	53	49	45	49	53	6
Club drugs[1]	—	1	4	8	4	1
Hallucinogens[2]	4	2	3	—	2	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics[3]	63	119	126	146	153	13
Other analgesics	5	7	12	12	8	—
Benzodiazepines	59	62	66	100	86	—
Antidepressants	24	41	57	33	55	1
All other substances[3]	31	68	78	93	69	1
Total drug deaths	**188**	**232**	**252**	**286**	**273**	**52**
Total drug mentions	**507**	**641**	**677**	**782**	**728**	—
Total deaths certified	**5,799**	**6,716**	**7,165**	**7,378**	**8,074**	—

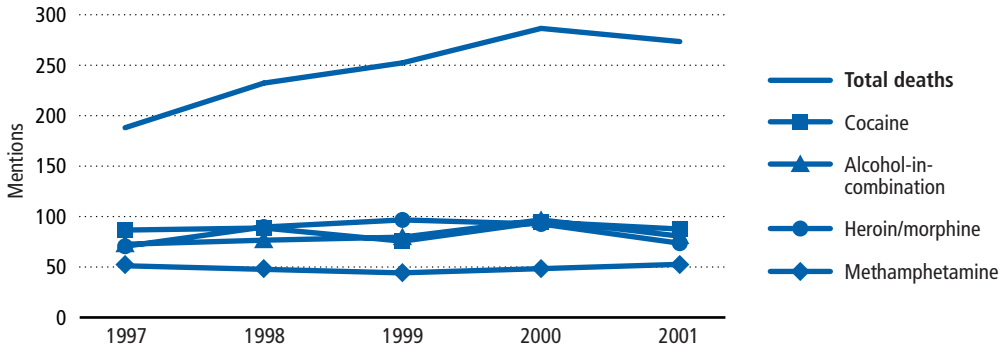
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

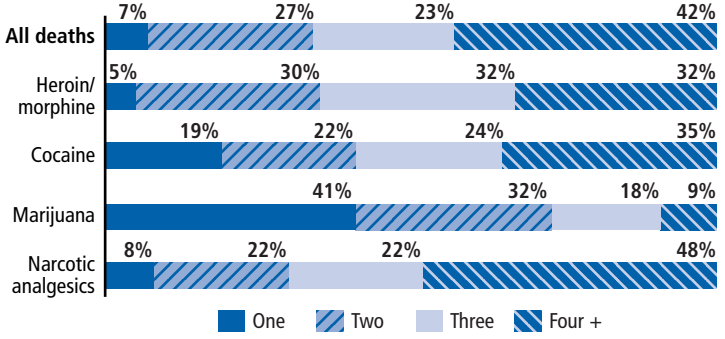
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	17	14	—	8	9
Alcohol + cocaine	6	2	1	3	2
Heroin/morphine only	4	2	2	1	1
Alcohol + heroin/morphine	4	4	—	2	2
Cocaine + heroin/morphine	12	10	2	5	5
Narcotic analgesics only	13	11	4	6	3
Alcohol + cocaine + heroin/morphine	6	5	—	3	3
Heroin/morphine + narcotic analgesics	6	5	1	3	2
Marijuana only	9	4	1	4	4
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	18	12	5	9	4
All other drugs/combinations	178	150	48	60	70
Total	**273**	**219**	**64**	**104**	**105**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

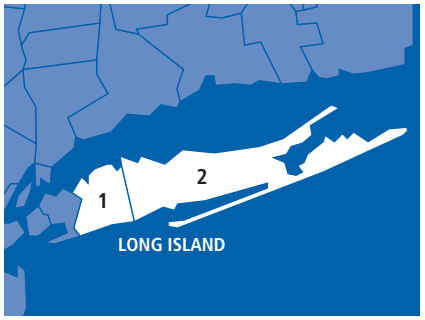


Bars may not total 100% due to rounding.

Las Vegas, NV

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Long Island, NY



Metro area population, 2001
9,637,494

Percent of population covered by DAWN
100%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Nassau County*	102	90	12	4,869	1,334,648
2. Suffolk County*	111	102	9	4,454	1,438,973
Total, participating (2)	**213**	**192**	**21**	**9,323**	**2,773,621**

* Indicates area featured in Spotlight section

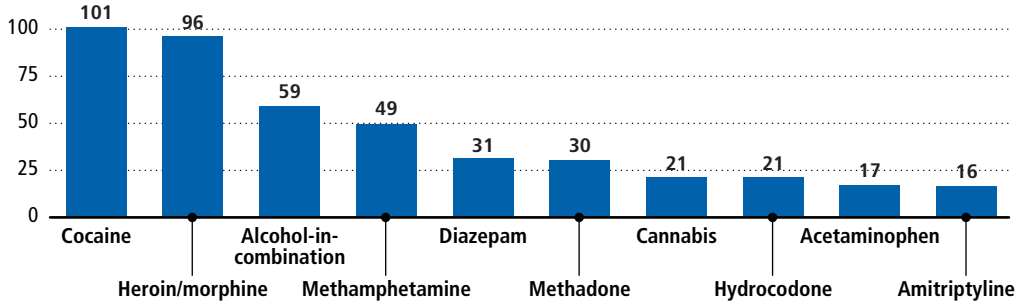
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	159	6-17	1	White	173
Female	53	18-24	18	Black	25
		25-34	41	Hispanic	6
		35-44	82	All others	9
		45-97	71		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	28%	30%	21%	—	22%	32%	32%	23%
Number of drugs involved								
Single-drug	13%	13%	13%	—	17%	7%	12%	17%
Multi-drug	87%	87%	87%	100%	83%	93%	88%	83%
Cause of death								
Drug-induced	90%	88%	96%	100%	72%	95%	93%	89%
Drug-related	10%	12%	4%	—	28%	5%	7%	11%
Manner of death								
Suicide	8%	6%	17%	—	11%	7%	7%	10%
Accidental/unexpected	72%	78%	55%	100%	78%	76%	70%	72%
All others	19%	16%	28%	—	11%	17%	23%	18%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	44	34	43	48	59	—
Cocaine	56	77	94	69	101	5
Heroin/morphine	68	72	105	96	96	7
Marijuana	67	23	43	23	21	—
Amphetamines	—	2	—	—	2	—
Methamphetamine	—	2	42	38	49	—
Club drugs[1]	1	2	1	3	4	1
Hallucinogens[2]	—	2	9	10	5	2
Inhalants	3	5	1	3	—	—
Narcotic analgesics[3]	40	42	69	73	98	4
Other analgesics	20	25	31	36	29	2
Benzodiazepines	29	33	36	31	50	1
Antidepressants	19	53	77	96	65	—
All other substances[3]	70	108	102	108	83	6
Total drug deaths	**170**	**173**	**215**	**209**	**213**	**28**
Total drug mentions	**417**	**480**	**653**	**634**	**662**	—
Total deaths certified	**9,161**	**8,950**	**8,884**	**9,219**	**9,323**	—

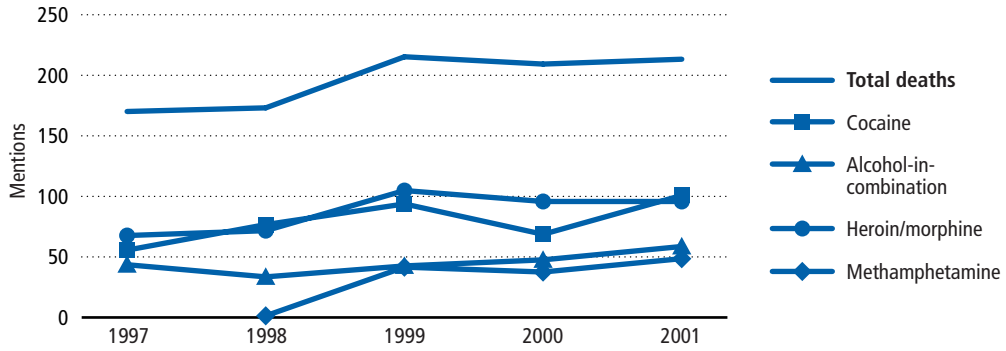
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

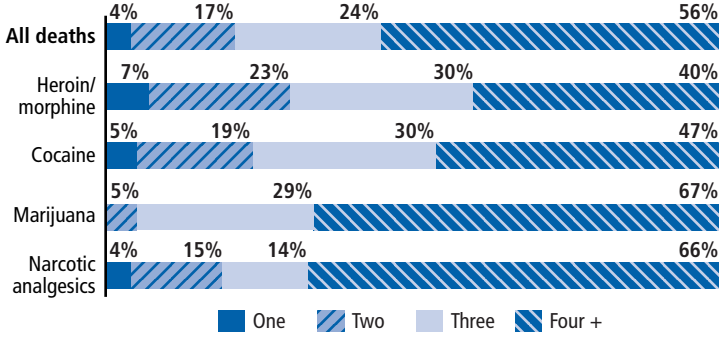
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	5	5	—	2	3
Alcohol + cocaine	—	—	—	—	—
Heroin/morphine only	7	6	1	4	2
Alcohol + heroin/morphine	4	4	—	3	1
Cocaine + heroin/morphine	6	6	—	6	—
Narcotic analgesics only	4	4	—	3	1
Alcohol + cocaine + heroin/morphine	5	5	—	5	—
Heroin/morphine + narcotic analgesics	5	5	—	3	2
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	177	157	17	128	32
Total	**213**	**192**	**18**	**154**	**41**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

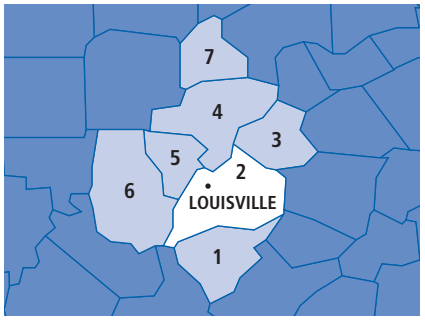


Bars may not total 100% due to rounding.

Long Island, NY

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Louisville, KY



Metro area population, 2001
2,289,683

Percent of population covered by DAWN
67%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
Kentucky jurisdictions					
1. Bullitt County					63,043
2. Jefferson County	92	49	43	3,753	692,910
3. Oldham County					48,000
Indiana jurisdictions					
4. Clark County					97,364
5. Floyd County					71,348
6. Harrison County					34,929
7. Scott County					23,247
Total, participating (1)	**92**	**49**	**43**	**3,753**	**692,910**

Areas that are shaded did not participate in DAWN in 2001.

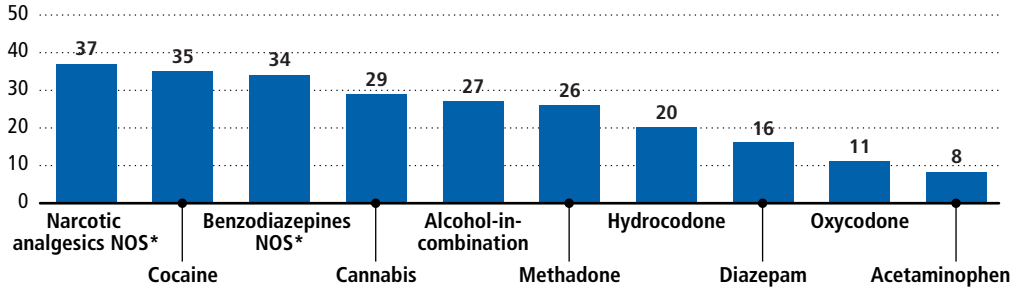
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	69	6-17	1	White	79
Female	23	18-24	12	Black	12
		25-34	22	Hispanic	—
		35-44	31	All others	1
		45-97	26		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	29%	32%	22%	—	33%	36%	29%	23%
Number of drugs involved								
Single-drug	9%	9%	9%	—	8%	14%	6%	8%
Multi-drug	91%	91%	91%	100%	92%	86%	94%	92%
Cause of death								
Drug-induced	53%	49%	65%	—	75%	55%	65%	31%
Drug-related	47%	51%	35%	100%	25%	45%	35%	69%
Manner of death								
Suicide	23%	16%	43%	—	17%	23%	26%	23%
Accidental/unexpected	52%	55%	43%	100%	75%	59%	55%	31%
All others	25%	29%	13%	—	8%	18%	19%	46%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	33	34	25	38	27	—
Cocaine	32	30	19	27	35	4
Heroin/morphine	1	3	2	10	3	—
Marijuana	29	29	16	45	29	2
Amphetamines	4	—	2	8	7	—
Methamphetamine	3	—	2	3	—	—
Club drugs[1]	—	—	—	1	—	—
Hallucinogens[2]	—	1	—	—	1	—
Inhalants	1	2	—	5	1	—
Narcotic analgesics[3]	24	40	50	77	106	1
Other analgesics	18	22	18	34	13	—
Benzodiazepines	18	33	29	67	51	—
Antidepressants	26	28	31	37	27	1
All other substances[3]	25	37	39	36	32	—
Total drug deaths	**77**	**80**	**61**	**109**	**92**	**8**
Total drug mentions	**214**	**259**	**233**	**388**	**332**	—
Total deaths certified	**3,676**	**3,710**	**3,822**	**3,974**	**3,753**	—

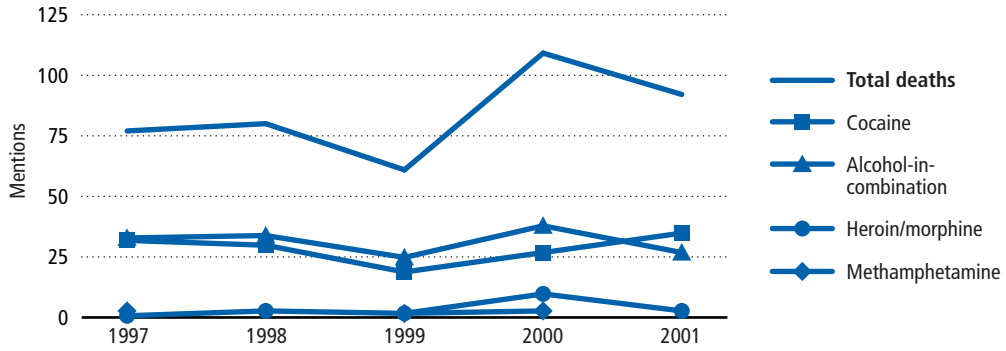
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

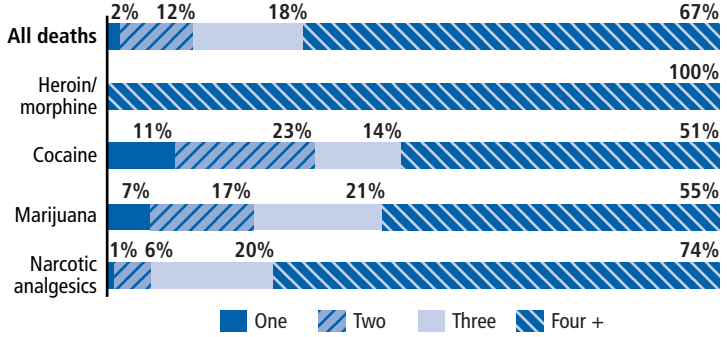
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	4	2	2	2	—
Alcohol + cocaine	6	1	2	2	2
Heroin/morphine only	—	—	—	—	—
Alcohol + heroin/morphine	—	—	—	—	—
Cocaine + heroin/morphine	—	—	—	—	—
Narcotic analgesics only	1	1	—	1	—
Alcohol + cocaine + heroin/morphine	—	—	—	—	—
Heroin/morphine + narcotic analgesics	—	—	—	—	—
Marijuana only	2	—	—	2	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	79	45	17	41	21
Total	**92**	**49**	**21**	**48**	**23**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

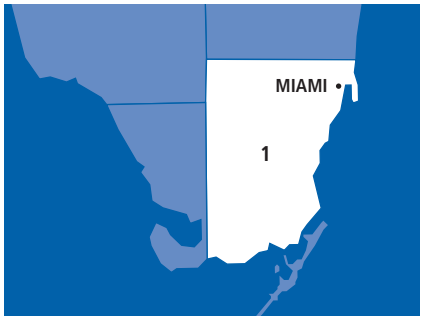


Bars may not total 100% due to rounding.

Louisville, KY

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Miami, FL



Metro area population, 2001
1,502,461

Percent of population covered by DAWN
100%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Miami-Dade County	239	174	65	3,053	2,289,683
Total, participating (1)	**239**	**174**	**65**	**3,053**	**2,289,683**

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	190
Female	49

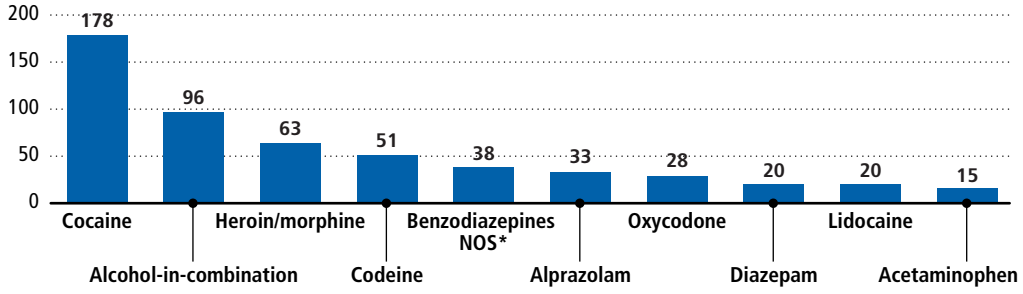
Age	
6-17	2
18-24	23
25-34	47
35-44	66
45-97	99

Race/Ethnicity	
White	113
Black	71
Hispanic	55
All others	—

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	40%	43%	29%	—	30%	49%	42%	38%
Number of drugs involved								
Single-drug	19%	21%	14%	—	22%	13%	20%	22%
Multi-drug	81%	79%	86%	100%	78%	87%	80%	78%
Cause of death								
Drug-induced	73%	69%	88%	50%	65%	60%	77%	78%
Drug-related	27%	31%	12%	50%	35%	40%	23%	22%
Manner of death								
Suicide	16%	16%	16%	—	17%	17%	15%	16%
Accidental/unexpected	60%	58%	67%	100%	65%	68%	61%	54%
All others	24%	26%	16%	—	17%	15%	24%	30%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	32	84	64	95	96	—
Cocaine	151	152	130	151	178	42
Heroin/morphine	37	50	40	86	63	—
Marijuana	4	2	3	1	3	1
Amphetamines	—	—	3	4	3	—
Methamphetamine	1	—	2	3	5	—
Club drugs[1]	—	—	5	9	15	1
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	2	2	2	—	—	—
Narcotic analgesics[3]	28	49	54	126	110	—
Other analgesics	25	27	22	24	29	1
Benzodiazepines	48	38	48	92	112	—
Antidepressants	23	18	25	27	36	1
All other substances[3]	77	90	81	102	90	—
Total drug deaths	**177**	**185**	**167**	**216**	**239**	**46**
Total drug mentions	**428**	**512**	**479**	**720**	**740**	**—**
Total deaths certified	**3,183**	**3,105**	**3,081**	**2,999**	**3,053**	**—**

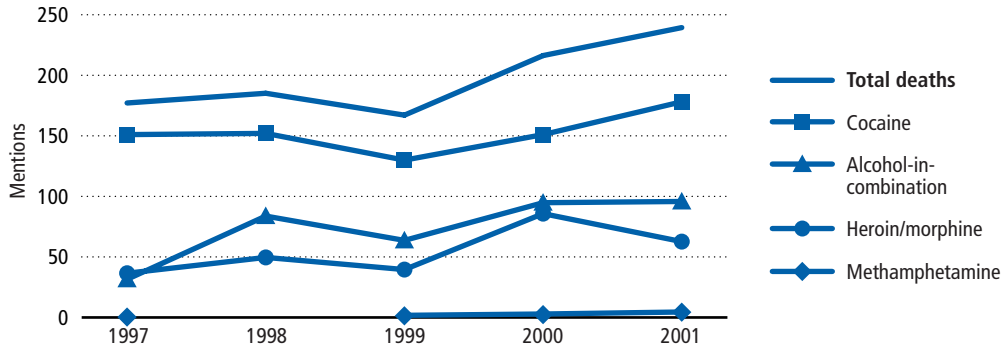
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

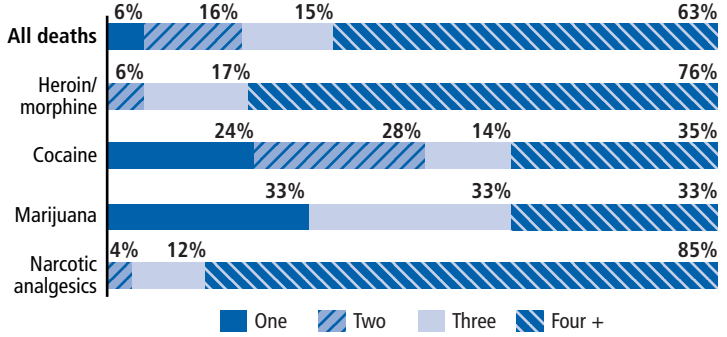
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	42	29	1	20	21
Alcohol + cocaine	34	14	8	19	7
Heroin/morphine only	—	—	—	—	—
Alcohol + heroin/morphine	1	1	—	1	—
Cocaine + heroin/morphine	—	—	—	—	—
Narcotic analgesics only	—	—	—	—	—
Alcohol + cocaine + heroin/morphine	1	—	1	—	—
Heroin/morphine + narcotic analgesics	3	3	—	3	—
Marijuana only	1	—	1	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	157	127	27	101	29
Total	**239**	**174**	**38**	**144**	**57**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

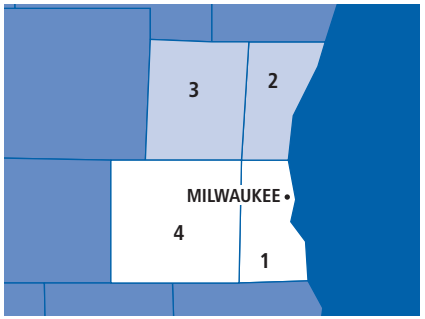


Bars may not total 100% due to rounding.

Miami, FL

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Milwaukee, WI



Metro area population, 2001
786,367

Percent of population covered by DAWN
86%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Milwaukee County*	123	104	19	1,851	932,012
2. Ozaukee County					83,555
3. Washington County					119,829
4. Waukesha County	23	11	12	296	367,065
Total, participating (2)	**146**	**115**	**31**	**2,147**	**1,299,077**

Areas that are shaded did not participate in DAWN in 2001.
* Indicates area featured in Spotlight section

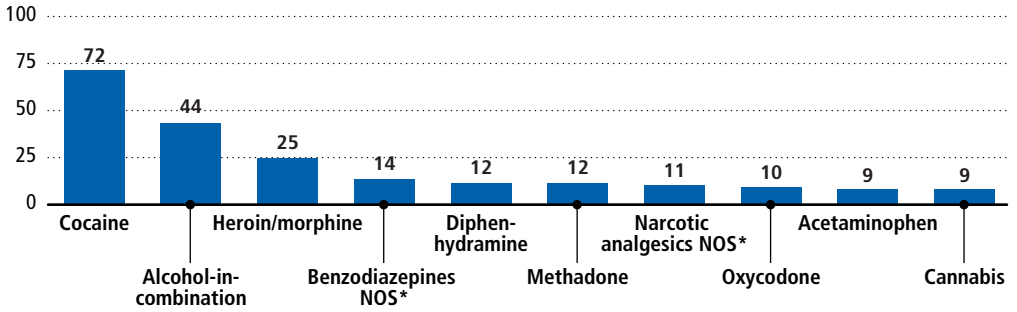
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	93	6-17	5	White	106
Female	53	18-24	7	Black	32
		25-34	16	Hispanic	6
		35-44	57	All others	2
		45-97	61		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	30%	32%	26%	—	57%	13%	39%	26%
Number of drugs involved								
Single-drug	33%	29%	40%	40%	—	38%	30%	38%
Multi-drug	67%	71%	60%	60%	100%	63%	70%	62%
Cause of death								
Drug-induced	79%	81%	75%	60%	57%	94%	77%	80%
Drug-related	21%	19%	25%	40%	43%	6%	23%	20%
Manner of death								
Suicide	24%	23%	26%	20%	29%	19%	18%	31%
Accidental/unexpected	65%	65%	66%	80%	29%	81%	74%	56%
All others	11%	13%	8%	—	43%	—	9%	13%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	4	4	6	5	8	—
Cocaine	1	4	3	7	3	2
Heroin/morphine	1	2	1	4	3	—
Marijuana	2	2	4	6	7	5
Amphetamines	—	—	—	—	—	—
Methamphetamine	—	—	—	—	—	—
Club drugs[1]	—	—	—	—	—	—
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	—	—	—	1	2	—
Narcotic analgesics[3]	2	5	—	9	7	2
Other analgesics	2	3	—	4	3	—
Benzodiazepines	2	4	—	6	2	—
Antidepressants	2	6	4	4	8	—
All other substances[3]	2	—	3	12	6	—
Total drug deaths	**7**	**10**	**9**	**21**	**23**	**9**
Total drug mentions	**18**	**30**	**21**	**58**	**49**	**—**
Total deaths certified	**1,338**	**493**	**231**	**285**	**296**	**—**

Because Milwaukee County did not participate in DAWN prior to 2000, this table shows data only from Waukesha County. Data for Milwaukee County are provided in the Area Spotlight section of this publication.

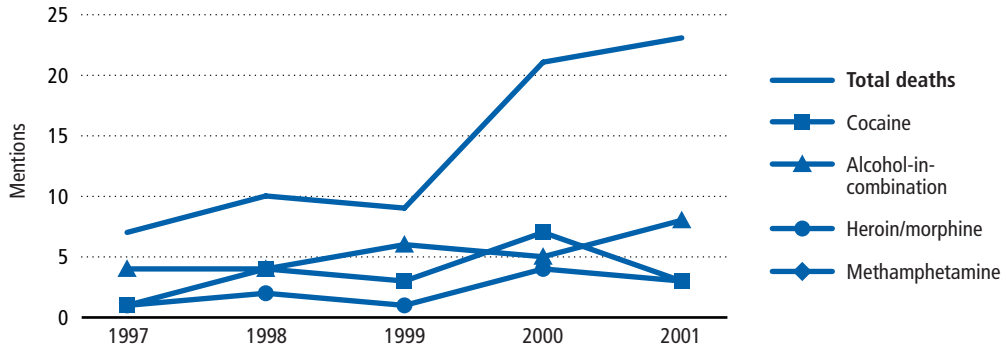
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

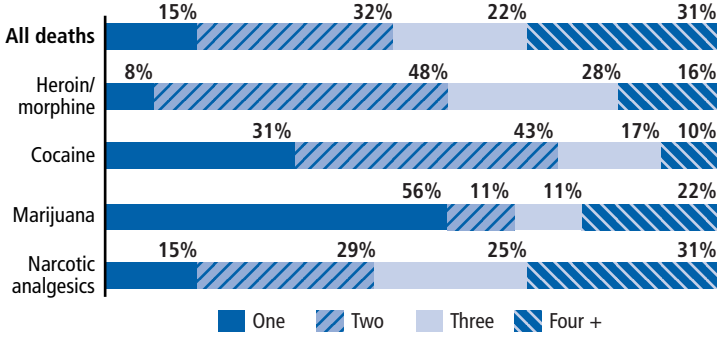
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	22	16	1	16	5
Alcohol + cocaine	13	8	2	9	2
Heroin/morphine only	2	2	—	2	—
Alcohol + heroin/morphine	2	2	—	1	1
Cocaine + heroin/morphine	8	8	—	8	—
Narcotic analgesics only	8	8	—	7	1
Alcohol + cocaine + heroin/morphine	3	3	—	3	—
Heroin/morphine + narcotic analgesics	1	1	—	—	1
Marijuana only	5	1	—	4	1
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	82	66	32	45	5
Total	**146**	**115**	**35**	**95**	**16**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

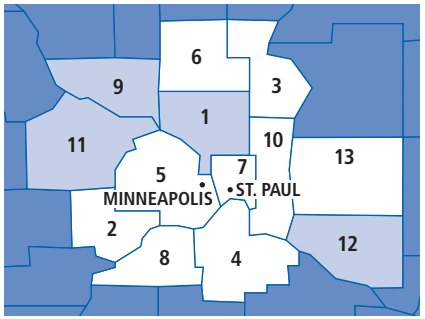


Bars may not total 100% due to rounding.

Milwaukee, WI

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Minneapolis-St. Paul, MN



Metro area population, 2001
2,773,621

Percent of population covered by DAWN
83%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
Minnesota jurisdictions					
1. Anoka County					305,681
2. Carver County	1	—	1	49	73,378
3. Chisago County	1	—	1	24	43,476
4. Dakota County	—	—	—	185	363,866
5. Hennepin County*	76	69	7	1,378	1,114,977
6. Isanti County	—	—	—	215	32,767
7. Ramsey County*	47	32	15	1,214	508,667
8. Scott County	1	1	—	70	98,100
9. Sherburne County					68,621
10. Washington County	5	3	2	214	207,642
11. Wright County					94,789
Wisconsin jurisdictions					
12. Pierce County					37,290
13. St. Croix County	3	2	1	197	66,319
Total, participating (9)	**134**	**107**	**27**	**3,546**	**2,509,192**

Areas that are shaded did not participate in DAWN in 2001.
* Indicates area featured in Spotlight section

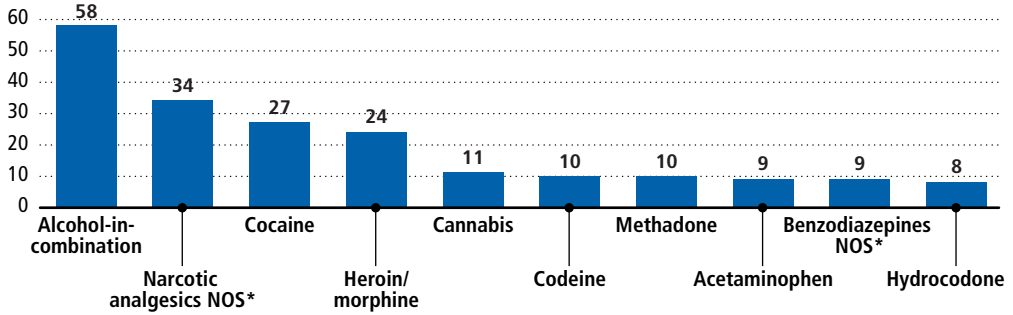
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	96	6-17	1	White	95
Female	38	18-24	13	Black	30
		25-34	23	Hispanic	2
		35-44	46	All others	7
		45-97	51		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	43%	45%	39%	—	8%	35%	54%	47%
Number of drugs involved								
Single-drug	31%	34%	21%	—	46%	35%	26%	29%
Multi-drug	69%	66%	79%	100%	54%	65%	74%	71%
Cause of death								
Drug-induced	80%	75%	92%	100%	77%	78%	78%	82%
Drug-related	20%	25%	8%	—	23%	22%	22%	18%
Manner of death								
Suicide	26%	18%	47%	100%	38%	17%	20%	31%
Accidental/unexpected	64%	71%	47%	—	54%	78%	72%	55%
All others	10%	11%	5%	—	8%	4%	9%	14%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	44	54	36	57	58	—
Cocaine	37	18	33	28	27	10
Heroin/morphine	26	32	30	17	24	2
Marijuana	25	25	14	19	11	1
Amphetamines	5	6	3	3	5	1
Methamphetamine	5	6	5	8	4	1
Club drugs[1]	—	1	3	6	—	—
Hallucinogens[2]	1	—	—	—	1	—
Inhalants	1	—	—	—	—	—
Narcotic analgesics[3]	34	29	37	47	77	20
Other analgesics	11	11	10	7	19	1
Benzodiazepines	18	9	12	24	21	—
Antidepressants	16	35	30	17	19	2
All other substances[3]	35	35	19	21	30	3
Total drug deaths	**112**	**117**	**97**	**115**	**134**	**41**
Total drug mentions	**258**	**261**	**232**	**254**	**296**	—
Total deaths certified	**3,559**	**3,592**	**3,452**	**3,607**	**3,546**	—

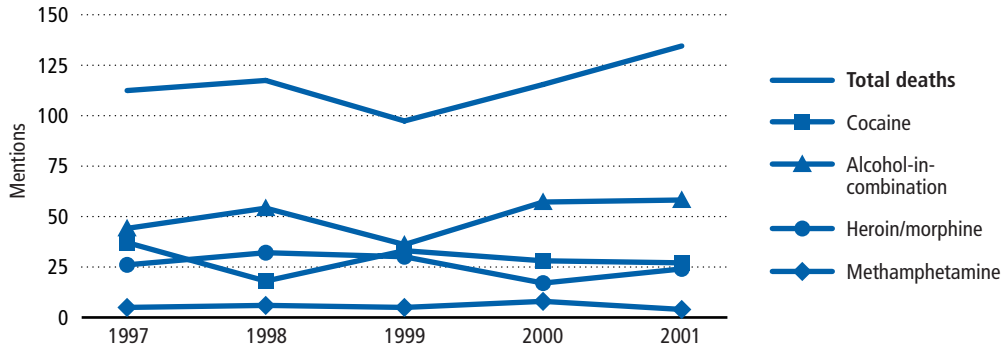
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

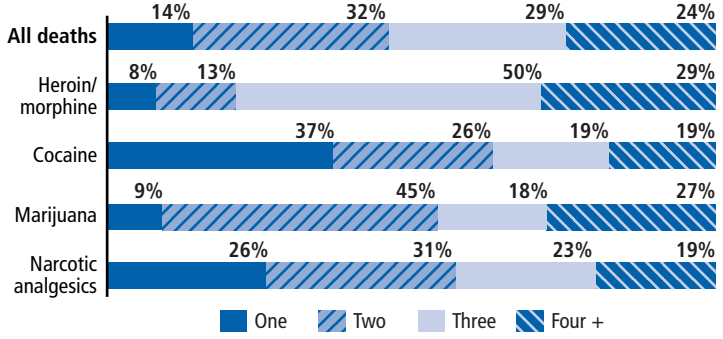
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	10	5	—	8	2
Alcohol + cocaine	6	5	—	5	1
Heroin/morphine only	2	2	—	2	—
Alcohol + heroin/morphine	—	—	—	—	—
Cocaine + heroin/morphine	—	—	—	—	—
Narcotic analgesics only	20	20	2	18	—
Alcohol + cocaine + heroin/morphine	1	1	—	1	—
Heroin/morphine + narcotic analgesics	—	—	—	—	—
Marijuana only	1	—	—	—	1
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	1	—	—	1	—
All other drugs/combinations	93	74	33	51	9
Total	**134**	**107**	**35**	**86**	**13**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

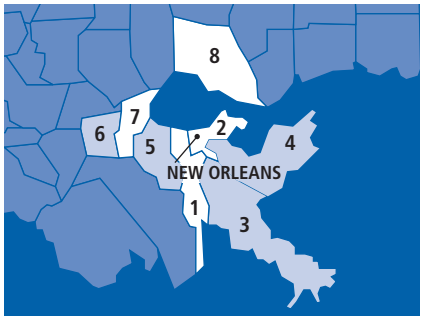


Bars may not total 100% due to rounding.

Minneapolis-St. Paul, MN

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

New Orleans, LA



Metro area population, 2001
1,332,694

Percent of population covered by DAWN
88%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Jefferson Parish	81	74	7	2,821	451,459
2. Orleans Parish*	84	59	25	1,876	476,492
3. Plaquemines Parish					27,004
4. St. Bernard Parish					66,486
5. St. Charles Parish					48,548
6. St. James Parish					21,224
7. St. John Baptist Parish	3	1	2	91	43,798
8. St. Tammany Parish	44	27	17	257	197,683
Total, participating (4)	**212**	**161**	**51**	**5,045**	**1,169,432**

Areas that are shaded did not participate in DAWN in 2001.

* Indicates area featured in Spotlight section

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	163
Female	46

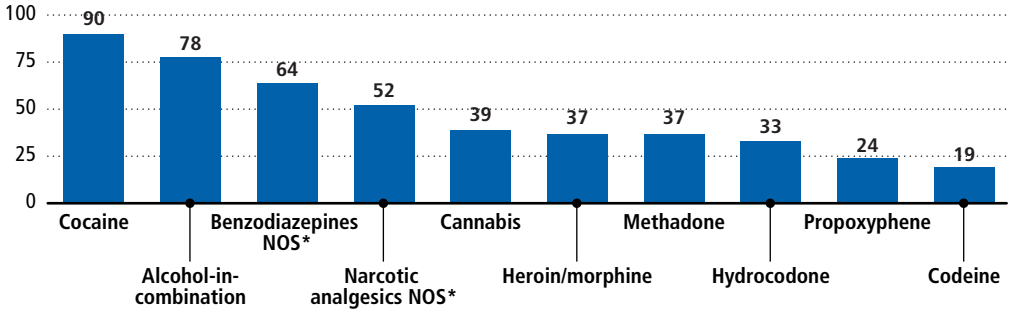
Age	
6-17	2
18-24	37
25-34	42
35-44	56
45-97	74

Race/Ethnicity	
White	151
Black	55
Hispanic	4
All others	2

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	37%	41%	24%	—	49%	33%	36%	35%
Number of drugs involved								
Single-drug	15%	14%	17%	—	8%	14%	14%	20%
Multi-drug	85%	86%	83%	100%	92%	86%	86%	80%
Cause of death								
Drug-induced	76%	73%	85%	100%	81%	83%	77%	68%
Drug-related	24%	27%	15%	—	19%	17%	23%	32%
Manner of death								
Suicide	13%	12%	15%	—	11%	10%	13%	16%
Accidental/unexpected	72%	72%	70%	50%	84%	79%	75%	60%
All others	16%	16%	15%	50%	5%	12%	13%	24%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	54	63	86	73	78	—
Cocaine	66	75	82	111	90	19
Heroin/morphine	20	29	38	48	37	2
Marijuana	28	49	58	55	39	2
Amphetamines	5	7	7	4	3	—
Methamphetamine	—	—	—	—	—	—
Club drugs[1]	—	1	4	3	7	—
Hallucinogens[2]	1	—	1	2	—	—
Inhalants	1	—	1	—	1	1
Narcotic analgesics[3]	59	69	124	118	200	5
Other analgesics	30	13	13	9	19	—
Benzodiazepines	34	55	67	78	73	—
Antidepressants	9	6	26	11	17	1
All other substances[3]	88	43	71	37	100	2
Total drug deaths	**162**	**175**	**208**	**223**	**212**	**32**
Total drug mentions	**395**	**410**	**578**	**549**	**664**	—
Total deaths certified	**5,005**	**5,149**	**5,070**	**5,139**	**5,045**	—

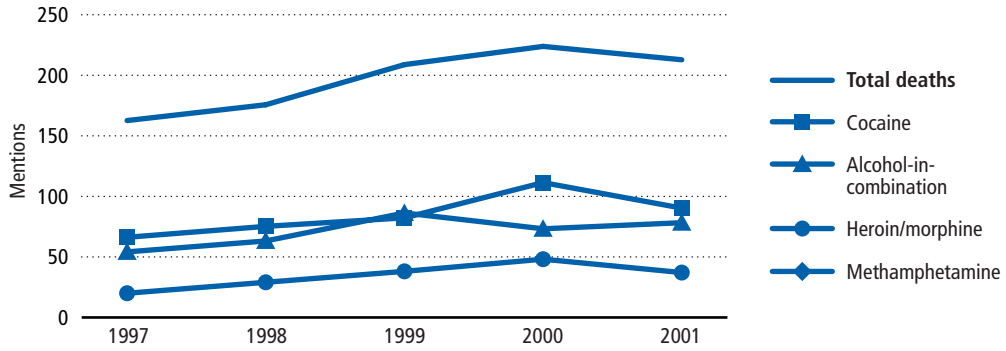
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

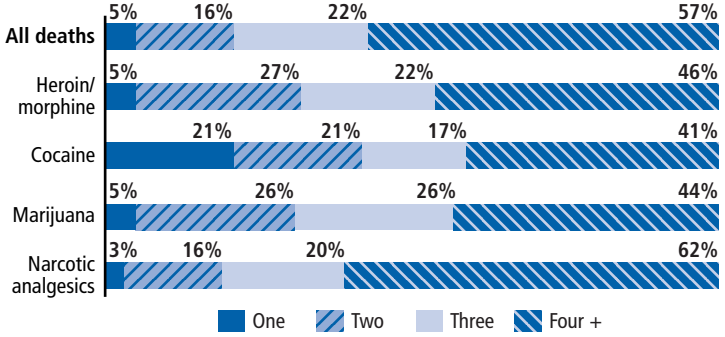
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	19	14	—	11	8
Alcohol + cocaine	9	7	1	7	1
Heroin/morphine only	2	2	—	2	—
Alcohol + heroin/morphine	2	2	—	2	—
Cocaine + heroin/morphine	1	—	—	—	1
Narcotic analgesics only	5	2	1	2	2
Alcohol + cocaine + heroin/morphine	1	1	—	1	—
Heroin/morphine + narcotic analgesics	5	4	1	4	—
Marijuana only	2	—	—	1	1
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	166	129	24	122	20
Total	**212**	**161**	**27**	**152**	**33**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

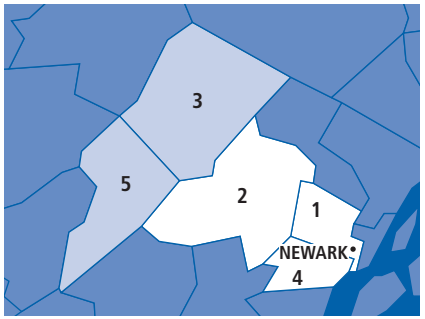


Bars may not total 100% due to rounding.

New Orleans, LA

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Newark, NJ



Metro area population, 2001
2,041,824

Percent of population covered by DAWN
88%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Essex County*	215	149	66	2,441	793,133
2. Morris County	35	29	6	928	472,859
3. Sussex County					146,671
4. Union County	54	35	19	1,365	523,396
5. Warren County					105,765
Total, participating (3)	**304**	**213**	**91**	**4,734**	**1,789,388**

Areas that are shaded did not participate in DAWN in 2001.

* Indicates area featured in Spotlight section

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	226
Female	78

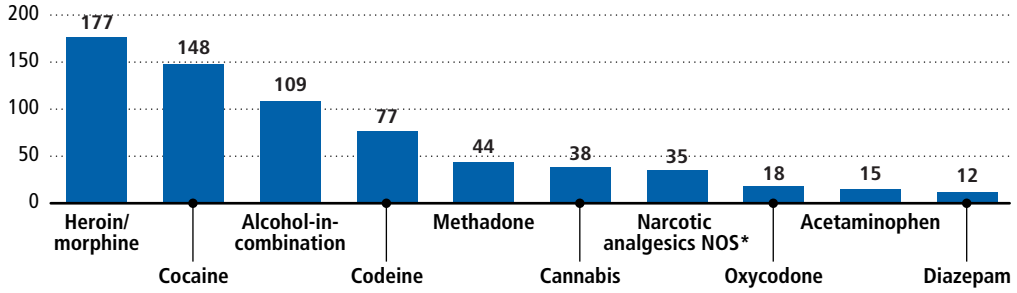
Age	
6-17	3
18-24	35
25-34	68
35-44	106
45-97	90

Race/Ethnicity	
White	117
Black	147
Hispanic	33
All others	7

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	36%	39%	27%	—	37%	31%	39%	37%
Number of drugs involved								
Single-drug	20%	21%	18%	67%	26%	19%	16%	23%
Multi-drug	80%	79%	82%	33%	74%	81%	84%	77%
Cause of death								
Drug-induced	70%	65%	83%	33%	46%	63%	78%	76%
Drug-related	30%	35%	17%	67%	54%	37%	22%	24%
Manner of death								
Suicide	5%	4%	8%	—	9%	3%	4%	7%
Accidental/unexpected	56%	60%	45%	67%	66%	57%	49%	59%
All others	39%	36%	47%	33%	26%	40%	47%	35%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	53	65	97	98	109	—
Cocaine	108	122	130	137	148	22
Heroin/morphine	103	107	128	179	177	12
Marijuana	22	21	21	14	38	15
Amphetamines	—	1	1	—	—	—
Methamphetamine	—	—	1	1	—	—
Club drugs[1]	—	—	1	1	2	—
Hallucinogens[2]	—	—	—	1	—	—
Inhalants	—	—	—	1	—	—
Narcotic analgesics[3]	14	54	44	75	190	11
Other analgesics	5	22	15	13	24	—
Benzodiazepines	14	31	49	35	33	—
Antidepressants	20	34	25	48	29	1
All other substances[3]	8	15	24	23	45	1
Total drug deaths	**155**	**202**	**225**	**250**	**304**	**62**
Total drug mentions	**347**	**472**	**536**	**626**	**795**	—
Total deaths certified	**4,682**	**5,022**	**5,039**	**4,802**	**4,734**	—

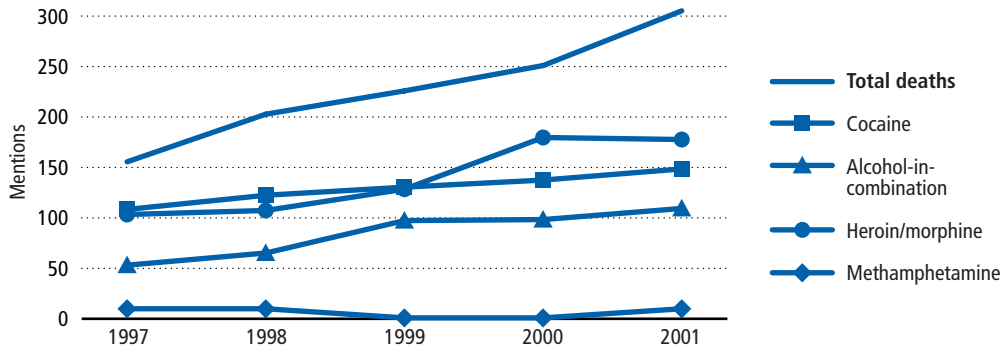
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

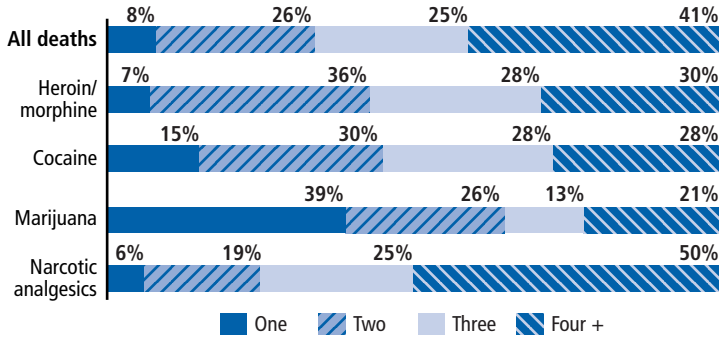
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	22	18	—	13	9
Alcohol + cocaine	15	7	2	9	4
Heroin/morphine only	12	10	—	5	7
Alcohol + heroin/morphine	14	11	—	5	9
Cocaine + heroin/morphine	23	18	—	12	11
Narcotic analgesics only	11	7	—	6	5
Alcohol + cocaine + heroin/morphine	15	14	—	8	7
Heroin/morphine + narcotic analgesics	23	16	—	12	11
Marijuana only	15	3	—	15	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	154	109	13	85	56
Total	**304**	**213**	**15**	**170**	**119**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

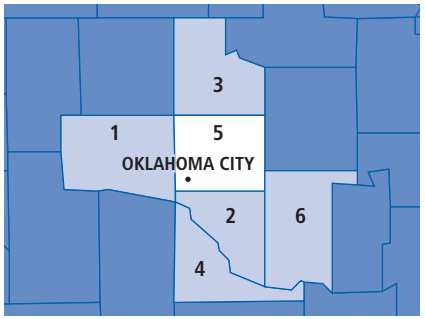


Bars may not total 100% due to rounding.

Newark, NJ

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Oklahoma City, OK



Metro area population, 2001
1,092,342

Percent of population covered by DAWN
61%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Canadian County					89,978
2. Cleveland County					211,908
3. Logan County					34,209
4. McClain County					27,825
5. Oklahoma County	182	160	22	3,079	662,153
6. Pottawatomie County					66,269
Total, participating (1)	**182**	**160**	**22**	**3,079**	**662,153**

Areas that are shaded did not participate in DAWN in 2001.

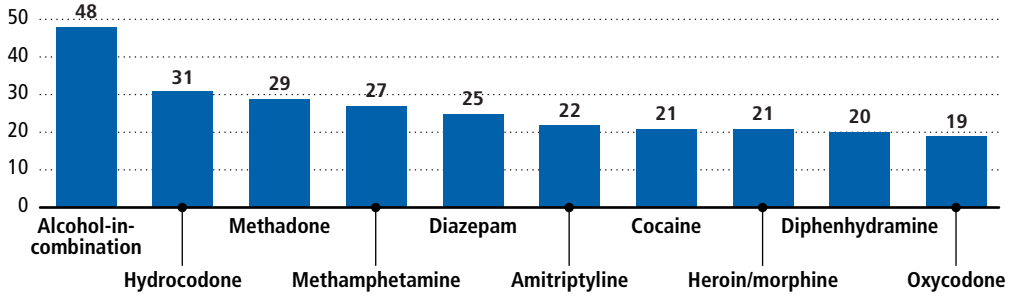
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	118	6-17	5	White	157
Female	64	18-24	24	Black	13
		25-34	30	Hispanic	2
		35-44	68	All others	10
		45-97	55		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	26%	32%	16%	—	29%	13%	34%	25%
Number of drugs involved								
Single-drug	21%	24%	16%	40%	17%	27%	10%	31%
Multi-drug	79%	76%	84%	60%	83%	73%	90%	69%
Cause of death								
Drug-induced	88%	84%	95%	60%	79%	93%	90%	89%
Drug-related	12%	16%	5%	40%	21%	7%	10%	11%
Manner of death								
Suicide	27%	22%	36%	20%	46%	30%	15%	33%
Accidental/unexpected	53%	60%	41%	80%	54%	40%	65%	44%
All others	20%	18%	23%	—	—	30%	21%	24%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	40	56	62	42	48	—
Cocaine	45	56	52	28	21	7
Heroin/morphine	16	26	25	19	21	4
Marijuana	—	—	—	—	—	—
Amphetamines	44	44	37	31	12	—
Methamphetamine	61	56	53	56	27	7
Club drugs[1]	—	—	—	1	3	—
Hallucinogens[2]	1	1	—	1	—	—
Inhalants	6	11	5	11	7	5
Narcotic analgesics[3]	34	53	97	78	100	9
Other analgesics	13	26	23	15	26	2
Benzodiazepines	20	23	35	27	45	1
Antidepressants	38	57	73	23	79	1
All other substances[3]	17	41	66	44	93	2
Total drug deaths	**170**	**211**	**226**	**196**	**182**	**38**
Total drug mentions	**335**	**450**	**528**	**376**	**482**	—
Total deaths certified	**3,273**	**3,313**	**3,420**	**3,319**	**3,079**	—

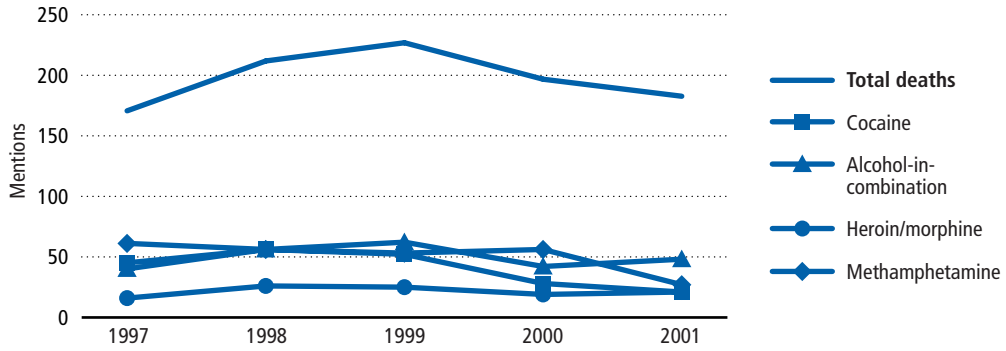
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

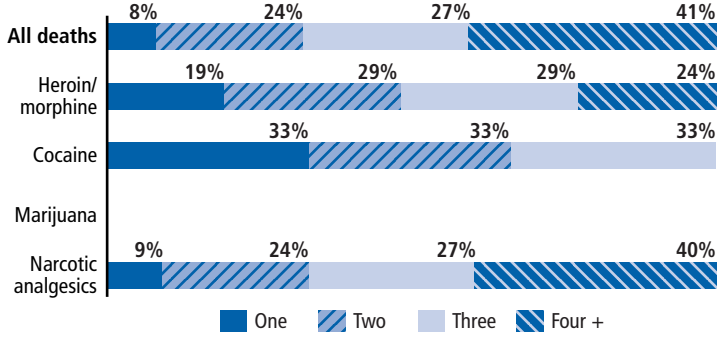
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	7	6	1	3	3
Alcohol + cocaine	6	4	1	5	—
Heroin/morphine only	4	4	1	3	—
Alcohol + heroin/morphine	2	2	—	1	1
Cocaine + heroin/morphine	1	1	—	1	—
Narcotic analgesics only	9	9	1	4	4
Alcohol + cocaine + heroin/morphine	—	—	—	—	—
Heroin/morphine + narcotic analgesics	2	2	—	1	1
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	7	3	—	4	3
All other drugs/combinations	144	129	45	75	24
Total	**182**	**160**	**49**	**97**	**36**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

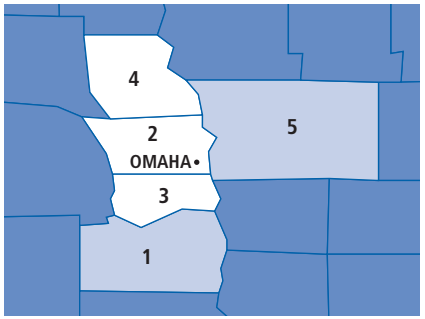


Bars may not total 100% due to rounding.

Oklahoma City, OK

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Omaha, NE



Metro area population, 2001
723,210

Percent of population covered by DAWN
84%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
Nebraska jurisdictions					
1. Cass County					24,646
2. Douglas County	60	20	40	2,909	465,683
3. Sarpy County	—	—	—	318	125,836
4. Washington County	—	—	—	25	19,191
Iowa jurisdictions					
5. Pottawattamie County					87,854
Total, participating (3)	**60**	**20**	**40**	**3,252**	**610,710**

Areas that are shaded did not participate in DAWN in 2001.

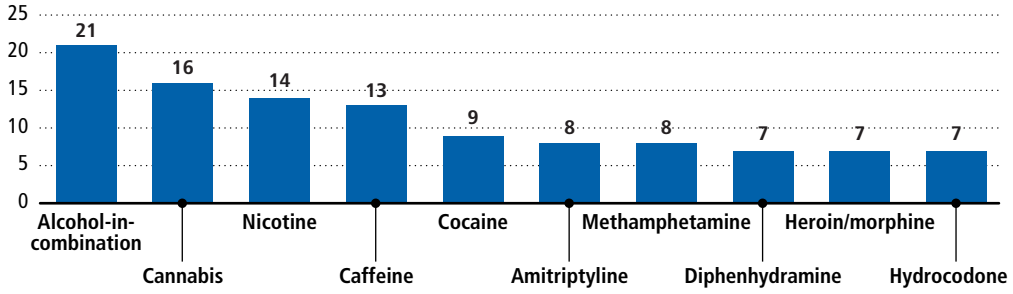
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	41	6-17	1	White	44
Female	19	18-24	9	Black	10
		25-34	14	Hispanic	4
		35-44	14	All others	2
		45-97	22		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	35%	34%	37%	—	11%	43%	43%	36%
Number of drugs involved								
Single-drug	20%	24%	11%	—	44%	21%	21%	9%
Multi-drug	80%	76%	89%	100%	56%	79%	79%	91%
Cause of death								
Drug-induced	33%	32%	37%	—	22%	36%	29%	41%
Drug-related	67%	68%	63%	100%	78%	64%	71%	59%
Manner of death								
Suicide	20%	20%	21%	—	22%	36%	14%	14%
Accidental/unexpected	30%	34%	21%	100%	56%	29%	7%	32%
All others	50%	46%	58%	—	22%	36%	79%	55%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	20	15	16	18	21	—
Cocaine	9	14	4	11	9	3
Heroin/morphine	3	3	2	2	7	—
Marijuana	18	12	16	18	16	5
Amphetamines	4	5	3	7	7	—
Methamphetamine	7	5	3	7	8	1
Club drugs[1]	—	—	—	—	—	—
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	—	1	—	—	—	—
Narcotic analgesics[3]	13	21	13	33	30	1
Other analgesics	8	8	8	12	8	—
Benzodiazepines	6	14	8	11	2	—
Antidepressants	14	12	18	17	29	—
All other substances[3]	9	29	18	39	60	2
Total drug deaths	**45**	**44**	**42**	**62**	**60**	**12**
Total drug mentions	**111**	**139**	**109**	**175**	**197**	—
Total deaths certified	**3,014**	**2,999**	**3,078**	**3,021**	**3,252**	—

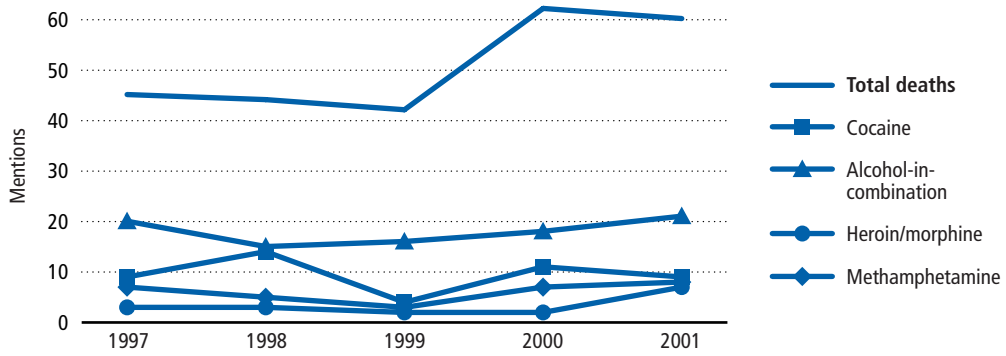
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

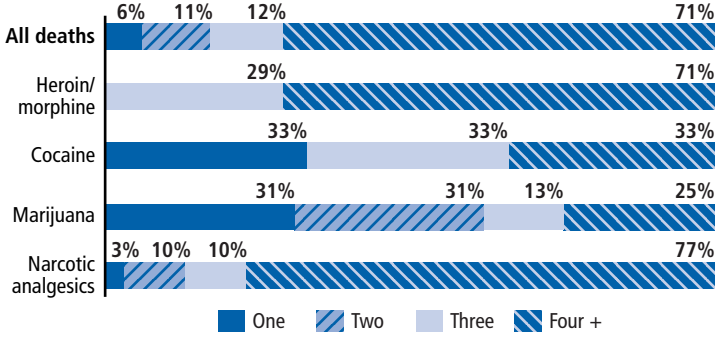
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	3	1	1	1	1
Alcohol + cocaine	—	—	—	—	—
Heroin/morphine only	—	—	—	—	—
Alcohol + heroin/morphine	—	—	—	—	—
Cocaine + heroin/morphine	—	—	—	—	—
Narcotic analgesics only	1	1	1	—	—
Alcohol + cocaine + heroin/morphine	1	1	—	1	—
Heroin/morphine + narcotic analgesics	—	—	—	—	—
Marijuana only	5	—	1	2	2
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	50	17	9	14	27
Total	**60**	**20**	**12**	**18**	**30**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

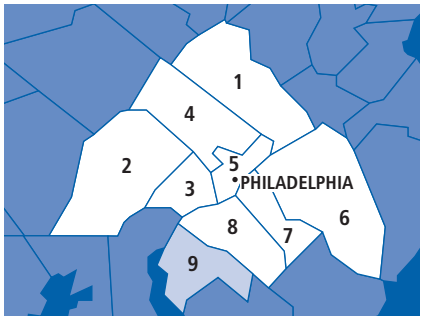


Bars may not total 100% due to rounding.

Omaha, NE

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Philadelphia, PA



Metro area population, 2001
5,116,830

Percent of population covered by DAWN
99%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
Pennsylvania jurisdictions					
1. Bucks County	36	36	—	498	605,379
2. Chester County	27	20	7	484	443,346
3. Delaware County	77	56	21	1,131	551,158
4. Montgomery County	58	42	16	561	759,953
5. Philadelphia County*	492	433	59	5,632	1,491,812
New Jersey jurisdictions					
6. Burlington County	45	26	19	944	432,121
7. Camden County*	113	87	26	1,374	509,350
8. Gloucester County	26	23	3	479	259,347
9. Salem County					64,364
Total, participating (8)	**874**	**723**	**151**	**11,103**	**5,052,466**

Areas that are shaded did not participate in DAWN in 2001.
* Indicates area featured in Spotlight section

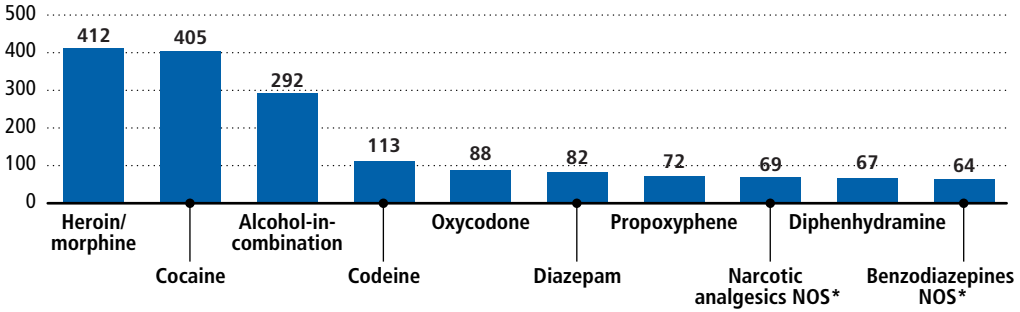
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	627	6-17	8	White	562
Female	239	18-24	104	Black	254
		25-34	159	Hispanic	55
		35-44	330	All others	3
		45-97	271		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	33%	36%	26%	25%	25%	33%	38%	31%
Number of drugs involved								
Single-drug	15%	15%	17%	38%	18%	15%	13%	16%
Multi-drug	85%	85%	83%	63%	82%	85%	87%	84%
Cause of death								
Drug-induced	83%	81%	88%	75%	69%	75%	87%	87%
Drug-related	17%	19%	12%	25%	31%	25%	13%	13%
Manner of death								
Suicide	14%	12%	18%	25%	18%	12%	13%	15%
Accidental/unexpected	71%	74%	63%	63%	78%	84%	71%	61%
All others	15%	14%	18%	13%	4%	4%	17%	24%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	271	234	249	317	283	—
Cocaine	474	401	427	429	393	65
Heroin/morphine	564	403	409	461	391	32
Marijuana	47	47	35	39	42	6
Amphetamines	12	7	12	7	18	—
Methamphetamine	18	7	6	3	7	—
Club drugs[1]	2	—	10	7	16	1
Hallucinogens[2]	33	33	29	33	36	4
Inhalants	5	1	9	2	2	1
Narcotic analgesics[3]	410	310	376	503	466	12
Other analgesics	83	58	65	78	83	—
Benzodiazepines	227	210	200	212	235	3
Antidepressants	136	220	178	232	254	3
All other substances[3]	295	296	332	354	345	3
Total drug deaths	**897**	**766**	**805**	**892**	**838**	**130**
Total drug mentions	**2,577**	**2,227**	**2,337**	**2,677**	**2,571**	—
Total deaths certified	**10,882**	**10,700**	**10,854**	**10,924**	**10,605**	—

This table includes only those counties that provided data for every year shown. Bucks County did not provide data in 1998, and is not included in this table.

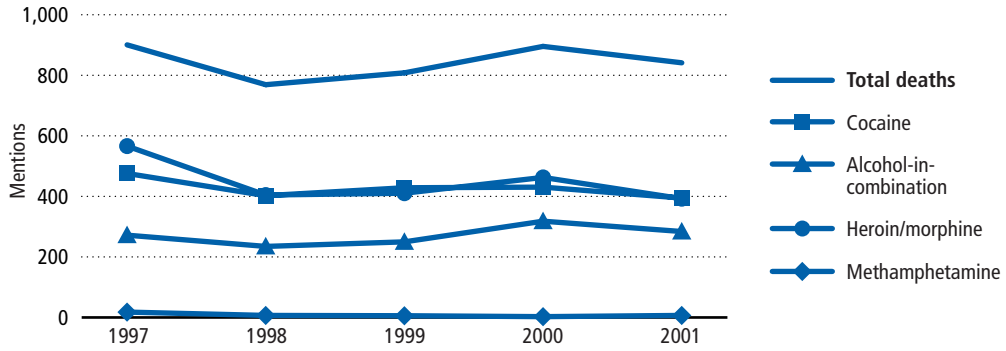
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

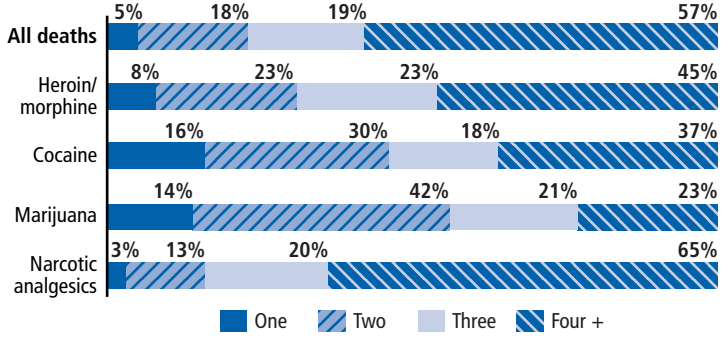
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	65	50	6	35	24
Alcohol + cocaine	48	32	7	30	11
Heroin/morphine only	34	25	5	27	2
Alcohol + heroin/morphine	26	25	2	24	—
Cocaine + heroin/morphine	29	28	2	24	3
Narcotic analgesics only	12	9	2	9	1
Alcohol + cocaine + heroin/morphine	18	17	—	18	—
Heroin/morphine + narcotic analgesics	18	17	—	15	3
Marijuana only	6	—	4	2	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	618	520	94	436	88
Total	**874**	**723**	**122**	**620**	**132**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

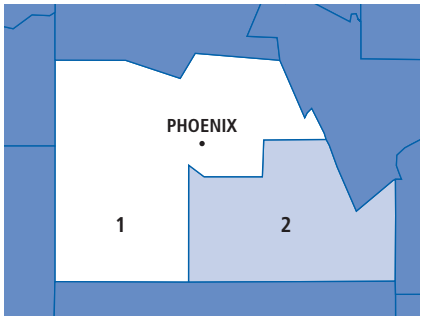


Bars may not total 100% due to rounding.

Philadelphia, PA

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Phoenix, AZ



Metro area population, 2001
3,383,644

Percent of population covered by DAWN
94%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Maricopa County	453	341	112	4,050	3,194,798
2. Pinal County					188,846
Total, participating (1)	**453**	**341**	**112**	**4,050**	**3,194,798**

Areas that are shaded did not participate in DAWN in 2001.

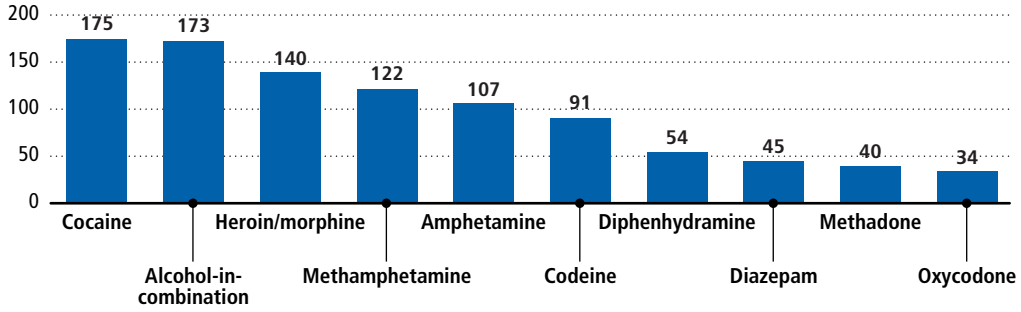
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	341	6-17	6	White	412
Female	112	18-24	46	Black	22
		25-34	102	Hispanic	4
		35-44	162	All others	15
		45-97	135		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	38%	43%	25%	17%	37%	38%	43%	34%
Number of drugs involved								
Single-drug	9%	9%	8%	—	7%	8%	9%	10%
Multi-drug	91%	91%	92%	100%	93%	92%	91%	90%
Cause of death								
Drug-induced	75%	72%	84%	33%	54%	64%	79%	88%
Drug-related	25%	28%	16%	67%	46%	36%	21%	12%
Manner of death								
Suicide	24%	23%	27%	33%	17%	30%	17%	28%
Accidental/unexpected	65%	67%	58%	67%	67%	63%	70%	61%
All others	11%	10%	15%	—	15%	7%	13%	12%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	73	159	259	236	173	—
Cocaine	98	174	236	213	175	19
Heroin/morphine	106	171	177	181	140	6
Marijuana	—	—	3	8	1	—
Amphetamines	17	47	72	78	107	—
Methamphetamine	34	60	94	109	122	4
Club drugs[1]	1	—	6	6	1	—
Hallucinogens[2]	—	1	1	4	4	1
Inhalants	3	2	7	1	—	—
Narcotic analgesics[3]	110	200	291	318	261	3
Other analgesics	12	23	15	26	26	2
Benzodiazepines	50	90	95	104	80	1
Antidepressants	96	135	223	242	168	—
All other substances[3]	192	302	484	452	320	3
Total drug deaths	**240**	**389**	**561**	**587**	**453**	**39**
Total drug mentions	**792**	**1,364**	**1,963**	**1,978**	**1,578**	—
Total deaths certified	**3,556**	**3,671**	**3,838**	**3,858**	**4,050**	—

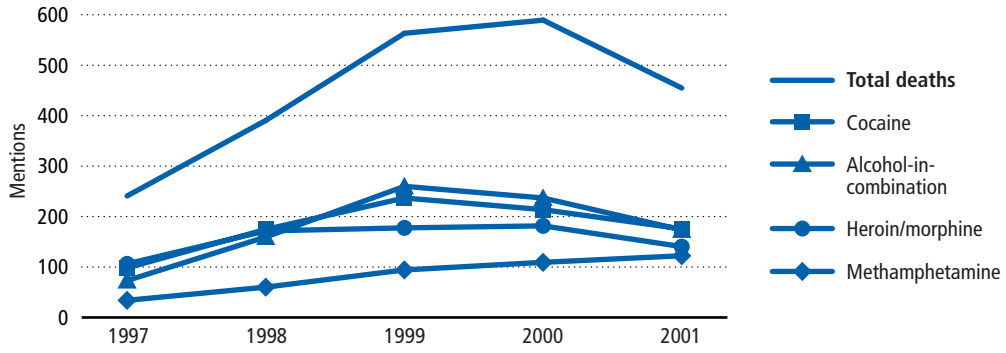
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

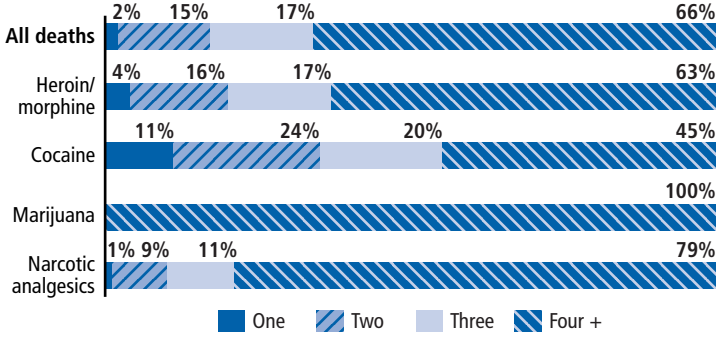
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	19	15	1	13	5
Alcohol + cocaine	32	12	8	20	4
Heroin/morphine only	6	6	1	5	—
Alcohol + heroin/morphine	8	7	—	8	—
Cocaine + heroin/morphine	3	3	—	3	—
Narcotic analgesics only	3	2	—	2	1
Alcohol + cocaine + heroin/morphine	7	7	—	7	—
Heroin/morphine + narcotic analgesics	10	10	1	9	—
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	38	12	17	19	2
All other drugs/combinations	327	267	79	209	39
Total	**453**	**341**	**107**	**295**	**51**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

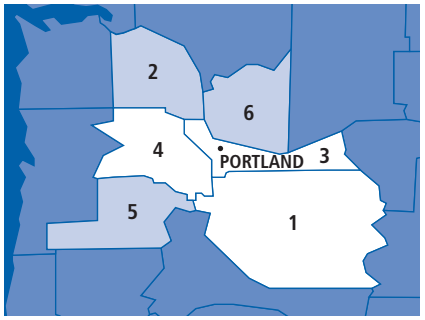


Bars may not total 100% due to rounding.

Phoenix, AZ

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Portland, OR



Metro area population, 2001
1,965,436

Percent of population covered by DAWN
75%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
Oregon jurisdictions					
1. Clackamas County	19	15	4	192	346,558
2. Columbia County					44,547
3. Multnomah County*	117	110	7	845	665,810
4. Washington County	21	20	1	184	461,119
5. Yamhill County					86,642
Washington jurisdictions					
6. Clark County					360,760
Total, participating (3)	**157**	**145**	**12**	**1,221**	**1,473,487**

Areas that are shaded did not participate in DAWN in 2001.

* Indicates area featured in Spotlight section

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	108
Female	49

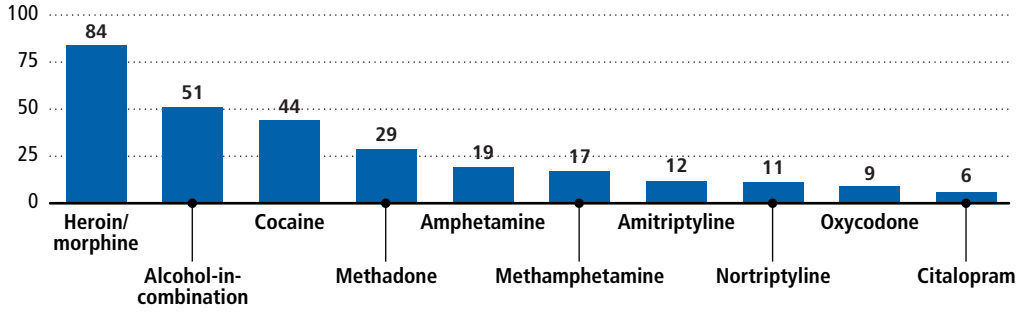
Age	
6-17	1
18-24	5
25-34	37
35-44	59
45-97	55

Race/Ethnicity	
White	137
Black	3
Hispanic	3
All others	14

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	32%	41%	14%	—	20%	32%	36%	31%
Number of drugs involved								
Single-drug	24%	28%	16%	100%	20%	30%	22%	22%
Multi-drug	76%	72%	84%	—	80%	70%	78%	78%
Cause of death								
Drug-induced	92%	91%	96%	100%	100%	86%	97%	91%
Drug-related	8%	9%	4%	—	—	14%	3%	9%
Manner of death								
Suicide	15%	12%	22%	—	—	11%	12%	24%
Accidental/unexpected	68%	75%	51%	100%	100%	73%	75%	53%
All others	17%	13%	27%	—	—	16%	14%	24%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	73	81	77	66	51	—
Cocaine	41	57	60	52	44	4
Heroin/morphine	114	127	142	107	84	20
Marijuana	—	—	—	—	—	—
Amphetamines	4	5	15	10	19	4
Methamphetamine	11	9	4	4	17	3
Club drugs[1]	—	—	—	1	—	—
Hallucinogens[2]	—	—	1	—	—	—
Inhalants	—	1	3	—	—	—
Narcotic analgesics[3]	13	16	26	22	50	6
Other analgesics	4	—	3	—	4	—
Benzodiazepines	6	11	9	8	9	—
Antidepressants	23	18	26	26	49	—
All other substances[3]	8	17	24	39	34	1
Total drug deaths	**154**	**175**	**191**	**168**	**157**	**38**
Total drug mentions	**297**	**342**	**390**	**335**	**361**	—
Total deaths certified	**1,366**	**1,272**	**1,187**	**1,154**	**1,221**	—

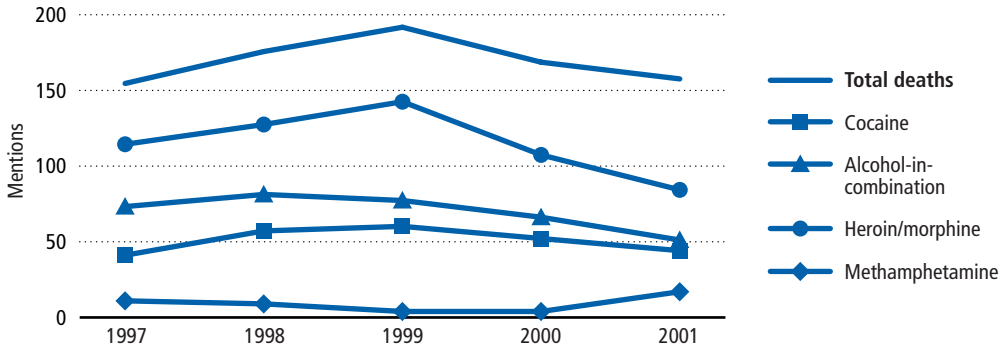
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

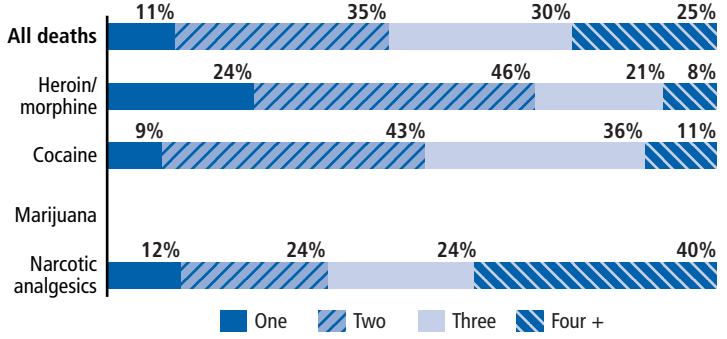
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	4	4	—	3	1
Alcohol + cocaine	3	3	—	2	1
Heroin/morphine only	20	19	2	16	2
Alcohol + heroin/morphine	19	18	—	18	1
Cocaine + heroin/morphine	14	14	—	14	—
Narcotic analgesics only	6	6	2	3	1
Alcohol + cocaine + heroin/morphine	9	8	—	8	1
Heroin/morphine + narcotic analgesics	2	2	—	2	—
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	5	3	—	5	—
All other drugs/combinations	75	68	20	35	20
Total	**157**	**145**	**24**	**106**	**27**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

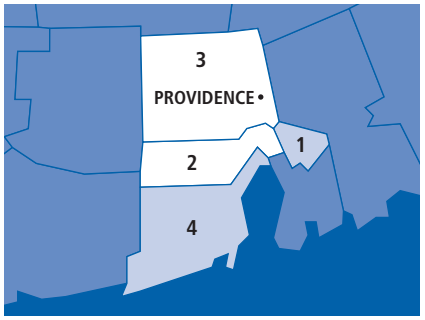


Bars may not total 100% due to rounding.

Portland, OR

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Providence, RI



Metro area population, 2001
973,702

Percent of population covered by DAWN
82%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Deaths involving drug abuse: Drug-induced	Deaths involving drug abuse: Drug-related	Total deaths certified	Total population (2001)
1. Bristol County					51,173
2. Kent County	8	8	—	417	169,224
3. Providence County	44	44	—	2,185	627,314
4. Washington County					125,991
Total, participating (2)	**52**	**52**	**—**	**2,602**	**796,538**

Areas that are shaded did not participate in DAWN in 2001.

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	38
Female	14

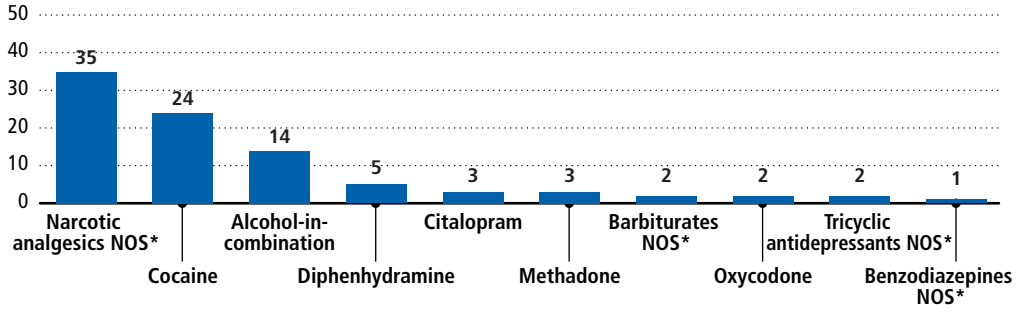
Age	
6-17	—
18-24	6
25-34	9
35-44	24
45-97	13

Race/Ethnicity	
White	44
Black	4
Hispanic	4
All others	—

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	27%	29%	21%	—	17%	22%	21%	46%
Number of drugs involved								
Single-drug	31%	32%	29%	—	33%	22%	42%	15%
Multi-drug	69%	68%	71%	—	67%	78%	58%	85%
Cause of death								
Drug-induced	100%	100%	100%	—	100%	100%	100%	100%
Drug-related	—	—	—	—	—	—	—	—
Manner of death								
Suicide	8%	5%	14%	—	17%	—	8%	8%
Accidental/unexpected	2%	3%	—	—	—	—	4%	—
All others	90%	92%	86%	—	83%	100%	88%	92%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	24	16	—	12	14	—
Cocaine	21	16	—	15	24	3
Heroin/morphine	17	9	—	—	—	—
Marijuana	3	4	—	1	—	—
Amphetamines	—	1	—	2	—	—
Methamphetamine	—	—	—	—	—	—
Club drugs[1]	—	—	—	—	1	—
Hallucinogens[2]	1	—	—	—	—	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics[3]	12	13	—	27	44	12
Other analgesics	7	10	—	2	—	—
Benzodiazepines	26	8	—	7	1	—
Antidepressants	16	5	—	2	5	—
All other substances[3]	29	5	—	2	7	1
Total drug deaths	**60**	**30**	**—**	**35**	**52**	**16**
Total drug mentions	**156**	**87**	**—**	**70**	**96**	**—**
Total deaths certified	**456**	**1,093**	**—**	**2,673**	**2,602**	**—**

Because neither Bristol County nor Washington County provided sufficient data for 1999, this table shows data only for 1997, 1998, 2000, and 2001.

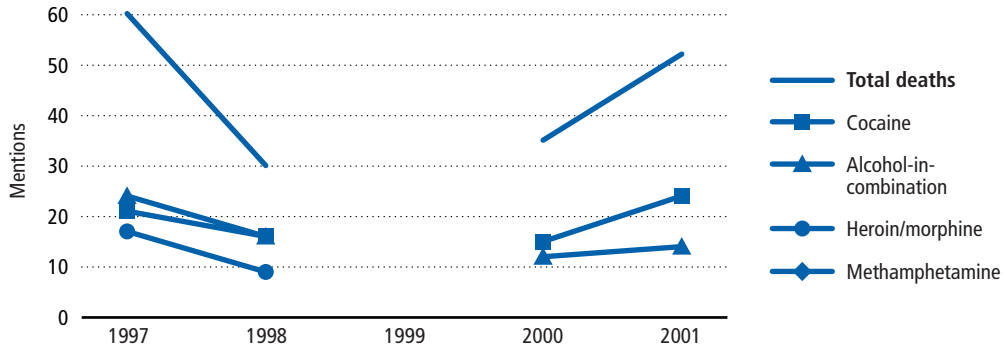
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

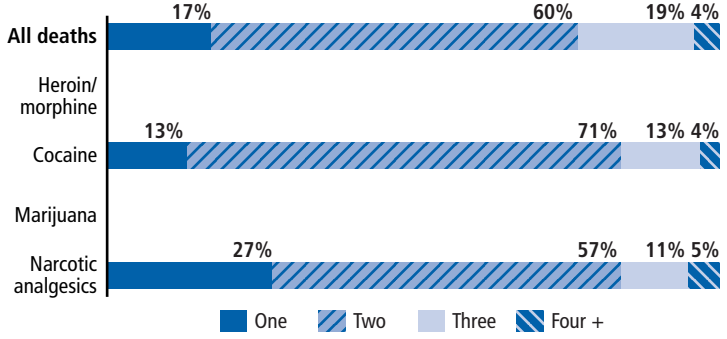
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	3	3	—	—	3
Alcohol + cocaine	3	3	—	1	2
Heroin/morphine only	—	—	—	—	—
Alcohol + heroin/morphine	—	—	—	—	—
Cocaine + heroin/morphine	—	—	—	—	—
Narcotic analgesics only	12	12	—	—	12
Alcohol + cocaine + heroin/morphine	—	—	—	—	—
Heroin/morphine + narcotic analgesics	—	—	—	—	—
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	34	34	4	—	30
Total	**52**	**52**	**4**	**1**	**47**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

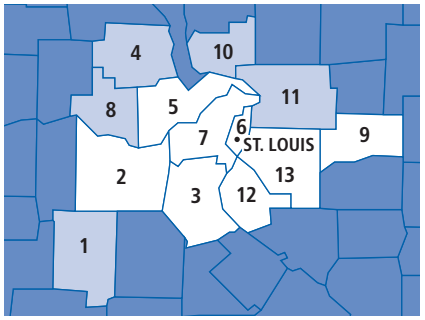


Bars may not total 100% due to rounding.

Providence, RI

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

St. Louis, MO



Metro area population, 2001
2,640,592

Percent of population covered by DAWN
86%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
Missouri jurisdictions					
1. Crawford County					22,955
2. Franklin County	12	6	6	349	95,187
3. Jefferson County	28	17	11	508	201,826
4. Lincoln County					41,010
5. St. Charles County	21	7	14	717	296,679
6. St. Louis City*	67	41	26	2,673	339,211
7. St. Louis County*	125	81	44	4,519	1,015,417
8. Warren County					25,452
Illinois jurisdictions					
9. Clinton County	—	—	—	86	35,658
10. Jersey County					21,832
11. Madison County					260,259
12. Monroe County	—	—	—	20	28,507
13. St. Clair County	11	2	9	1,333	256,599
Total, participating (8)	**264**	**154**	**110**	**10,205**	**2,269,084**

Areas that are shaded did not participate in DAWN in 2001.
* Indicates area featured in Spotlight section

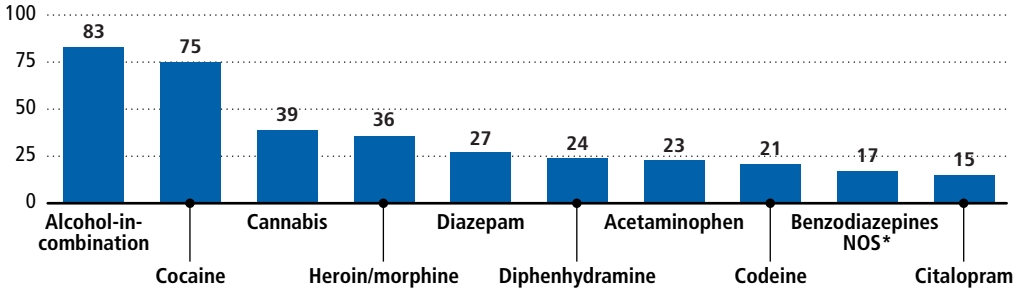
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	180	6-17	5	White	206
Female	82	18-24	30	Black	57
		25-34	48	Hispanic	1
		35-44	78	All others	—
		45-97	102		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	31%	34%	24%	—	40%	35%	33%	27%
Number of drugs involved								
Single-drug	29%	35%	16%	40%	20%	33%	26%	31%
Multi-drug	71%	65%	84%	60%	80%	67%	74%	69%
Cause of death								
Drug-induced	58%	54%	68%	40%	33%	44%	67%	67%
Drug-related	42%	46%	32%	60%	67%	56%	33%	33%
Manner of death								
Suicide	31%	31%	33%	40%	23%	27%	26%	40%
Accidental/unexpected	37%	39%	30%	40%	63%	48%	40%	22%
All others	31%	29%	37%	20%	13%	25%	35%	38%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	64	68	74	70	83	—
Cocaine	80	88	78	63	75	22
Heroin/morphine	45	54	55	54	36	1
Marijuana	46	47	60	49	39	9
Amphetamines	1	3	7	7	5	—
Methamphetamine	3	7	9	9	3	1
Club drugs[1]	—	—	3	2	1	—
Hallucinogens[2]	—	1	2	3	6	4
Inhalants	3	3	5	5	—	—
Narcotic analgesics[3]	52	52	65	77	78	5
Other analgesics	25	36	31	26	37	2
Benzodiazepines	57	60	65	60	59	1
Antidepressants	36	45	38	49	76	15
All other substances[3]	42	44	79	94	111	16
Total drug deaths	**215**	**229**	**263**	**234**	**264**	**76**
Total drug mentions	**454**	**508**	**571**	**568**	**609**	—
Total deaths certified	**9,603**	**9,613**	**9,988**	**9,939**	**10,205**	—

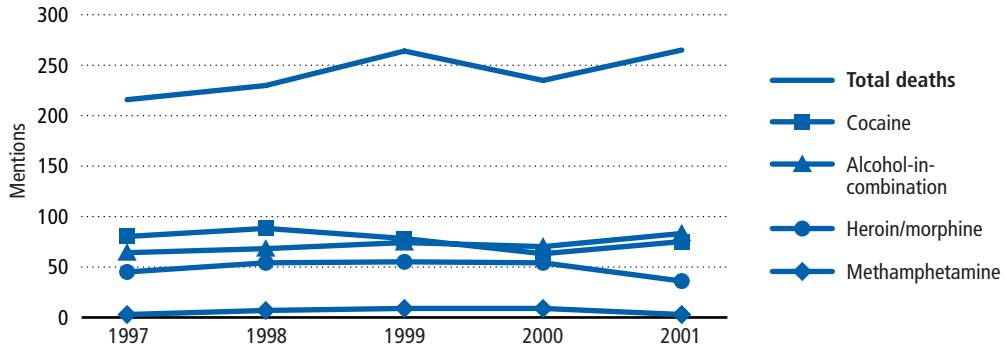
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

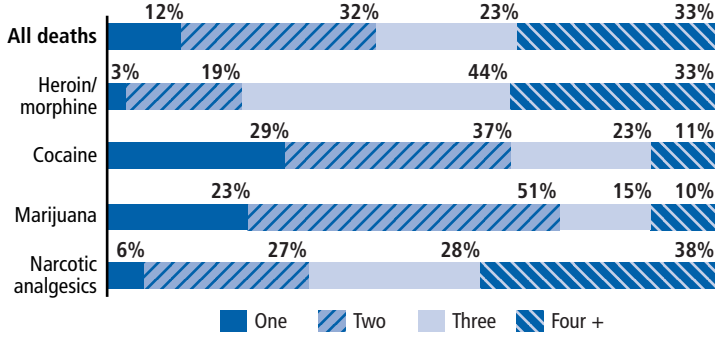
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	22	8	6	14	2
Alcohol + cocaine	20	13	4	12	4
Heroin/morphine only	1	—	—	1	—
Alcohol + heroin/morphine	—	—	—	—	—
Cocaine + heroin/morphine	—	—	—	—	—
Narcotic analgesics only	5	4	2	—	3
Alcohol + cocaine + heroin/morphine	3	3	—	2	1
Heroin/morphine + narcotic analgesics	7	5	1	3	3
Marijuana only	9	2	2	5	2
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	1	—	—	1	—
All other drugs/combinations	196	119	68	60	68
Total	**264**	**154**	**83**	**98**	**83**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

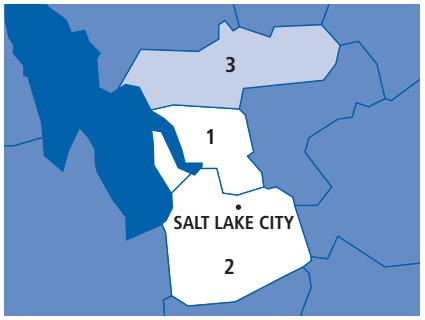


Bars may not total 100% due to rounding.

St. Louis, MO

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Salt Lake City, UT



Metro area population, 2001
1,626,538

Percent of population covered by DAWN
85%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Davis County	13	13	—	125	244,840
2. Salt Lake County*	85	80	5	792	904,331
3. Weber County					199,435
Total, participating (2)	**98**	**93**	**5**	**917**	**1,149,171**

Areas that are shaded did not participate in DAWN in 2001.
* Indicates area featured in Spotlight section

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	62
Female	33

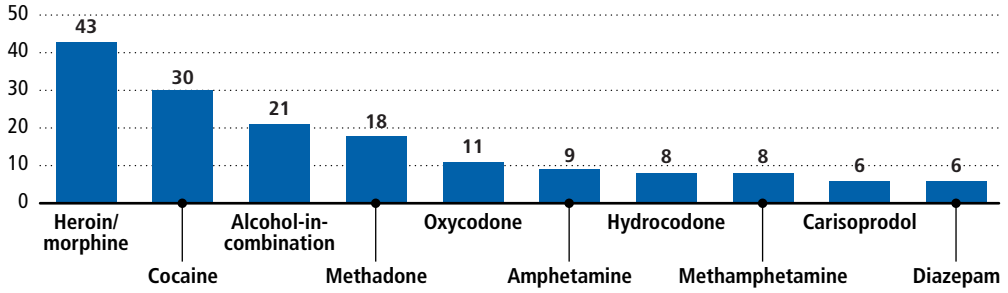
Age	
6-17	1
18-24	7
25-34	23
35-44	27
45-97	38

Race/Ethnicity	
White	87
Black	—
Hispanic	7
All others	4

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	21%	24%	15%	—	—	4%	30%	30%
Number of drugs involved								
Single-drug	33%	35%	30%	100%	57%	39%	26%	28%
Multi-drug	67%	65%	70%	—	43%	61%	74%	73%
Cause of death								
Drug-induced	95%	95%	94%	100%	86%	100%	93%	95%
Drug-related	5%	5%	6%	—	14%	—	7%	5%
Manner of death								
Suicide	14%	13%	18%	—	—	17%	19%	13%
Accidental/unexpected	6%	6%	6%	—	14%	9%	7%	3%
All others	80%	81%	76%	100%	86%	74%	74%	85%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	28	28	30	33	21	—
Cocaine	44	77	76	59	30	4
Heroin/morphine	67	83	90	80	43	13
Marijuana	2	1	1	—	2	—
Amphetamines	8	15	24	12	9	—
Methamphetamine	11	22	24	15	8	—
Club drugs[1]	—	—	1	2	1	—
Hallucinogens[2]	—	—	—	1	1	1
Inhalants	1	—	1	—	—	—
Narcotic analgesics[3]	18	15	28	39	43	13
Other analgesics	1	2	2	3	7	1
Benzodiazepines	6	5	8	14	13	—
Antidepressants	17	4	9	8	7	—
All other substances[3]	12	9	9	15	24	—
Total drug deaths	**102**	**118**	**148**	**129**	**98**	**32**
Total drug mentions	**215**	**261**	**303**	**281**	**209**	**—**
Total deaths certified	**823**	**802**	**820**	**805**	**917**	**—**

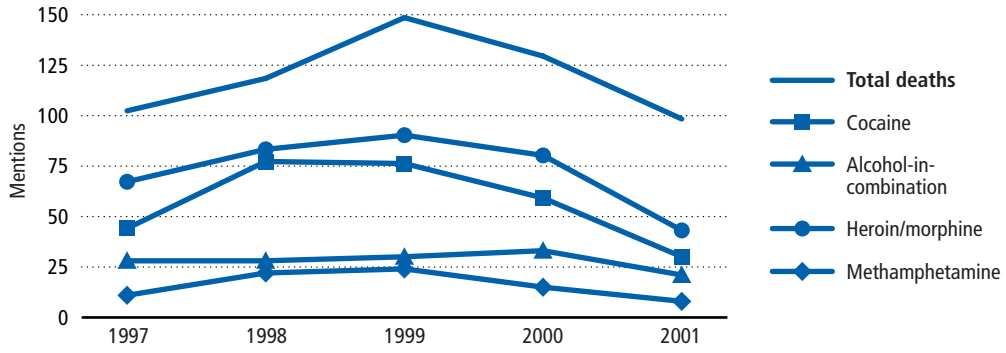
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

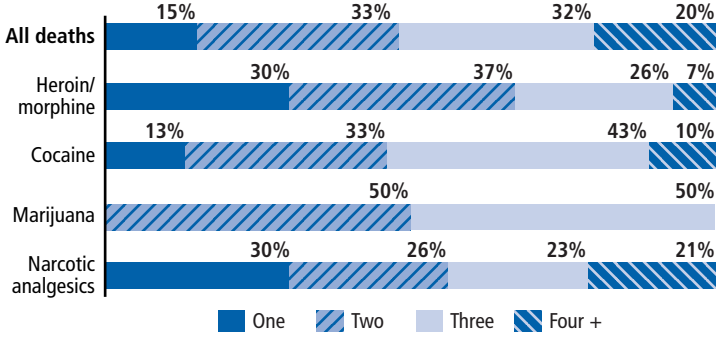
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	4	4	—	—	4
Alcohol + cocaine	—	—	—	—	—
Heroin/morphine only	13	13	—	—	13
Alcohol + heroin/morphine	5	5	1	—	4
Cocaine + heroin/morphine	10	9	1	1	8
Narcotic analgesics only	13	12	2	—	11
Alcohol + cocaine + heroin/morphine	3	3	—	—	3
Heroin/morphine + narcotic analgesics	—	—	—	—	—
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	3	3	—	—	3
All other drugs/combinations	47	44	10	5	32
Total	**98**	**93**	**14**	**6**	**78**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

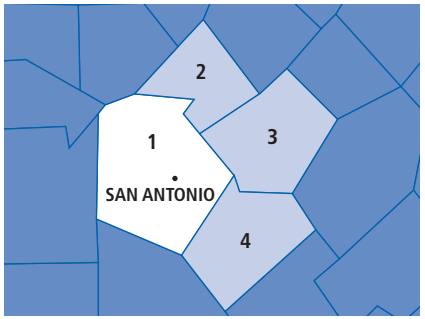


Bars may not total 100% due to rounding.

Salt Lake City, UT

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

San Antonio, TX



Metro area population, 2001
2,862,819

Percent of population covered by DAWN
87%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Bexar County	272	192	80	2,119	1,417,501
2. Comal County					82,563
3. Guadalupe County					92,753
4. Wilson County					33,721
Total, participating (1)	**272**	**192**	**80**	**2,119**	**1,417,501**

Areas that are shaded did not participate in DAWN in 2001.

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	214
Female	58

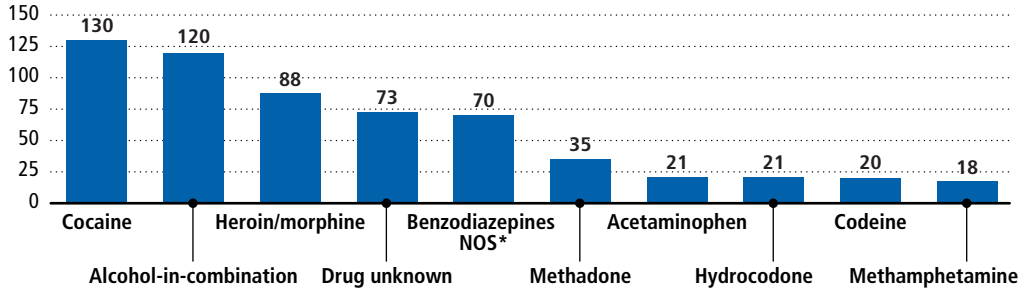
Age	
6-17	6
18-24	29
25-34	70
35-44	88
45-97	79

Race/Ethnicity	
White	108
Black	17
Hispanic	147
All others	—

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	44%	49%	28%	17%	45%	53%	44%	38%
Number of drugs involved								
Single-drug	9%	8%	12%	33%	7%	9%	7%	11%
Multi-drug	91%	92%	88%	67%	93%	91%	93%	89%
Cause of death								
Drug-induced	71%	67%	84%	50%	38%	60%	76%	87%
Drug-related	29%	33%	16%	50%	62%	40%	24%	13%
Manner of death								
Suicide	27%	27%	29%	33%	41%	26%	26%	24%
Accidental/unexpected	50%	52%	43%	67%	48%	59%	52%	39%
All others	23%	21%	28%	—	10%	16%	22%	37%

Top 10 drugs mentioned



* NOS = Not otherwise specified

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	50	33	91	109	120	—
Cocaine	45	44	110	126	130	10
Heroin/morphine	30	30	77	90	88	9
Marijuana	11	2	7	2	6	—
Amphetamines	4	2	5	4	11	—
Methamphetamine	8	4	4	9	18	1
Club drugs[1]	—	—	—	—	1	—
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	1	—	1	—	—	—
Narcotic analgesics[3]	48	38	90	95	90	2
Other analgesics	4	5	30	39	30	—
Benzodiazepines	15	22	48	77	88	2
Antidepressants	21	35	92	65	50	1
All other substances[3]	32	32	104	100	148	—
Total drug deaths	**120**	**97**	**241**	**242**	**272**	**25**
Total drug mentions	**269**	**247**	**659**	**716**	**780**	—
Total deaths certified	**2,019**	**1,895**	**2,032**	**2,233**	**2,119**	—

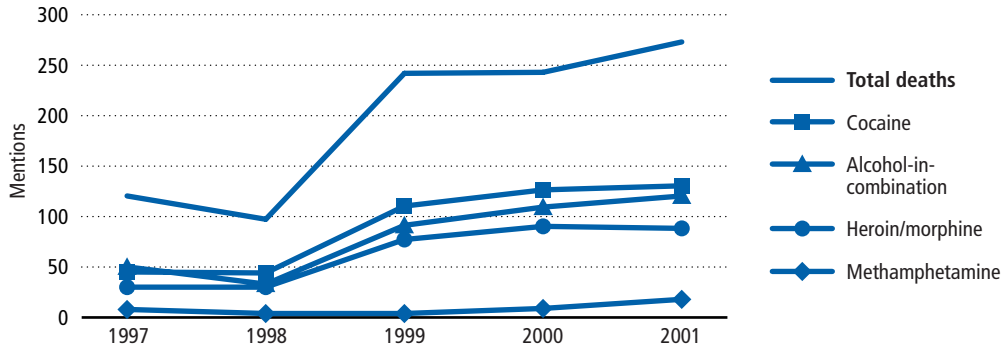
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

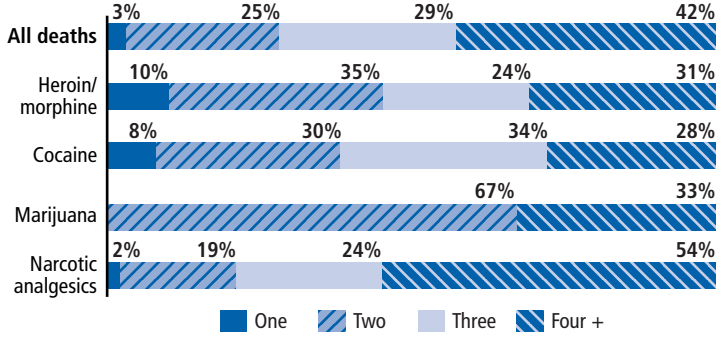
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	10	5	3	5	2
Alcohol + cocaine	14	5	4	9	1
Heroin/morphine only	9	7	3	3	3
Alcohol + heroin/morphine	15	15	—	8	7
Cocaine + heroin/morphine	5	4	1	3	1
Narcotic analgesics only	2	1	1	1	—
Alcohol + cocaine + heroin/morphine	6	5	1	3	2
Heroin/morphine + narcotic analgesics	6	6	—	5	1
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	2	1	1	1	—
All other drugs/combinations	203	143	60	98	45
Total	**272**	**192**	**74**	**136**	**62**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories



Bars may not total 100% due to rounding.

San Antonio, TX

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

San Diego, CA

Metro area population, 2001
2,862,819

Percent of population covered by DAWN
100%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. San Diego County	312	254	58	2,406	2,862,819
Total, participating (1)	**312**	**254**	**58**	**2,406**	**2,862,819**

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	208
Female	104

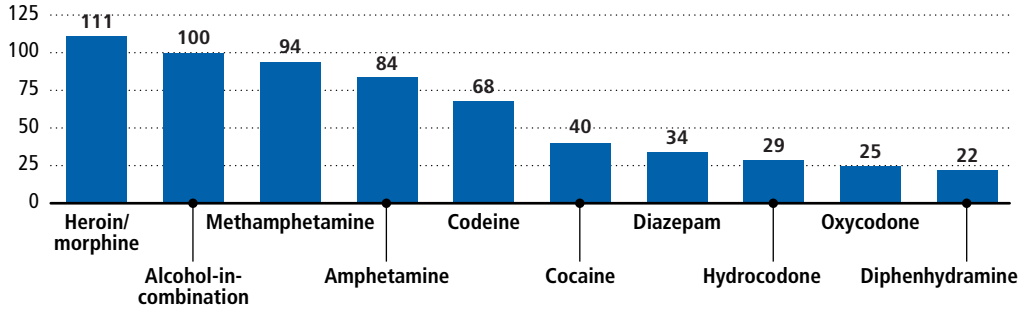
Age	
6-17	3
18-24	17
25-34	50
35-44	112
45-97	128

Race/Ethnicity	
White	234
Black	16
Hispanic	46
All others	16

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	32%	37%	23%	—	59%	32%	31%	30%
Number of drugs involved								
Single-drug	10%	11%	7%	—	—	4%	6%	16%
Multi-drug	90%	89%	93%	100%	100%	96%	94%	84%
Cause of death								
Drug-induced	81%	79%	87%	100%	53%	78%	79%	88%
Drug-related	19%	21%	13%	—	47%	22%	21%	12%
Manner of death								
Suicide	23%	16%	36%	33%	35%	30%	16%	24%
Accidental/unexpected	71%	78%	58%	33%	59%	68%	76%	71%
All others	6%	6%	7%	33%	6%	2%	8%	5%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	165	103	118	119	100	—
Cocaine	108	83	74	84	40	7
Heroin/morphine	165	165	142	145	111	7
Marijuana	2	—	1	—	5	—
Amphetamines	87	66	73	74	84	—
Methamphetamine	115	84	88	112	94	3
Club drugs[1]	—	2	5	3	9	—
Hallucinogens[2]	2	1	1	—	—	—
Inhalants	3	—	—	—	2	2
Narcotic analgesics[3]	191	145	137	179	164	3
Other analgesics	28	19	25	22	26	2
Benzodiazepines	33	46	59	58	81	—
Antidepressants	52	70	109	67	98	3
All other substances[3]	143	82	106	124	91	3
Total drug deaths	**419**	**336**	**354**	**360**	**312**	**30**
Total drug mentions	**1,094**	**866**	**938**	**987**	**905**	—
Total deaths certified	**2,345**	**1,640**	**2,271**	**2,436**	**2,406**	—

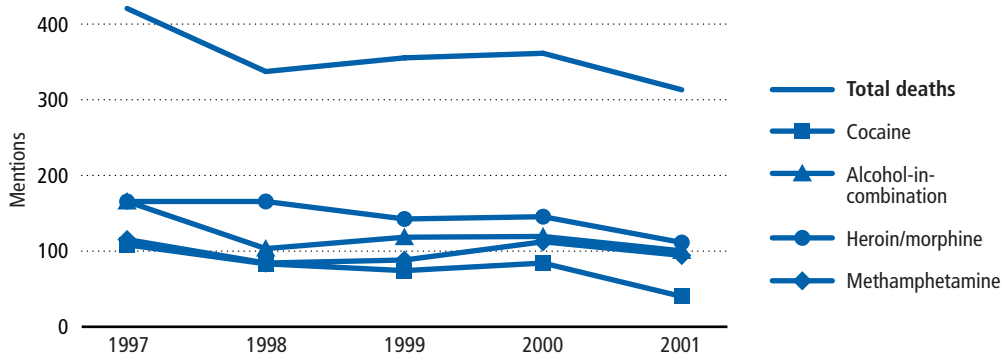
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

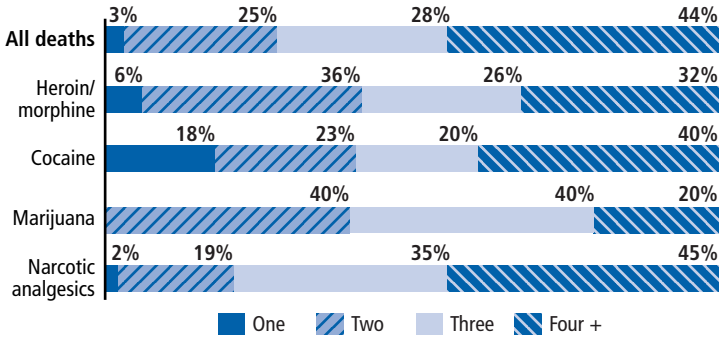
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	7	6	—	6	1
Alcohol + cocaine	5	2	1	4	—
Heroin/morphine only	7	5	1	5	1
Alcohol + heroin/morphine	14	13	—	14	—
Cocaine + heroin/morphine	3	3	—	3	—
Narcotic analgesics only	3	3	—	3	—
Alcohol + cocaine + heroin/morphine	1	1	—	1	—
Heroin/morphine + narcotic analgesics	21	21	—	20	1
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	39	21	4	29	6
All other drugs/combinations	212	179	65	137	10
Total	**312**	**254**	**71**	**222**	**19**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories



Bars may not total 100% due to rounding.

San Diego, CA

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

San Francisco, CA

Metro area population, 2001
1,720,450

Percent of population covered by DAWN
100%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Marin County	19	13	6	272	247,707
2. San Francisco County*	206	169	37	1,340	770,723
3. San Mateo County	49	44	5	2,225	702,020
Total, participating (3)	**274**	**226**	**48**	**3,837**	**1,720,450**

* Indicates area featured in Spotlight section

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	204
Female	69

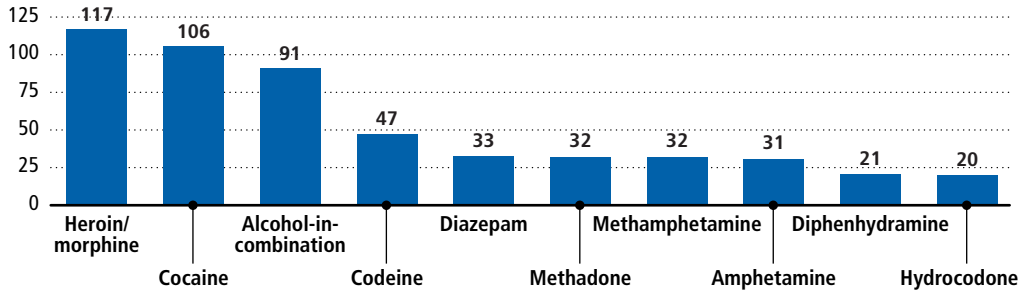
Age	
6-17	1
18-24	9
25-34	36
35-44	87
45-97	141

Race/Ethnicity	
White	174
Black	47
Hispanic	32
All others	21

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	33%	39%	17%	—	22%	25%	46%	28%
Number of drugs involved								
Single-drug	17%	18%	13%	100%	22%	22%	11%	18%
Multi-drug	83%	82%	87%	—	78%	78%	89%	82%
Cause of death								
Drug-induced	82%	80%	90%	—	67%	64%	86%	87%
Drug-related	18%	20%	10%	100%	33%	36%	14%	13%
Manner of death								
Suicide	14%	11%	22%	—	11%	14%	14%	13%
Accidental/unexpected	63%	66%	57%	100%	67%	69%	72%	55%
All others	23%	24%	22%	—	22%	17%	14%	31%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	119	108	135	90	91	—
Cocaine	127	158	158	146	106	22
Heroin/morphine	159	164	192	148	117	12
Marijuana	2	5	5	1	5	2
Amphetamines	2	31	38	35	31	—
Methamphetamine	49	45	58	45	32	—
Club drugs[1]	4	2	6	6	5	—
Hallucinogens[2]	1	1	3	1	1	—
Inhalants	2	—	1	1	—	—
Narcotic analgesics[3]	156	185	198	164	124	7
Other analgesics	21	19	21	16	21	1
Benzodiazepines	71	62	50	55	56	—
Antidepressants	49	56	88	70	101	1
All other substances[3]	134	112	133	95	136	1
Total drug deaths	**316**	**322**	**361**	**286**	**274**	**46**
Total drug mentions	**896**	**948**	**1,086**	**873**	**826**	—
Total deaths certified	**4,142**	**4,119**	**3,964**	**3,739**	**3,837**	—

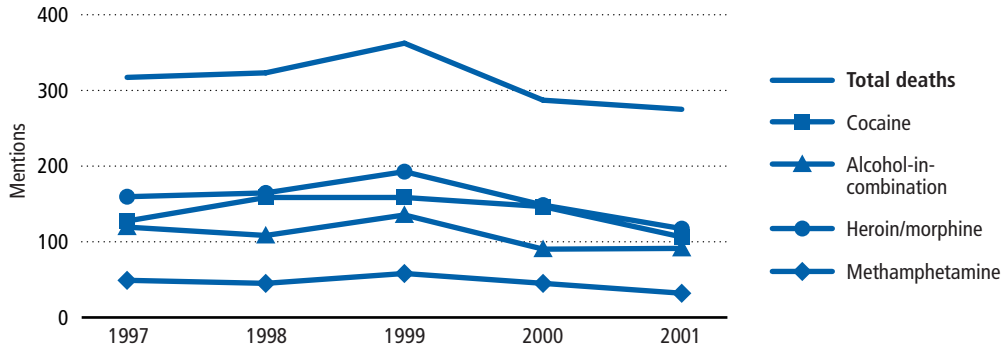
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

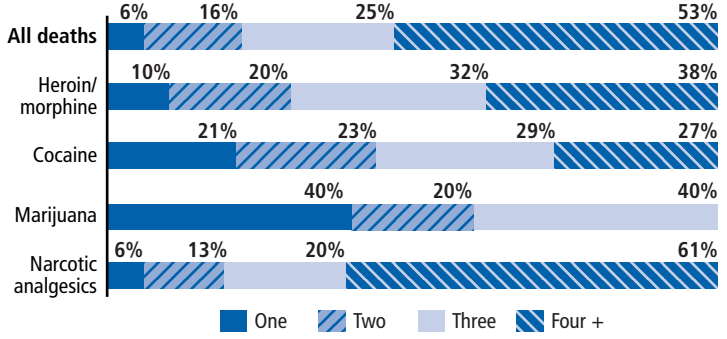
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	22	17	1	15	6
Alcohol + cocaine	8	7	—	6	2
Heroin/morphine only	12	6	1	3	8
Alcohol + heroin/morphine	8	7	1	6	1
Cocaine + heroin/morphine	8	7	—	5	3
Narcotic analgesics only	7	5	—	4	3
Alcohol + cocaine + heroin/morphine	9	8	—	9	—
Heroin/morphine + narcotic analgesics	6	5	1	5	—
Marijuana only	2	1	—	1	1
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	8	6	—	6	2
All other drugs/combinations	184	157	33	113	38
Total	**274**	**226**	**37**	**173**	**64**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

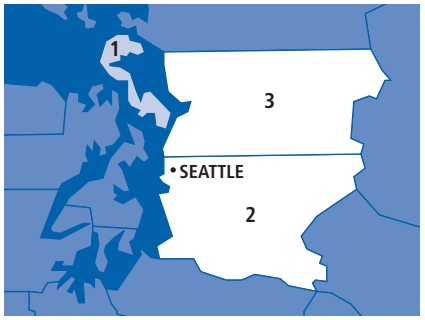


Bars may not total 100% due to rounding.

San Francisco, CA

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Seattle, WA



Metro area population, 2001
2,438,799

Percent of population covered by DAWN
97%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Island County					74,114
2. King County*	146	146	—	1,354	1,741,785
3. Snohomish County	42	42	—	485	622,900
Total, participating (2)	**188**	**188**	**—**	**1,839**	**2,364,685**

Areas that are shaded did not participate in DAWN in 2001.
* Indicates area featured in Spotlight section

Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	118
Female	70

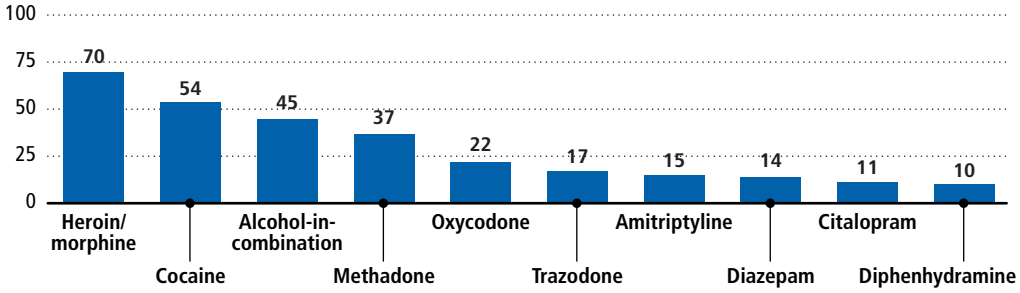
Age	
6-17	3
18-24	9
25-34	37
35-44	71
45-97	68

Race/Ethnicity	
White	163
Black	15
Hispanic	4
All others	6

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	24%	30%	14%	—	11%	22%	32%	19%
Number of drugs involved								
Single-drug	30%	31%	27%	100%	56%	32%	23%	29%
Multi-drug	70%	69%	73%	—	44%	68%	77%	71%
Cause of death								
Drug-induced	100%	100%	100%	100%	100%	100%	100%	100%
Drug-related	—	—	—	—	—	—	—	—
Manner of death								
Suicide	13%	12%	16%	—	22%	8%	11%	18%
Accidental/unexpected	70%	78%	57%	67%	56%	81%	76%	60%
All others	16%	10%	27%	33%	22%	11%	13%	22%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	94	113	77	82	45	—
Cocaine	74	78	88	104	54	6
Heroin/morphine	133	149	136	118	70	18
Marijuana	—	1	—	1	—	—
Amphetamines	2	—	2	1	—	—
Methamphetamine	4	4	30	15	8	2
Club drugs[1]	—	—	2	3	3	2
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	—	—	—	1	—	—
Narcotic analgesics[3]	40	66	43	75	85	15
Other analgesics	23	14	18	26	18	4
Benzodiazepines	27	41	26	33	29	—
Antidepressants	48	80	74	83	93	6
All other substances[3]	39	61	65	51	67	3
Total drug deaths	**209**	**250**	**251**	**264**	**188**	**56**
Total drug mentions	**484**	**607**	**561**	**593**	**472**	—
Total deaths certified	**1,782**	**1,809**	**1,785**	**1,858**	**1,839**	—

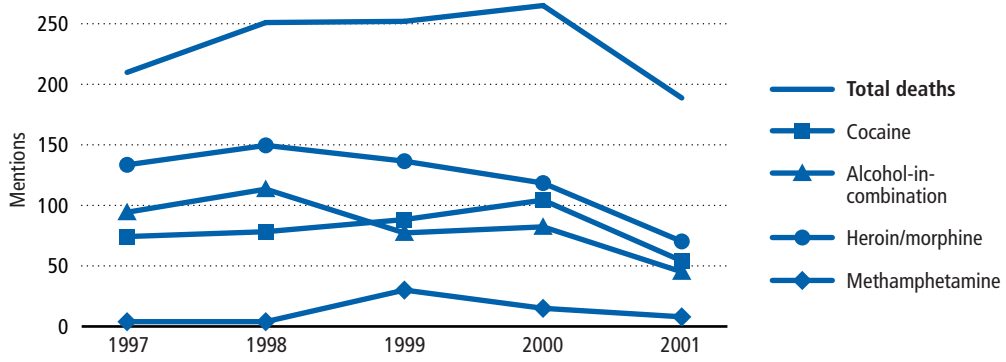
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

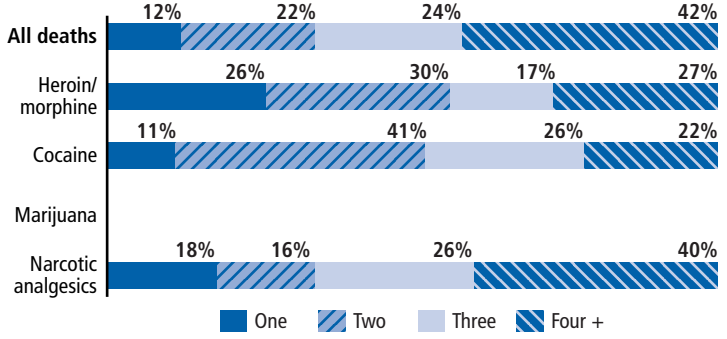
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	6	6	—	4	2
Alcohol + cocaine	4	4	—	4	—
Heroin/morphine only	18	18	—	18	—
Alcohol + heroin/morphine	4	4	—	3	1
Cocaine + heroin/morphine	13	13	—	13	—
Narcotic analgesics only	15	15	1	11	3
Alcohol + cocaine + heroin/morphine	5	5	—	4	1
Heroin/morphine + narcotic analgesics	1	1	—	1	—
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	122	122	24	74	24
Total	**188**	**188**	**25**	**132**	**31**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

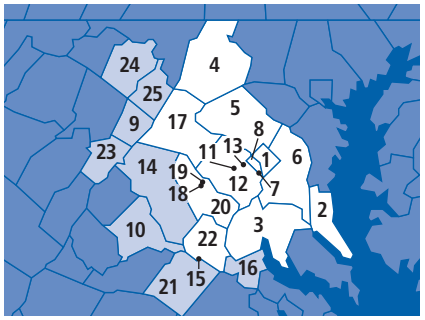


Bars may not total 100% due to rounding.

Seattle, WA

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Washington, DC



Metro area population, 2001
5,053,594

Percent of population covered by DAWN
92%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. District of Columbia*	53	45	8	1,582	571,822
Maryland jurisdictions					
2. Calvert County	5	4	1	69	78,307
3. Charles County	4	4	—	57	125,371
4. Frederick County	9	9	—	154	203,789
5. Montgomery County*	32	27	5	400	891,347
6. Prince George's County*	57	39	18	1,033	816,791
Virginia jurisdictions					
7. Alexandria City	2	2	—	88	128,773
8. Arlington County	5	5	—	118	187,469
9. Clarke County					13,111
10. Culpeper County					35,715
11. Fairfax City					21,674
12. Fairfax County	14	14	—	432	985,161
13. Falls Church City	—	—	—	13	10,612
14. Fauquier County					57,820
15. Fredericksburg City					19,952
16. King George County					17,319
17. Loudoun County	3	3	—	76	190,903
18. Manassas City	2	2	—	51	35,814
19. Manassas Park City					10,589
20. Prince William County	7	7	—	95	298,707
21. Spotsylvania County					97,760
22. Stafford County	—	—	—	33	99,692
23. Warren County					32,349
West Virginia jurisdictions					
24. Berkeley County					79,202
25. Jefferson County					43,545
Total, participating (14)	**193**	**161**	**32**	**4,201**	**4,624,558**

Areas that are shaded did not participate in DAWN in 2001. * Indicates area featured in Spotlight section

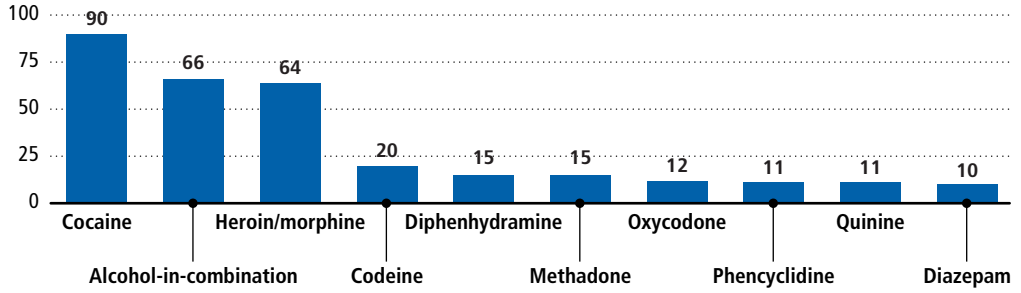
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	143	6-17	—	White	86
Female	49	18-24	22	Black	100
		25-34	22	Hispanic	7
		35-44	77	All others	—
		45-97	71		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	34%	36%	31%	—	27%	55%	31%	33%
Number of drugs involved								
Single-drug	26%	29%	14%	—	27%	27%	22%	29%
Multi-drug	74%	71%	86%	—	73%	73%	78%	71%
Cause of death								
Drug-induced	83%	78%	98%	—	73%	68%	86%	89%
Drug-related	17%	22%	2%	—	27%	32%	14%	11%
Manner of death								
Suicide	15%	9%	31%	—	18%	5%	6%	25%
Accidental/unexpected	37%	39%	29%	—	27%	32%	35%	43%
All others	49%	52%	41%	—	55%	64%	58%	32%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	84	103	85	81	66	—
Cocaine	81	121	106	107	90	31
Heroin/morphine	107	117	95	84	64	9
Marijuana	1	—	—	3	1	—
Amphetamines	1	—	—	1	—	—
Methamphetamine	1	1	5	1	1	—
Club drugs[1]	—	—	—	1	1	—
Hallucinogens[2]	5	4	4	9	11	5
Inhalants	1	—	—	—	—	—
Narcotic analgesics[3]	47	62	55	72	70	2
Other analgesics	23	25	24	22	14	—
Benzodiazepines	32	23	19	22	19	1
Antidepressants	48	50	57	47	58	—
All other substances[3]	107	117	101	75	77	2
Total drug deaths	**224**	**281**	**239**	**235**	**193**	**50**
Total drug mentions	**538**	**623**	**551**	**525**	**472**	—
Total deaths certified	**4,286**	**4,631**	**4,713**	**4,235**	**4,201**	—

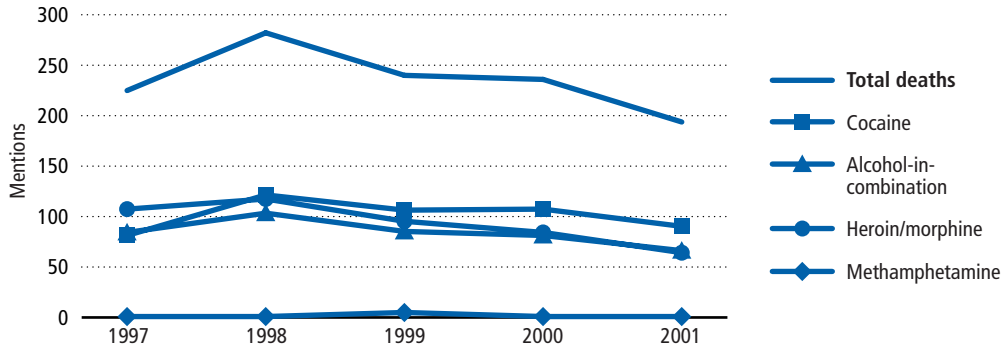
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

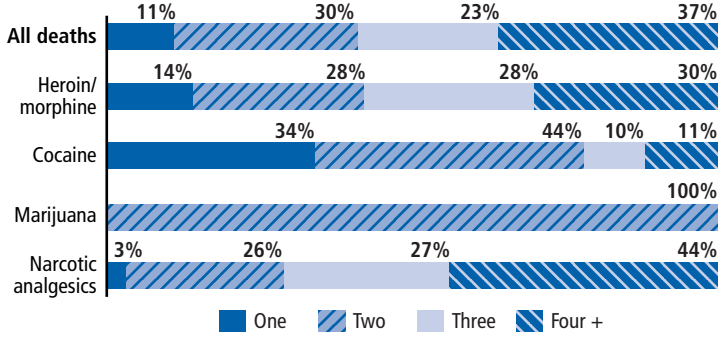
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	31	28	—	18	13
Alcohol + cocaine	27	16	1	18	8
Heroin/morphine only	9	8	—	3	6
Alcohol + heroin/morphine	3	3	—	1	2
Cocaine + heroin/morphine	8	6	1	5	2
Narcotic analgesics only	2	2	—	—	2
Alcohol + cocaine + heroin/morphine	2	2	—	2	—
Heroin/morphine + narcotic analgesics	4	4	—	3	1
Marijuana only	—	—	—	—	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	107	92	26	21	60
Total	**193**	**161**	**28**	**71**	**94**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories

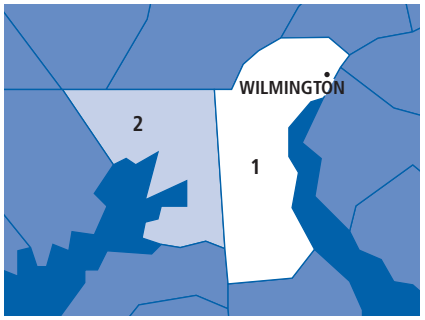


Bars may not total 100% due to rounding.

Washington, DC

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Wilmington, DE



Metro area population, 2001
594,679

Percent of population covered by DAWN
85%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
Delaware jurisdiction					
1. New Castle County	115	79	36	791	505,829
Maryland jurisdiction					
2. Cecil County					88,850
Total, participating (1)	**115**	**79**	**36**	**791**	**505,829**

Areas that are shaded did not participate in DAWN in 2001.

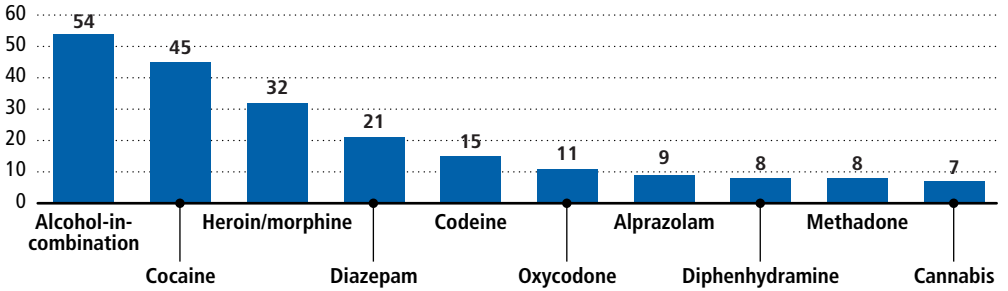
Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	85	6-17	2	White	85
Female	30	18-24	11	Black	26
		25-34	23	Hispanic	3
		35-44	43	All others	1
		45-97	36		

Drug involvement in death by sex and age of decedent

	TOTAL	Sex: Male	Sex: Female	Age: 6-17	Age: 18-24	Age: 25-34	Age: 35-44	Age: 45-97
Alcohol involved	47%	49%	40%	—	55%	52%	40%	53%
Number of drugs involved								
Single-drug	20%	19%	23%	50%	18%	26%	21%	14%
Multi-drug	80%	81%	77%	50%	82%	74%	79%	86%
Cause of death								
Drug-induced	69%	75%	50%	50%	45%	61%	79%	69%
Drug-related	31%	25%	50%	50%	55%	39%	21%	31%
Manner of death								
Suicide	—	—	—	—	—	—	—	—
Accidental/unexpected	59%	58%	63%	50%	64%	52%	53%	69%
All others	41%	42%	37%	50%	36%	48%	47%	31%

Top 10 drugs mentioned



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	21	—	10	4	54	—
Cocaine	38	—	18	29	45	13
Heroin/morphine	28	—	15	21	32	4
Marijuana	—	—	2	18	7	4
Amphetamines	1	—	—	1	—	—
Methamphetamine	1	—	—	—	—	—
Club drugs[1]	—	—	1	2	3	—
Hallucinogens[2]	2	—	—	—	2	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics[3]	9	—	4	9	49	1
Other analgesics	4	—	—	1	10	1
Benzodiazepines	4	—	1	1	44	—
Antidepressants	3	—	—	1	31	—
All other substances[3]	4	—	—	—	39	—
Total drug deaths	**63**	**—**	**31**	**54**	**115**	**23**
Total drug mentions	**115**	**—**	**51**	**87**	**316**	**—**
Total deaths certified	**698**	**—**	**716**	**735**	**791**	**—**

Because Cecil County did not provide sufficient data for 1998, this table shows data only for 1997, 1999, 2000, and 2001.

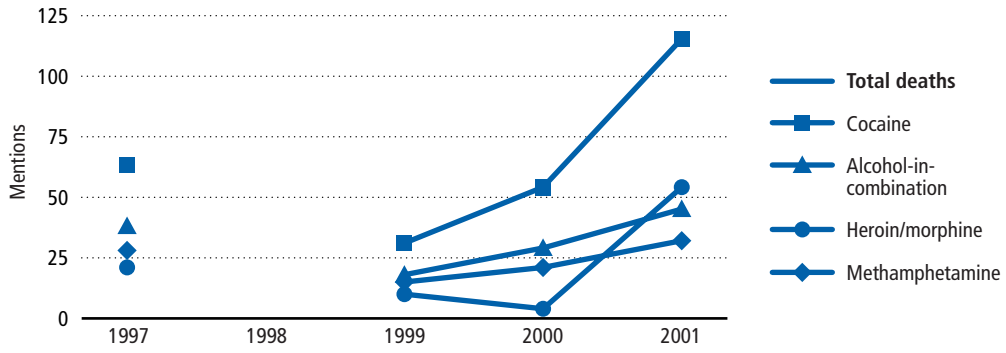
[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

Selected drug combinations by cause and manner of death

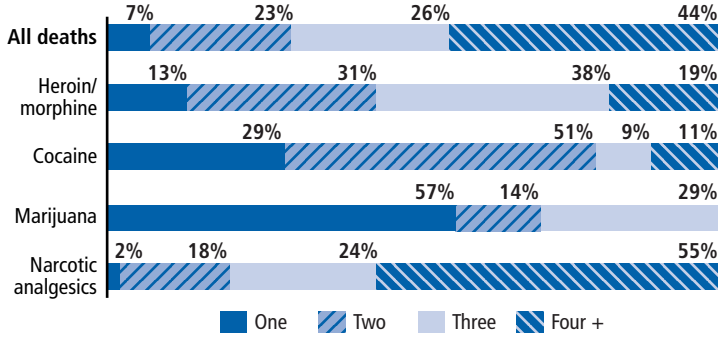
Combination	TOTAL	Drug-induced*	Manner: Suicide	Manner: Accidental/ Unexpected	Manner: All others
Cocaine only	13	9	—	9	4
Alcohol + cocaine	17	8	—	15	2
Heroin/morphine only	4	4	—	—	4
Alcohol + heroin/morphine	3	2	—	2	1
Cocaine + heroin/morphine	5	5	—	2	3
Narcotic analgesics only	1	—	—	1	—
Alcohol + cocaine + heroin/morphine	—	—	—	—	—
Heroin/morphine + narcotic analgesics	2	2	—	—	2
Marijuana only	4	—	—	4	—
Alcohol + narcotic analgesics	—	—	—	—	—
Amphetamine + methamphetamine	—	—	—	—	—
All other drugs/combinations	66	49	—	35	31
Total	**115**	**79**	**—**	**68**	**47**

* This column shows the number of deaths directly caused by the listed substances (i.e., overdoses). See Glossary.

Recent trends in major drugs of abuse



Number of drugs involved in deaths, selected drug categories



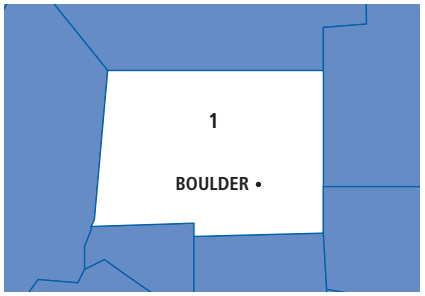
Bars may not total 100% due to rounding.

Wilmington, DE

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

ABBREVIATED PROFILES FOR AREAS WITH FEW CASES

Boulder, CO

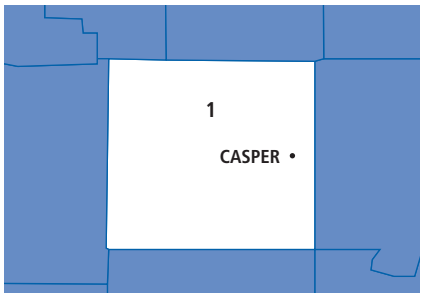


Metro area population, 2001 297,686
Percent of population covered by DAWN 100%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse			Total deaths certified	Total population (2001)
	TOTAL	Drug-induced	Drug-related		
1. Boulder County	16	16	—	1,426	297,686
Total, participating (1)	**16**	**16**	**—**	**1,426**	**297,686**

Casper, WY



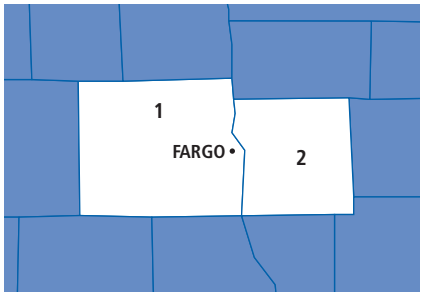
Metro area population, 2001 66,798
Percent of population covered by DAWN 100%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse			Total deaths certified	Total population (2001)
	TOTAL	Drug-induced	Drug-related		
1. Natrona County	9	2	7	115	66,798
Total, participating (1)	**9**	**2**	**7**	**115**	**66,798**

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Fargo, ND

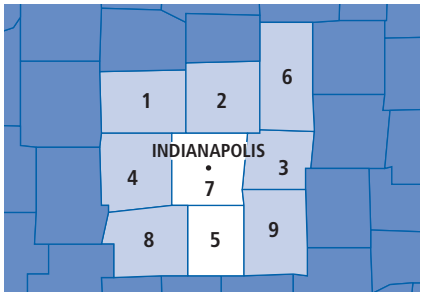


Metro area population, 2001 175,630
Percent of population covered by DAWN 100%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
North Dakota jurisdiction					
1. Cass County	9	4	5	135	124,021
Minnesota jurisdiction					
2. Clay County	—	—	—	236	51,609
Total, participating (2)	**9**	**4**	**5**	**371**	**175,630**

Indianapolis, IN



Metro area population, 2001 1,632,452
Percent of population covered by DAWN 60%

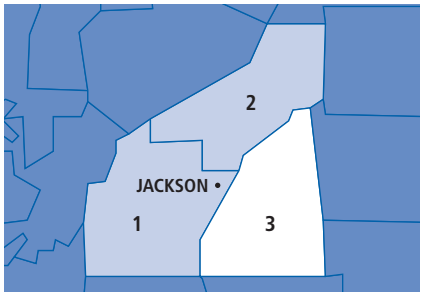
Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Boone County					47,408
2. Hamilton County					197,477
3. Hancock County					57,160
4. Hendricks County					110,784
5. Johnson County	2	2	—	60	119,240
6. Madison County					132,352
7. Marion County	2	2	—	1,152	856,938
8. Morgan County					67,513
9. Shelby County					43,580
Total, participating (2)	**4**	**4**	**—**	**1,212**	**976,178**

Areas that are shaded did not participate in DAWN in 2001.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Jackson, MS



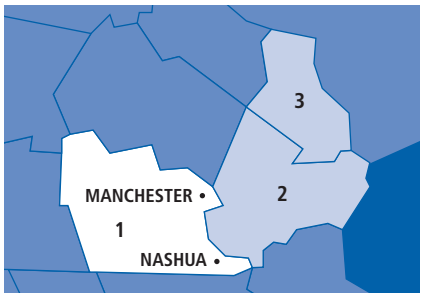
Metro area population, 2001 445,344
Percent of population covered by DAWN 27%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Deaths involving drug abuse: Drug-induced	Deaths involving drug abuse: Drug-related	Total deaths certified	Total population (2001)
1. Hinds County					249,495
2. Madison County					76,708
3. Rankin County	2	2	—	444	119,141
Total, participating (1)	**2**	**2**	**—**	**444**	**119,141**

Areas that are shaded did not participate in DAWN in 2001.

Manchester-Nashua, NH



Metro area population, 2001 786,367
Percent of population covered by DAWN 49%

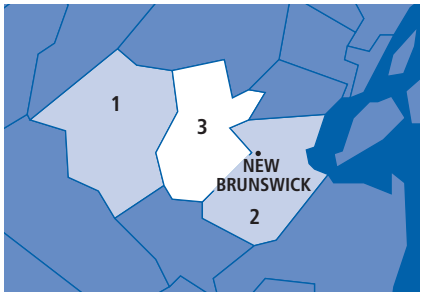
Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse: TOTAL	Deaths involving drug abuse: Drug-induced	Deaths involving drug abuse: Drug-related	Total deaths certified	Total population (2001)
1. Hillsborough County	21	19	2	425	387,674
2. Rockingham County					284,061
3. Strafford County					114,632
Total, participating (1)	**21**	**19**	**2**	**425**	**387,674**

Areas that are shaded did not participate in DAWN in 2001.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Middlesex-Somerset, NJ



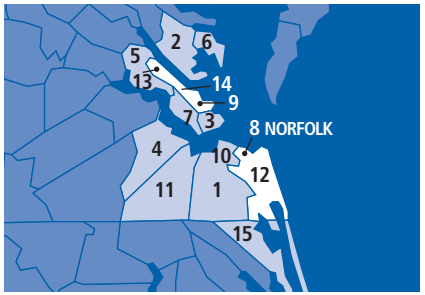
Metro area population, 2001 1,184,281
Percent of population covered by DAWN 25%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
1. Hunterdon County					125,135
2. Middlesex County					757,191
3. Somerset County	14	9	5	429	301,955
Total, participating (1)	**14**	**9**	**5**	**429**	**301,955**

Areas that are shaded did not participate in DAWN in 2001.

Norfolk, VA



Metro area population, 2001 1,583,170
Percent of population covered by DAWN 48%

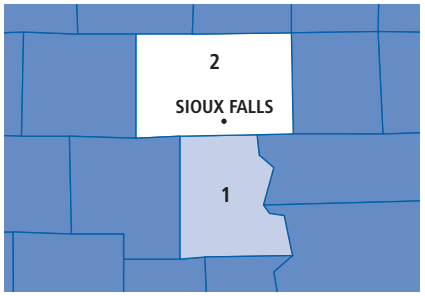
Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse TOTAL	Drug-induced	Drug-related	Total deaths certified	Total population (2001)
Virginia jurisdictions					
1. Chesapeake City					203,796
2. Gloucester County					35,410
3. Hampton City					145,665
4. Isle of Wight County					30,659
5. James City County					50,249
6. Mathews County					9,300
7. Newport News City					180,305
8. Norfolk City	12	12	—	329	233,147
9. Poquoson City					11,694
10. Portsmouth City	4	4	—	93	99,494
11. Suffolk City					67,107
12. Virginia Beach City	8	8	—	160	426,931
13. Williamsburg City					12,102
14. York County					58,293
North Carolina jurisdictions					
15. Currituck County					19,018
Total, participating (3)	**24**	**24**	**—**	**582**	**759,572**

Areas that are shaded did not participate in DAWN in 2001.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Sioux Falls, ND



Metro area population, 2001 176,649
Percent of population covered by DAWN 85%

Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse			Total deaths certified	Total population (2001)
	TOTAL	Drug-induced	Drug-related		
1. Lincoln County					26,322
2. Minnehaha County	3	3	—	438	150,327
Total, participating (1)	**3**	**3**	**—**	**438**	**150,327**

Areas that are shaded did not participate in DAWN in 2001.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

AREA SPOTLIGHTS

Atlanta: Fulton County, GA

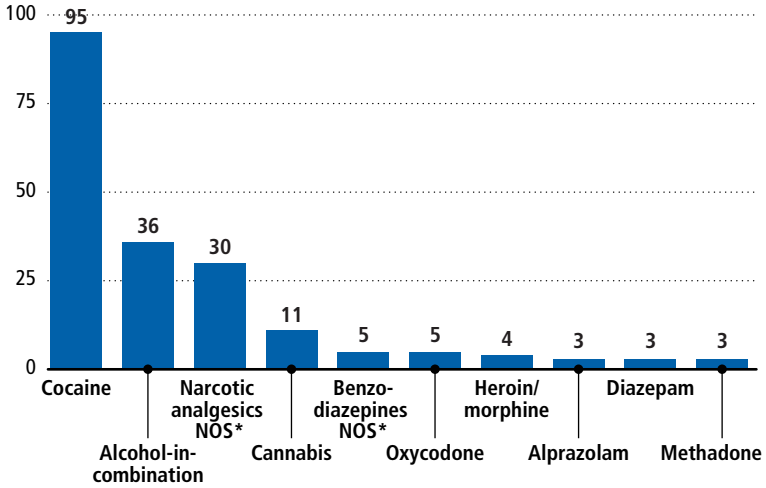
Fulton County, GA: Deaths and population, 2001

Deaths involving drug abuse	
Total	131
Drug-induced	90
Drug-related	41
Total deaths certified	1,359
Population (2001)	816,638

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	97	6-17	2	White	50
Female	34	18-24	7	Black	81
		25-34	21	Hispanic	—
		35-44	40	All others	—
		45-97	61		

Top 10 drugs mentioned



* NOS = Not otherwise specified

Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	27%	28%	26%	—	—	24%	40%	25%
Number of drugs involved								
Single-drug	56%	55%	62%	50%	71%	67%	45%	59%
Multi-drug	44%	45%	38%	50%	29%	33%	55%	41%
Cause of death								
Drug-induced	69%	69%	68%	50%	43%	57%	75%	72%
Drug-related	31%	31%	32%	50%	57%	43%	25%	28%
Manner of death								
Suicide	11%	11%	9%	—	—	29%	13%	5%
Accidental/unexpected	76%	76%	76%	50%	100%	57%	73%	84%
All others	13%	12%	15%	50%	—	14%	15%	11%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	18	49	33	30	36	—
Cocaine	41	103	121	89	95	53
Heroin/morphine	19	26	25	11	4	—
Marijuana	4	8	8	7	11	7
Amphetamines	—	—	3	2	1	—
Methamphetamine	—	—	1	1	—	—
Club drugs[1]	1	—	2	—	1	1
Hallucinogens[2]	—	1	—	—	—	—
Inhalants	—	—	4	1	—	—
Narcotic analgesics[3]	11	16	23	51	43	11
Other analgesics	1	5	2	2	—	—
Benzodiazepines	3	9	13	12	11	1
Antidepressants	8	10	7	7	5	—
All other substances[3]	17	20	20	24	2	1
Total drug deaths	**58**	**125**	**158**	**114**	**131**	**74**
Total drug mentions	**123**	**247**	**262**	**237**	**209**	**—**
Total deaths certified	**1,377**	**1,496**	**1,397**	**1,345**	**1,359**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Baltimore: Baltimore City, MD

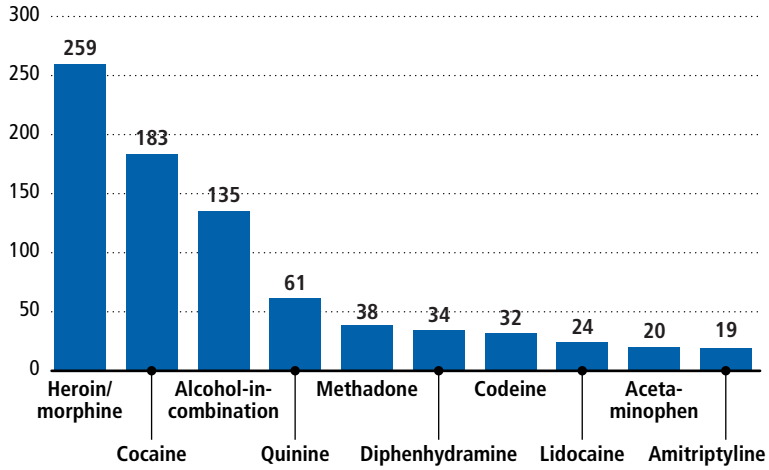
Baltimore City, MD: Deaths and population, 2001

Deaths involving drug abuse	
Total	329
Drug-induced	305
Drug-related	24
Total deaths certified	3,246
Population (2001)	635,210

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	262	6-17	2	White	116
Female	67	18-24	9	Black	213
		25-34	59	Hispanic	—
		35-44	151	All others	—
		45-97	101		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	41%	44%	31%	50%	22%	25%	50%	39%
Number of drugs involved								
Single-drug	13%	13%	13%	—	33%	19%	9%	16%
Multi-drug	87%	87%	87%	100%	67%	81%	91%	84%
Cause of death								
Drug-induced	93%	92%	94%	100%	100%	90%	95%	90%
Drug-related	7%	8%	6%	—	—	10%	5%	10%
Manner of death								
Suicide	1%	2%	—	—	—	2%	2%	—
Accidental/unexpected	2%	2%	1%	—	—	2%	1%	4%
All others	97%	96%	99%	100%	100%	97%	97%	96%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	186	181	174	196	135	—
Cocaine	228	241	232	178	183	14
Heroin/morphine	278	310	344	292	259	25
Marijuana	—	—	—	—	—	—
Amphetamines	—	—	—	—	—	—
Methamphetamine	—	—	13	—	—	—
Club drugs[1]	—	2	2	1	1	—
Hallucinogens[2]	—	—	—	1	1	1
Inhalants	—	—	2	—	—	—
Narcotic analgesics[3]	100	118	71	86	91	4
Other analgesics	28	22	29	25	23	—
Benzodiazepines	18	25	6	16	8	—
Antidepressants	66	80	85	73	72	—
All other substances[3]	353	393	305	226	214	—
Total drug deaths	**357**	**379**	**404**	**360**	**329**	**44**
Total drug mentions	**1,257**	**1,372**	**1,263**	**1,094**	**987**	—
Total deaths certified	**3,464**	**3,488**	**3,687**	**3,507**	**3,246**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Boston: Middlesex County, MA

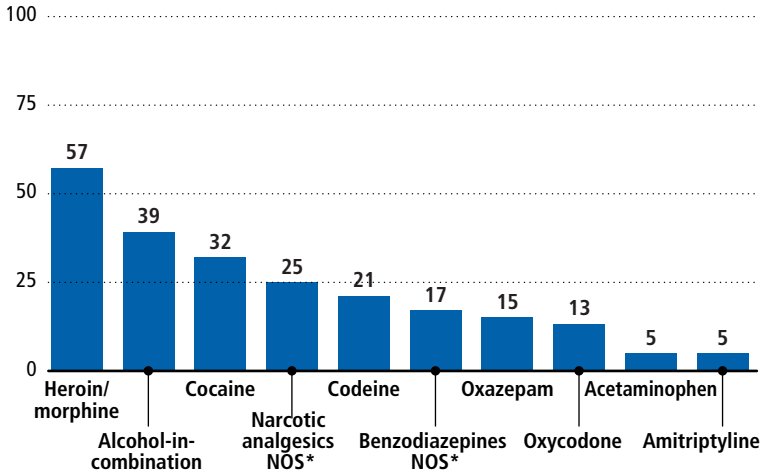
Middlesex County, MA: Deaths and population, 2001

Deaths involving drug abuse	
Total	121
Drug-induced	112
Drug-related	9
Total deaths certified	642
Population (2001)	1,463,454

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	78	6-17	2	White	113
Female	43	18-24	16	Black	2
		25-34	22	Hispanic	4
		35-44	47	All others	2
		45-97	34		

Top 10 drugs mentioned



* NOS = Not otherwise specified

Drug involvement in death by sex and age of decedent

		Sex		Age				
	TOTAL	Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	32%	32%	33%	—	19%	45%	36%	26%
Number of drugs involved								
Single-drug	23%	28%	14%	—	44%	18%	15%	29%
Multi-drug	77%	72%	86%	100%	56%	82%	85%	71%
Cause of death								
Drug-induced	93%	90%	98%	100%	88%	100%	96%	85%
Drug-related	7%	10%	2%	—	13%	—	4%	15%
Manner of death								
Suicide	17%	10%	30%	—	25%	—	13%	32%
Accidental/unexpected	1%	1%	—	—	6%	—	—	—
All others	82%	88%	70%	100%	69%	100%	87%	68%

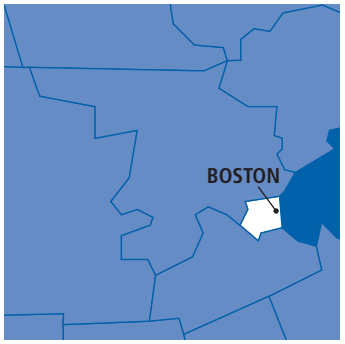
Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	28	45	31	32	39	—
Cocaine	28	40	32	35	32	5
Heroin/morphine	47	62	46	57	57	8
Marijuana	—	1	—	1	2	—
Amphetamines	1	—	—	—	1	—
Methamphetamine	1	—	4	—	—	—
Club drugs[1]	—	—	—	1	2	2
Hallucinogens[2]	—	—	—	1	—	—
Inhalants	1	1	2	—	—	—
Narcotic analgesics[3]	24	43	24	38	74	7
Other analgesics	10	11	5	2	10	2
Benzodiazepines	7	22	4	8	39	2
Antidepressants	16	36	23	11	22	—
All other substances[3]	27	24	13	11	25	2
Total drug deaths	**81**	**120**	**104**	**104**	**121**	**28**
Total drug mentions	**190**	**285**	**184**	**197**	**303**	**—**
Total deaths certified	**610**	**637**	**646**	**580**	**642**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Boston: Suffolk County, MA



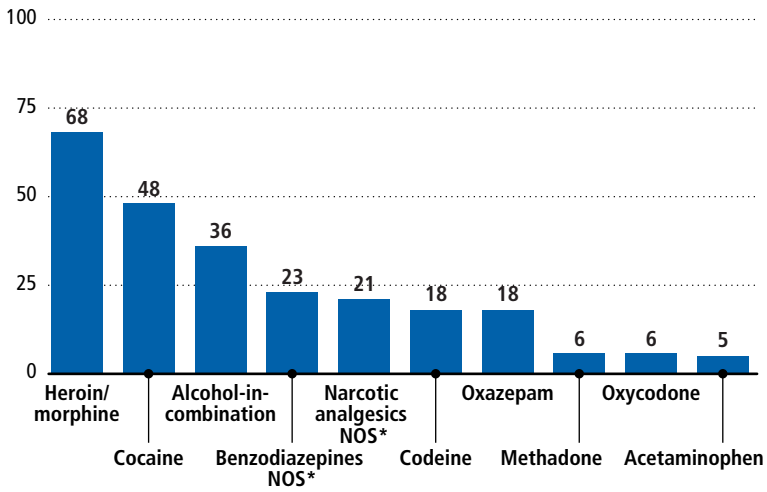
Suffolk County, MA: Deaths and population, 2001

Deaths involving drug abuse	
Total	117
Drug-induced	106
Drug-related	11
Total deaths certified	850
Population (2001)	682,062

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	93	6-17	—	White	84
Female	24	18-24	15	Black	22
		25-34	25	Hispanic	7
		35-44	48	All others	4
		45-97	29		

Top 10 drugs mentioned



* NOS = Not otherwise specified

Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	31%	34%	17%	—	13%	40%	29%	34%
Number of drugs involved								
Single-drug	24%	25%	21%	—	20%	24%	21%	31%
Multi-drug	76%	75%	79%	—	80%	76%	79%	69%
Cause of death								
Drug-induced	91%	91%	88%	—	93%	96%	90%	86%
Drug-related	9%	9%	13%	—	7%	4%	10%	14%
Manner of death								
Suicide	4%	4%	4%	—	7%	4%	2%	7%
Accidental/unexpected	—	—	—	—	—	—	—	—
All others	96%	96%	96%	—	93%	96%	98%	93%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	25	25	33	37	36	—
Cocaine	33	31	31	37	48	8
Heroin/morphine	37	40	48	51	68	9
Marijuana	—	—	—	1	2	—
Amphetamines	—	—	—	—	1	—
Methamphetamine	—	—	5	—	1	—
Club drugs[1]	—	—	—	—	2	—
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	2	2	2	—	—	—
Narcotic analgesics[3]	23	23	21	23	57	3
Other analgesics	9	2	4	4	8	2
Benzodiazepines	6	8	5	7	49	3
Antidepressants	14	14	16	11	5	1
All other substances[3]	17	17	2	7	4	2
Total drug deaths	**74**	**82**	**100**	**94**	**117**	**28**
Total drug mentions	**166**	**162**	**167**	**178**	**281**	—
Total deaths certified	**750**	**766**	**771**	**753**	**850**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Buffalo: Erie County, NY

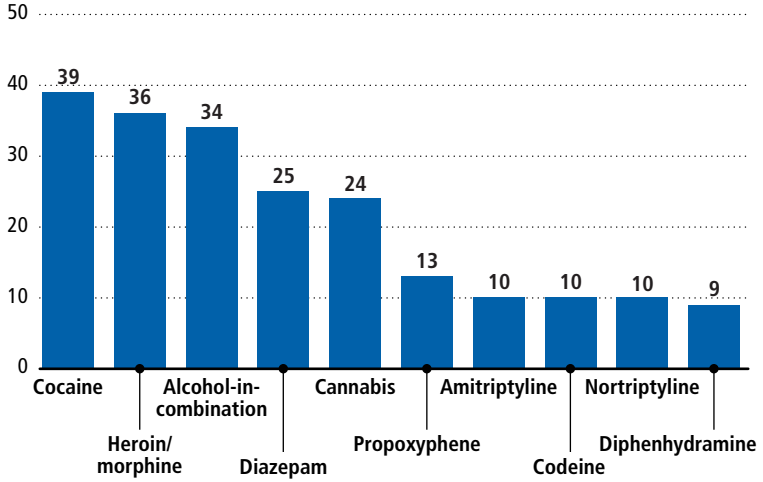
Erie County, NY: Deaths and population, 2001

Deaths involving drug abuse	
Total	114
Drug-induced	54
Drug-related	60
Total deaths certified	1,017
Population (2001)	944,408

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	86	6-17	1	White	81
Female	28	18-24	6	Black	30
		25-34	12	Hispanic	3
		35-44	36	All others	—
		45-97	59		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

		Sex		Age				
	TOTAL	Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	30%	30%	29%	—	—	33%	39%	27%
Number of drugs involved								
Single-drug	18%	19%	14%	100%	50%	17%	22%	10%
Multi-drug	82%	81%	86%	—	50%	83%	78%	90%
Cause of death								
Drug-induced	47%	47%	50%	—	17%	50%	56%	46%
Drug-related	53%	53%	50%	100%	83%	50%	44%	54%
Manner of death								
Suicide	18%	16%	25%	—	50%	8%	11%	22%
Accidental/unexpected	12%	13%	11%	100%	33%	8%	22%	3%
All others	69%	71%	64%	—	17%	83%	67%	75%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	35	34	33	40	34	—
Cocaine	31	27	36	27	39	6
Heroin/morphine	42	23	37	28	36	4
Marijuana	13	17	12	19	24	6
Amphetamines	—	—	1	—	—	—
Methamphetamine	—	1	1	—	—	—
Club drugs[1]	—	1	1	2	1	1
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	1	3	—	—	—	—
Narcotic analgesics[3]	51	31	26	39	52	—
Other analgesics	15	3	8	—	7	—
Benzodiazepines	25	13	18	15	39	—
Antidepressants	55	29	36	29	55	1
All other substances[3]	89	42	37	30	52	2
Total drug deaths	**128**	**82**	**100**	**83**	**114**	**20**
Total drug mentions	**357**	**224**	**246**	**229**	**339**	**—**
Total deaths certified	**972**	**938**	**987**	**943**	**1,017**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Chicago: Cook County, IL

Cook County, IL: Deaths and population, 2001

Deaths involving drug abuse	
Total	679
Drug-induced	504
Drug-related	175
Total deaths certified	5,161
Population (2001)	5,350,269

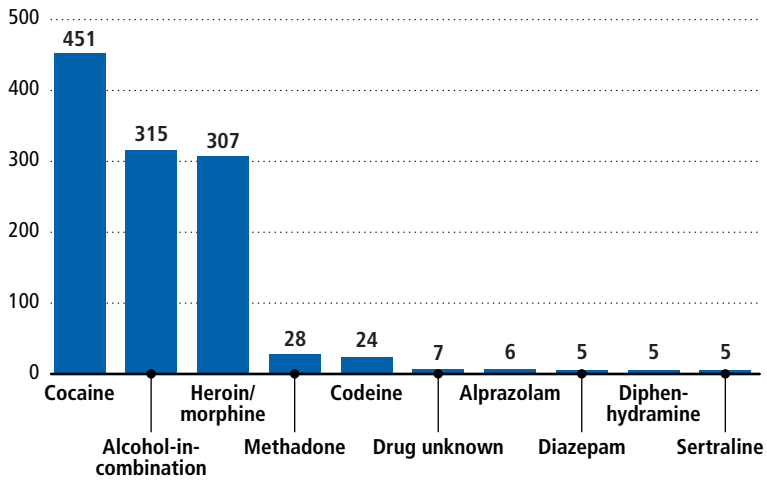
Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	527
Female	149

Age	
6-17	5
18-24	47
25-34	151
35-44	279
45-97	195

Race/Ethnicity	
White	240
Black	343
Hispanic	88
All others	8

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	46%	49%	38%	60%	47%	45%	47%	47%
Number of drugs involved								
Single-drug	38%	37%	40%	20%	32%	34%	39%	39%
Multi-drug	62%	63%	60%	80%	68%	66%	61%	61%
Cause of death								
Drug-induced	74%	75%	72%	40%	55%	66%	75%	85%
Drug-related	26%	25%	28%	60%	45%	34%	25%	15%
Manner of death								
Suicide	25%	24%	27%	60%	43%	31%	24%	16%
Accidental/unexpected	15%	15%	15%	—	9%	10%	15%	21%
All others	60%	61%	58%	40%	49%	59%	61%	63%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	268	321	329	338	315	—
Cocaine	350	409	460	386	451	160
Heroin/morphine	334	375	412	438	307	73
Marijuana	2	—	—	—	—	—
Amphetamines	1	—	—	1	1	—
Methamphetamine	—	—	—	1	1	—
Club drugs[1]	—	—	—	3	4	1
Hallucinogens[2]	6	3	1	4	4	—
Inhalants	—	—	—	—	5	1
Narcotic analgesics[3]	116	125	124	107	61	13
Other analgesics	17	13	14	7	5	1
Benzodiazepines	22	7	8	10	11	—
Antidepressants	52	27	24	30	19	4
All other substances[3]	46	17	45	26	24	2
Total drug deaths	**613**	**672**	**751**	**703**	**679**	**255**
Total drug mentions	**1,214**	**1,297**	**1,417**	**1,351**	**1,208**	—
Total deaths certified	**5,262**	**5,439**	**5,481**	**5,301**	**5,161**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Dallas: Dallas County, TX

Dallas County, TX: Deaths and population, 2001

Deaths involving drug abuse	
Total	285
Drug-induced	189
Drug-related	96
Total deaths certified	2,562
Population (2001)	2,245,398

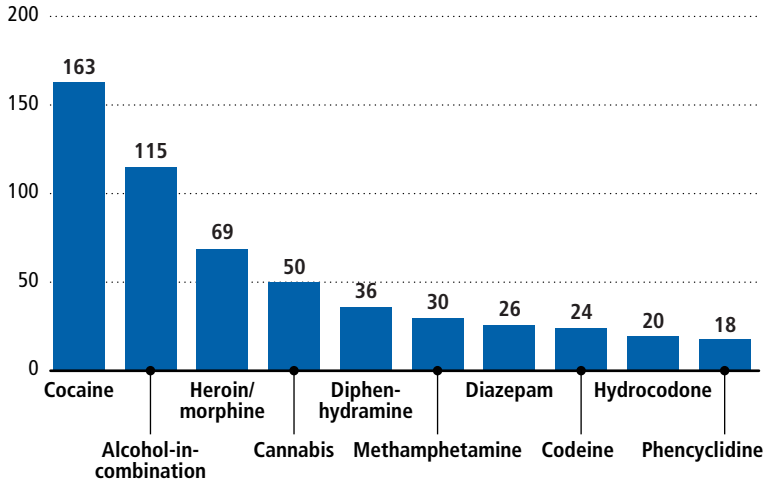
Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	216
Female	68

Age	
6-17	1
18-24	44
25-34	64
35-44	83
45-97	93

Race/Ethnicity	
White	133
Black	96
Hispanic	51
All others	5

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	40%	43%	34%	—	41%	55%	36%	34%
Number of drugs involved								
Single-drug	21%	21%	22%	100%	14%	20%	22%	24%
Multi-drug	79%	79%	78%	—	86%	80%	78%	76%
Cause of death								
Drug-induced	66%	66%	66%	—	50%	50%	70%	83%
Drug-related	34%	34%	34%	100%	50%	50%	30%	17%
Manner of death								
Suicide	29%	29%	29%	100%	36%	44%	24%	18%
Accidental/unexpected	14%	14%	15%	—	11%	9%	12%	22%
All others	57%	57%	56%	—	52%	47%	64%	60%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	174	133	119	100	115	—
Cocaine	126	130	132	140	163	35
Heroin/morphine	62	62	68	81	69	3
Marijuana	98	85	84	70	50	—
Amphetamines	10	5	3	6	2	1
Methamphetamine	17	7	7	19	30	11
Club drugs[1]	4	2	1	6	10	1
Hallucinogens[2]	—	—	4	7	18	5
Inhalants	—	—	—	—	1	—
Narcotic analgesics[3]	49	42	46	83	66	3
Other analgesics	34	34	34	25	16	—
Benzodiazepines	52	41	45	63	42	—
Antidepressants	73	63	68	61	46	—
All other substances[3]	186	156	117	167	77	1
Total drug deaths	**329**	**316**	**273**	**271**	**285**	**60**
Total drug mentions	**885**	**760**	**728**	**828**	**705**	**—**
Total deaths certified	**2,988**	**3,079**	**2,997**	**3,283**	**2,562**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Denver: Denver County, CO

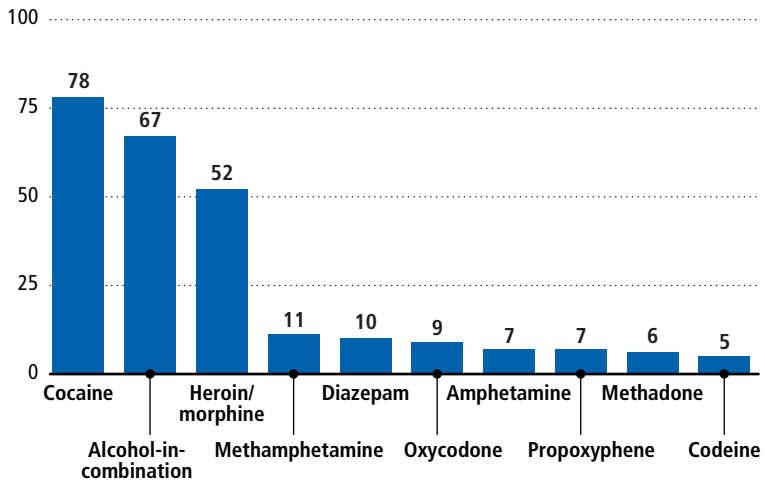
Denver County, CO: Deaths and population, 2001

Deaths involving drug abuse	
Total	147
Drug-induced	101
Drug-related	46
Total deaths certified	2,867
Population (2001)	554,446

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	112	6-17	—	White	78
Female	34	18-24	12	Black	20
		25-34	25	Hispanic	45
		35-44	57	All others	4
		45-97	53		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	46%	47%	38%	—	33%	64%	51%	34%
Number of drugs involved								
Single-drug	32%	34%	26%	—	42%	28%	23%	42%
Multi-drug	68%	66%	74%	—	58%	72%	77%	58%
Cause of death								
Drug-induced	69%	71%	59%	—	67%	60%	68%	74%
Drug-related	31%	29%	41%	—	33%	40%	32%	26%
Manner of death								
Suicide	13%	9%	26%	—	—	32%	11%	9%
Accidental/unexpected	60%	64%	44%	—	83%	48%	67%	53%
All others	27%	27%	29%	—	17%	20%	23%	38%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	36	42	52	45	67	—
Cocaine	40	45	56	57	78	24
Heroin/morphine	42	35	63	40	52	11
Marijuana	—	—	—	—	1	—
Amphetamines	1	1	3	6	7	—
Methamphetamine	1	1	5	4	11	1
Club drugs[1]	—	—	—	1	1	1
Hallucinogens[2]	—	—	—	1	—	—
Inhalants	—	1	—	—	—	—
Narcotic analgesics[3]	20	8	28	29	35	6
Other analgesics	2	3	2	5	3	—
Benzodiazepines	2	2	16	14	18	1
Antidepressants	14	14	15	14	11	—
All other substances[3]	4	11	12	23	12	3
Total drug deaths	**84**	**84**	**135**	**123**	**147**	**47**
Total drug mentions	**162**	**163**	**252**	**239**	**296**	—
Total deaths certified	**2,885**	**2,879**	**2,940**	**2,943**	**2,867**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Detroit: Wayne County, MI

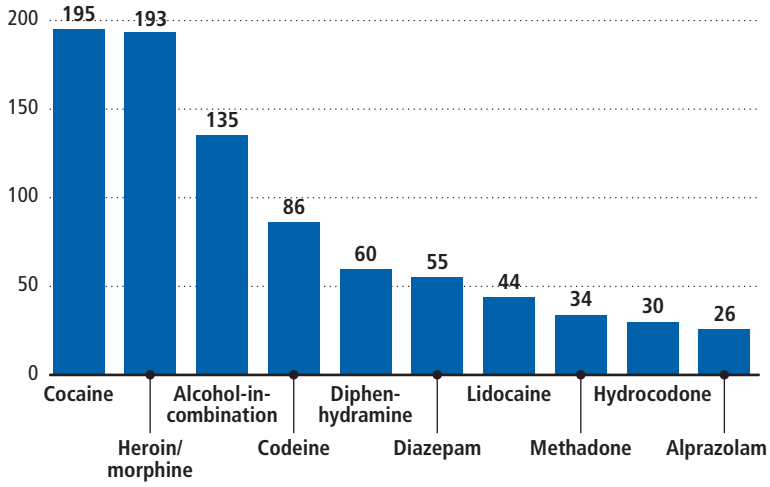
Wayne County, MI: Deaths and population, 2001

Deaths involving drug abuse	
Total	446
Drug-induced	237
Drug-related	209
Total deaths certified	3,256
Population (2001)	2,045,473

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	321	6-17	4	White	195
Female	125	18-24	11	Black	240
		25-34	61	Hispanic	10
		35-44	138	All others	1
		45-97	232		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

		Sex		Age				
	TOTAL	Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	30%	32%	26%	—	27%	30%	32%	30%
Number of drugs involved								
Single-drug	21%	21%	22%	25%	36%	11%	18%	25%
Multi-drug	79%	79%	78%	75%	64%	89%	82%	75%
Cause of death								
Drug-induced	53%	57%	44%	—	73%	72%	60%	44%
Drug-related	47%	43%	56%	100%	27%	28%	40%	56%
Manner of death								
Suicide	6%	6%	4%	—	18%	5%	7%	5%
Accidental/unexpected	58%	58%	58%	50%	73%	82%	62%	49%
All others	36%	36%	38%	50%	9%	13%	31%	47%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	92	111	122	154	135	—
Cocaine	174	186	169	194	195	40
Heroin/morphine	145	148	127	179	193	22
Marijuana	—	—	—	—	—	—
Amphetamines	—	—	—	1	—	—
Methamphetamine	—	—	—	—	3	—
Club drugs[1]	—	1	1	2	1	1
Hallucinogens[2]	—	1	—	—	—	—
Inhalants	3	—	1	—	—	—
Narcotic analgesics[3]	127	150	169	152	188	15
Other analgesics	11	9	13	17	4	1
Benzodiazepines	77	81	73	88	94	3
Antidepressants	69	103	95	86	97	1
All other substances[3]	304	294	363	299	267	11
Total drug deaths	**364**	**412**	**412**	**402**	**446**	**94**
Total drug mentions	**1,002**	**1,084**	**1,133**	**1,172**	**1,177**	**—**
Total deaths certified	**3,046**	**2,928**	**3,316**	**3,327**	**3,256**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Kansas City: Jackson County, MO

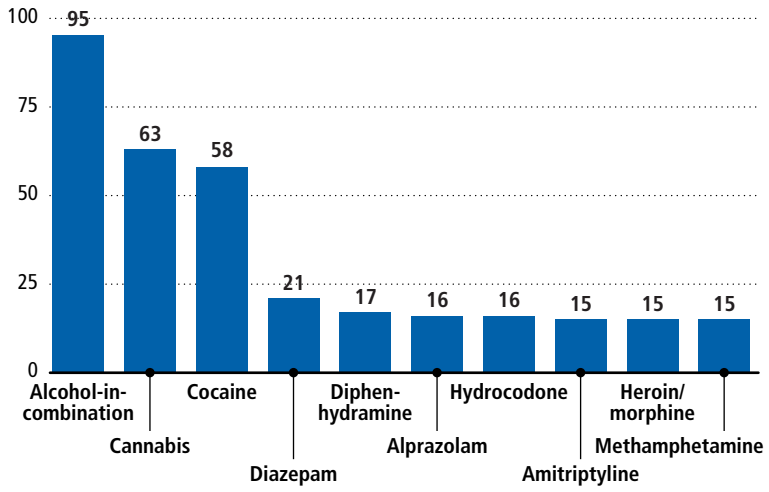
Jackson County, MO: Deaths and population, 2001

Deaths involving drug abuse	
Total	252
Drug-induced	146
Drug-related	106
Total deaths certified	2,028
Population (2001)	655,855

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	172	6-17	8	White	174
Female	80	18-24	31	Black	69
		25-34	39	Hispanic	8
		35-44	66	All others	1
		45-97	108		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	38%	41%	31%	38%	42%	46%	41%	31%
Number of drugs involved								
Single-drug	32%	31%	35%	25%	39%	18%	26%	40%
Multi-drug	68%	69%	65%	75%	61%	82%	74%	60%
Cause of death								
Drug-induced	58%	55%	65%	38%	23%	46%	64%	70%
Drug-related	42%	45%	35%	63%	77%	54%	36%	30%
Manner of death								
Suicide	22%	23%	20%	13%	39%	26%	21%	18%
Accidental/unexpected	44%	45%	43%	63%	55%	51%	50%	33%
All others	34%	32%	38%	25%	6%	23%	29%	49%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	34	64	67	72	95	—
Cocaine	35	52	57	56	58	14
Heroin/morphine	10	19	21	20	15	5
Marijuana	33	51	55	46	63	17
Amphetamines	24	16	14	5	12	—
Methamphetamine	25	16	13	6	15	2
Club drugs[1]	—	1	—	—	2	—
Hallucinogens[2]	2	—	6	7	10	5
Inhalants	1	—	—	1	—	—
Narcotic analgesics[3]	27	56	43	72	63	14
Other analgesics	5	10	14	8	11	2
Benzodiazepines	28	82	78	73	55	4
Antidepressants	36	45	73	80	71	8
All other substances[3]	49	68	106	82	98	10
Total drug deaths	**136**	**231**	**237**	**222**	**252**	**81**
Total drug mentions	**309**	**480**	**547**	**528**	**568**	—
Total deaths certified	**1,659**	**1,743**	**2,012**	**1,961**	**2,028**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Long Island: Nassau County, NY

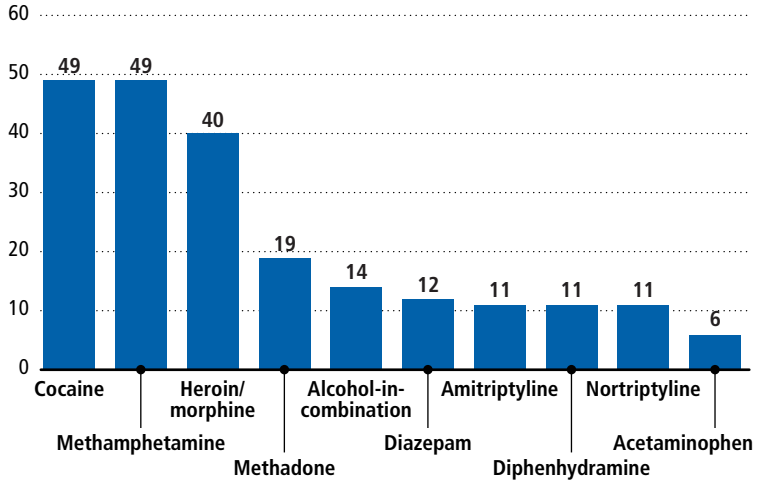
Nassau County, NY: Deaths and population, 2001

Deaths involving drug abuse	
Total	102
Drug-induced	90
Drug-related	12
Total deaths certified	4,869
Population (2001)	1,334,648

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	76	6-17	1	White	83
Female	26	18-24	6	Black	17
		25-34	20	Hispanic	—
		35-44	35	All others	2
		45-97	40		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

		Sex		Age				
	TOTAL	Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	14%	14%	12%	—	—	5%	23%	13%
Number of drugs involved								
Single-drug	16%	16%	15%	—	33%	10%	9%	23%
Multi-drug	84%	84%	85%	100%	67%	90%	91%	78%
Cause of death								
Drug-induced	88%	87%	92%	100%	17%	95%	94%	90%
Drug-related	12%	13%	8%	—	83%	5%	6%	10%
Manner of death								
Suicide	10%	7%	19%	—	33%	15%	6%	8%
Accidental/unexpected	75%	78%	65%	100%	67%	85%	77%	68%
All others	16%	16%	15%	—	—	—	17%	25%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	22	—	7	6	14	—
Cocaine	37	39	54	27	49	—
Heroin/morphine	32	35	38	44	40	5
Marijuana	53	4	18	11	2	—
Amphetamines	—	—	—	—	1	—
Methamphetamine	—	—	42	38	49	—
Club drugs[1]	1	2	—	1	3	1
Hallucinogens[2]	—	1	8	10	3	1
Inhalants	2	3	1	1	—	—
Narcotic analgesics[3]	20	13	27	20	39	3
Other analgesics	7	6	10	14	9	1
Benzodiazepines	9	10	11	10	15	1
Antidepressants	12	22	31	33	35	—
All other substances[3]	38	35	28	44	43	4
Total drug deaths	**108**	**85**	**103**	**102**	**102**	**16**
Total drug mentions	**233**	**170**	**275**	**259**	**302**	**—**
Total deaths certified	**5,007**	**4,675**	**4,628**	**4,817**	**4,869**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Long Island: Suffolk County, NY

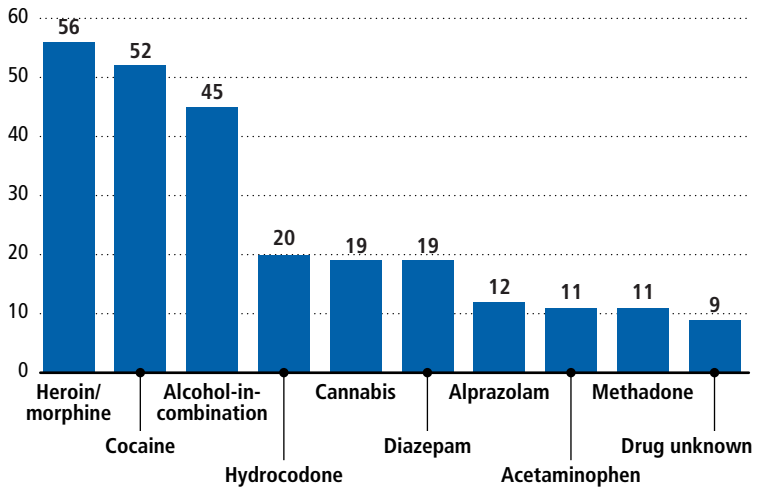
Suffolk County, NY: Deaths and population, 2001

Deaths involving drug abuse	
Total	111
Drug-induced	102
Drug-related	9
Total deaths certified	4,454
Population (2001)	1,438,973

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	83	6-17	—	White	90
Female	27	18-24	12	Black	8
		25-34	21	Hispanic	6
		35-44	47	All others	7
		45-97	31		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	41%	43%	30%	—	33%	57%	38%	35%
Number of drugs involved								
Single-drug	11%	11%	11%	—	8%	5%	15%	10%
Multi-drug	89%	89%	89%	—	92%	95%	85%	90%
Cause of death								
Drug-induced	92%	89%	100%	—	100%	95%	91%	87%
Drug-related	8%	11%	—	—	—	5%	9%	13%
Manner of death								
Suicide	7%	5%	15%	—	—	—	9%	13%
Accidental/unexpected	70%	78%	44%	—	83%	67%	64%	77%
All others	23%	17%	41%	—	17%	33%	28%	10%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	22	34	36	42	45	—
Cocaine	19	38	40	42	52	5
Heroin/morphine	36	37	67	52	56	2
Marijuana	14	19	25	12	19	—
Amphetamines	—	2	—	—	1	—
Methamphetamine	—	2	—	—	—	—
Club drugs[1]	—	—	1	2	1	—
Hallucinogens[2]	—	1	1	—	2	1
Inhalants	1	2	—	2	—	—
Narcotic analgesics[3]	20	29	42	53	59	1
Other analgesics	13	19	21	22	20	1
Benzodiazepines	20	23	25	21	35	—
Antidepressants	7	31	46	63	30	—
All other substances[3]	32	73	74	64	40	2
Total drug deaths	**62**	**88**	**112**	**107**	**111**	**12**
Total drug mentions	**184**	**310**	**378**	**375**	**360**	—
Total deaths certified	**4,154**	**4,275**	**4,256**	**4,402**	**4,454**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Milwaukee: Milwaukee County, WI

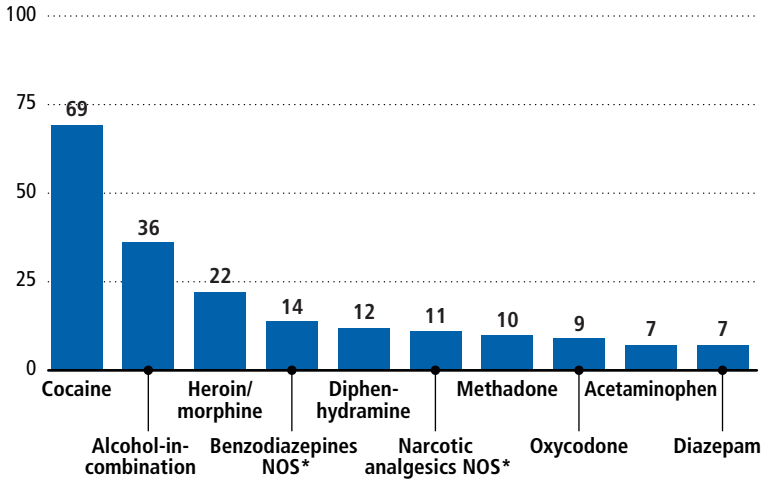
Milwaukee County, WI: Deaths and population, 2001

Deaths involving drug abuse	
Total	123
Drug-induced	104
Drug-related	19
Total deaths certified	1,851
Population (2001)	932,012

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	78	6-17	2	White	83
Female	45	18-24	6	Black	32
		25-34	15	Hispanic	6
		35-44	48	All others	2
		45-97	52		

Top 10 drugs mentioned



* NOS = Not otherwise specified

Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	29%	31%	27%	—	50%	13%	40%	23%
Number of drugs involved								
Single-drug	32%	28%	38%	—	—	33%	27%	40%
Multi-drug	68%	72%	62%	100%	100%	67%	73%	60%
Cause of death								
Drug-induced	85%	88%	78%	100%	50%	100%	79%	88%
Drug-related	15%	12%	22%	—	50%	—	21%	12%
Manner of death								
Suicide	20%	17%	27%	50%	33%	20%	13%	25%
Accidental/unexpected	70%	72%	67%	50%	33%	80%	79%	63%
All others	10%	12%	7%	—	33%	—	8%	12%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	—	—	—	46	36	—
Cocaine	—	—	—	63	69	20
Heroin/morphine	—	—	—	23	22	2
Marijuana	—	—	—	5	2	—
Amphetamines	—	—	—	—	2	—
Methamphetamine	—	—	—	—	1	—
Club drugs[1]	—	—	—	—	2	—
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics[3]	—	—	—	60	45	6
Other analgesics	—	—	—	16	11	2
Benzodiazepines	—	—	—	28	27	3
Antidepressants	—	—	—	30	23	2
All other substances[3]	—	—	—	47	38	4
Total drug deaths	—	—	—	**110**	**123**	**39**
Total drug mentions	—	—	—	**318**	**278**	—
Total deaths certified	—	—	—	**1,936**	**1,851**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Minneapolis-St. Paul: Hennepin County, MN

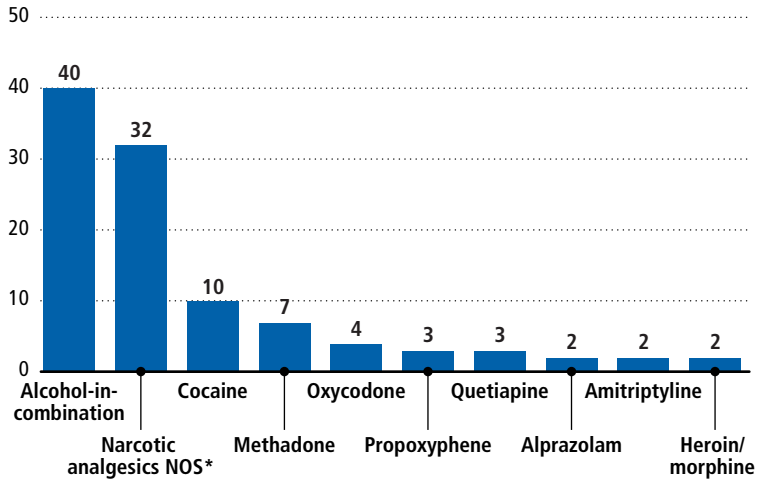
Hennepin County, MN: Deaths and population, 2001

Deaths involving drug abuse	
Total	76
Drug-induced	69
Drug-related	7
Total deaths certified	1,378
Population (2001)	1,114,977

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	57	6-17	1	White	53
Female	19	18-24	6	Black	21
		25-34	9	Hispanic	—
		35-44	29	All others	2
		45-97	31		

Top 10 drugs mentioned



* NOS = Not otherwise specified

Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	53%	49%	63%	—	17%	33%	66%	55%
Number of drugs involved								
Single-drug	42%	46%	32%	—	83%	67%	31%	39%
Multi-drug	58%	54%	68%	100%	17%	33%	69%	61%
Cause of death								
Drug-induced	91%	91%	89%	100%	100%	100%	90%	87%
Drug-related	9%	9%	11%	—	—	—	10%	13%
Manner of death								
Suicide	28%	19%	53%	100%	33%	—	24%	35%
Accidental/unexpected	71%	79%	47%	—	67%	100%	76%	61%
All others	1%	2%	—	—	—	—	—	3%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	24	27	24	28	40	—
Cocaine	27	8	13	6	10	5
Heroin/morphine	18	21	16	7	2	1
Marijuana	—	—	—	—	1	—
Amphetamines	1	—	—	—	1	—
Methamphetamine	2	2	2	—	1	1
Club drugs[1]	—	1	1	2	—	—
Hallucinogens[2]	—	—	—	—	1	—
Inhalants	1	—	—	—	—	—
Narcotic analgesics[3]	16	13	8	25	49	20
Other analgesics	2	2	2	6	6	1
Benzodiazepines	6	1	2	7	5	—
Antidepressants	10	23	15	7	6	2
All other substances[3]	15	12	4	11	9	2
Total drug deaths	**57**	**56**	**45**	**52**	**76**	**32**
Total drug mentions	**122**	**110**	**87**	**99**	**131**	—
Total deaths certified	**1,401**	**1,348**	**1,274**	**1,314**	**1,378**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Minneapolis-St. Paul: Ramsey County, MN

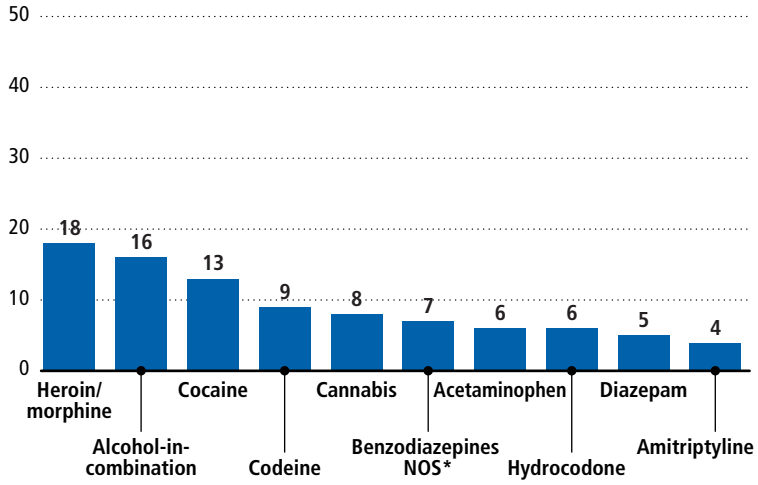
Ramsey County, MN: Deaths and population, 2001

Deaths involving drug abuse	
Total	47
Drug-induced	32
Drug-related	15
Total deaths certified	1,214
Population (2001)	508,667

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	30	6-17	—	White	34
Female	17	18-24	5	Black	7
		25-34	11	Hispanic	2
		35-44	12	All others	4
		45-97	19		

Top 10 drugs mentioned



* NOS = Not otherwise specified

Drug involvement in death by sex and age of decedent

		Sex		Age				
	TOTAL	Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	34%	43%	18%	—	—	36%	42%	37%
Number of drugs involved								
Single-drug	15%	17%	12%	—	20%	18%	8%	16%
Multi-drug	85%	83%	88%	—	80%	82%	92%	84%
Cause of death								
Drug-induced	68%	53%	94%	—	60%	64%	58%	79%
Drug-related	32%	47%	6%	—	40%	36%	42%	21%
Manner of death								
Suicide	21%	7%	47%	—	40%	27%	—	26%
Accidental/unexpected	57%	67%	41%	—	60%	64%	75%	42%
All others	21%	27%	12%	—	—	9%	25%	32%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	12	12	9	15	16	—
Cocaine	8	8	17	13	13	4
Heroin/morphine	7	10	11	9	18	1
Marijuana	9	12	9	11	8	1
Amphetamines	2	6	3	1	2	—
Methamphetamine	2	4	3	2	2	—
Club drugs[1]	—	—	1	2	—	—
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics[3]	11	12	18	11	23	—
Other analgesics	5	6	7	1	11	—
Benzodiazepines	4	7	8	12	15	—
Antidepressants	5	10	13	5	11	—
All other substances[3]	11	16	14	5	14	1
Total drug deaths	**29**	**39**	**37**	**36**	**47**	**7**
Total drug mentions	**76**	**103**	**113**	**87**	**133**	**—**
Total deaths certified	**1,276**	**1,302**	**1,253**	**1,344**	**1,214**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

New Orleans: Orleans Parish, LA

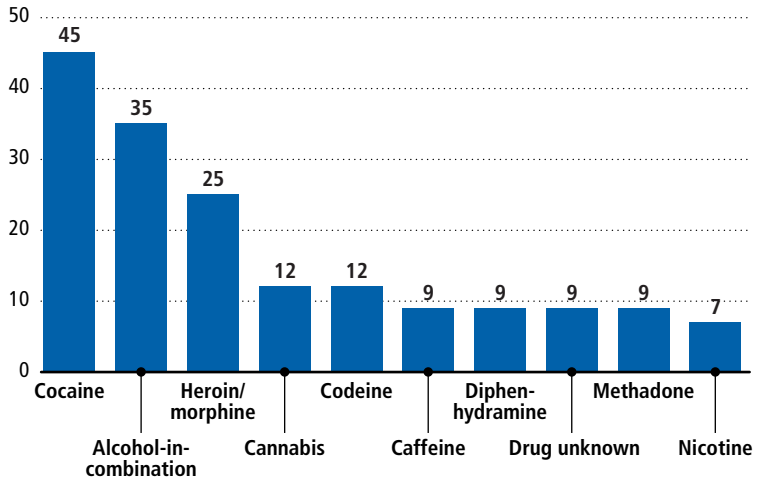
Orleans Parish, LA: Deaths and population, 2001

Deaths involving drug abuse	
Total	84
Drug-induced	59
Drug-related	25
Total deaths certified	1,876
Population (2001)	476,492

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	72	6-17	—	White	38
Female	12	18-24	17	Black	42
		25-34	18	Hispanic	2
		35-44	21	All others	2
		45-97	28		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

		Sex		Age				
	TOTAL	Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	42%	44%	25%	—	59%	39%	43%	32%
Number of drugs involved								
Single-drug	20%	17%	42%	—	18%	17%	19%	25%
Multi-drug	80%	83%	58%	—	82%	83%	81%	75%
Cause of death								
Drug-induced	70%	71%	67%	—	76%	78%	71%	61%
Drug-related	30%	29%	33%	—	24%	22%	29%	39%
Manner of death								
Suicide	10%	8%	17%	—	18%	11%	5%	7%
Accidental/unexpected	65%	67%	58%	—	71%	67%	76%	54%
All others	25%	25%	25%	—	12%	22%	19%	39%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	19	25	41	44	35	—
Cocaine	36	36	50	60	45	13
Heroin/morphine	16	28	37	45	25	1
Marijuana	13	21	21	23	12	2
Amphetamines	—	—	—	—	—	—
Methamphetamine	—	—	—	—	—	—
Club drugs[1]	—	1	4	2	6	—
Hallucinogens[2]	—	—	1	—	—	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics[3]	13	21	52	25	44	—
Other analgesics	8	7	3	6	5	—
Benzodiazepines	—	14	6	13	6	—
Antidepressants	4	2	12	7	9	1
All other substances[3]	15	12	37	25	62	—
Total drug deaths	**56**	**76**	**94**	**103**	**84**	**17**
Total drug mentions	**124**	**167**	**264**	**250**	**249**	—
Total deaths certified	**2,086**	**2,027**	**1,895**	**1,844**	**1,876**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Newark: Essex County, NJ

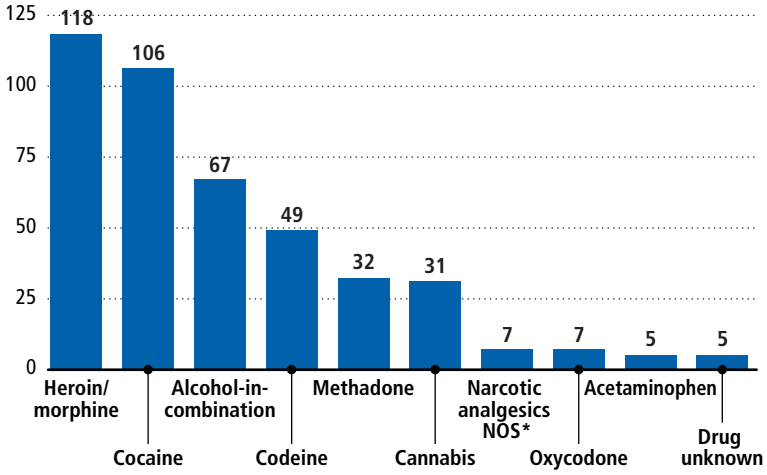
Essex County, NJ: Deaths and population, 2001

Deaths involving drug abuse	
Total	215
Drug-induced	149
Drug-related	66
Total deaths certified	2,441
Population (2001)	793,133

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	159	6-17	3	White	56
Female	56	18-24	25	Black	129
		25-34	56	Hispanic	24
		35-44	69	All others	6
		45-97	60		

Top 10 drugs mentioned



* NOS = Not otherwise specified

Drug involvement in death by sex and age of decedent

		Sex		Age				
	TOTAL	Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	31%	36%	18%	—	24%	27%	35%	35%
Number of drugs involved								
Single-drug	28%	29%	25%	67%	36%	23%	23%	32%
Multi-drug	72%	71%	75%	33%	64%	77%	77%	68%
Cause of death								
Drug-induced	69%	63%	88%	33%	44%	61%	81%	76%
Drug-related	31%	37%	13%	67%	56%	39%	19%	24%
Manner of death								
Suicide	—	—	—	—	—	—	—	—
Accidental/unexpected	52%	55%	45%	67%	64%	54%	39%	60%
All others	48%	45%	55%	33%	36%	46%	61%	40%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	50	35	50	47	67	—
Cocaine	104	86	92	88	106	21
Heroin/morphine	94	61	81	110	118	12
Marijuana	20	14	18	9	31	15
Amphetamines	—	—	—	—	—	—
Methamphetamine	—	—	—	1	—	—
Club drugs[1]	—	—	—	1	2	—
Hallucinogens[2]	—	—	—	1	—	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics[3]	13	15	22	25	103	10
Other analgesics	5	2	5	—	7	—
Benzodiazepines	13	12	11	9	6	—
Antidepressants	20	11	11	22	16	1
All other substances[3]	7	8	6	2	13	1
Total drug deaths	**145**	**127**	**144**	**158**	**215**	**60**
Total drug mentions	**326**	**244**	**296**	**315**	**469**	**—**
Total deaths certified	**2,446**	**2,738**	**2,620**	**2,487**	**2,441**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Philadelphia: Camden County, NJ

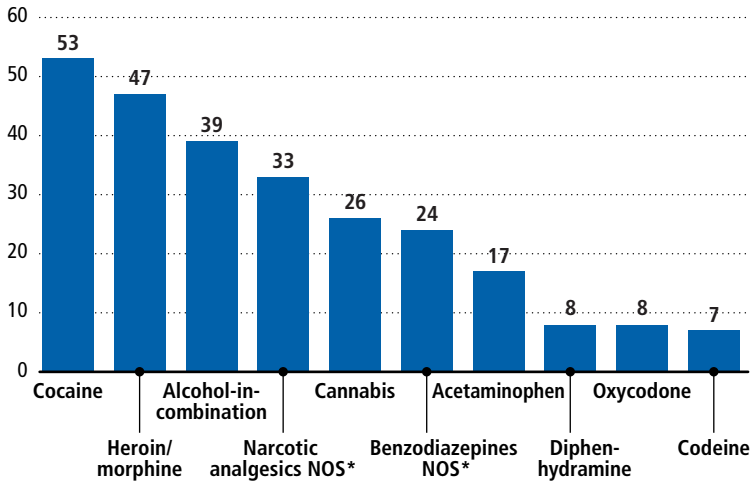
Camden County, NJ: Deaths and population, 2001

Deaths involving drug abuse	
Total	113
Drug-induced	87
Drug-related	26
Total deaths certified	1,374
Population (2001)	509,350

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	77	6-17	2	White	74
Female	36	18-24	20	Black	33
		25-34	22	Hispanic	6
		35-44	39	All others	—
		45-97	30		

Top 10 drugs mentioned



* NOS = Not otherwise specified

Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	35%	40%	22%	—	30%	36%	44%	27%
Number of drugs involved								
Single-drug	13%	12%	17%	100%	25%	14%	8%	7%
Multi-drug	87%	88%	83%	—	75%	86%	92%	93%
Cause of death								
Drug-induced	77%	71%	89%	—	50%	64%	95%	87%
Drug-related	23%	29%	11%	100%	50%	36%	5%	13%
Manner of death								
Suicide	16%	16%	17%	50%	25%	23%	8%	13%
Accidental/unexpected	60%	66%	47%	50%	70%	73%	64%	40%
All others	24%	18%	36%	—	5%	5%	28%	47%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	41	32	43	43	39	—
Cocaine	60	32	51	44	53	8
Heroin/morphine	75	31	42	48	47	1
Marijuana	22	28	18	21	26	5
Amphetamines	1	1	1	—	3	—
Methamphetamine	1	1	—	—	1	—
Club drugs[1]	—	—	1	—	—	—
Hallucinogens[2]	1	4	2	2	2	—
Inhalants	3	1	4	—	1	1
Narcotic analgesics[3]	31	28	27	64	65	—
Other analgesics	16	13	20	21	27	—
Benzodiazepines	62	46	44	52	37	—
Antidepressants	12	20	7	27	23	—
All other substances[3]	50	25	45	35	34	—
Total drug deaths	**127**	**98**	**108**	**117**	**113**	**15**
Total drug mentions	**375**	**262**	**305**	**357**	**358**	—
Total deaths certified	**1,642**	**1,446**	**1,397**	**1,497**	**1,374**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Philadelphia: Philadelphia County, PA

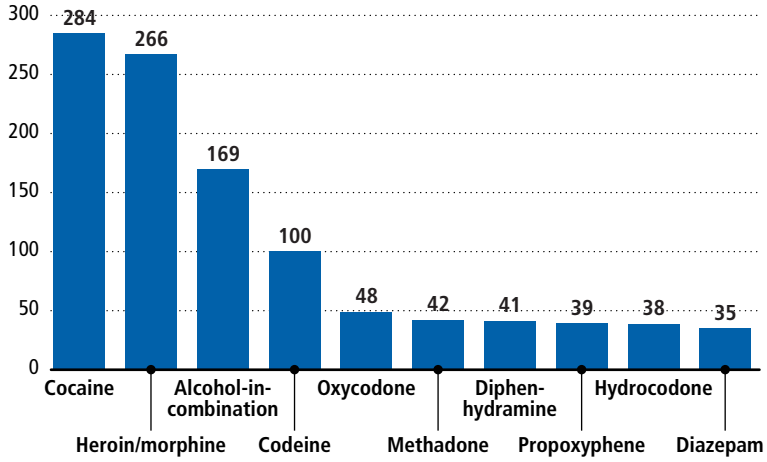
Philadelphia County, PA: Deaths and population, 2001

Deaths involving drug abuse	
Total	492
Drug-induced	433
Drug-related	59
Total deaths certified	5,632
Population (2001)	1,491,812

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	369	6-17	3	White	253
Female	118	18-24	50	Black	199
		25-34	91	Hispanic	39
		35-44	184	All others	1
		45-97	164		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

		Sex		Age				
	TOTAL	Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	34%	36%	31%	—	22%	33%	40%	34%
Number of drugs involved								
Single-drug	15%	14%	19%	—	12%	15%	14%	19%
Multi-drug	85%	86%	81%	100%	88%	85%	86%	81%
Cause of death								
Drug-induced	88%	86%	93%	100%	74%	84%	89%	94%
Drug-related	12%	14%	7%	—	26%	16%	11%	6%
Manner of death								
Suicide	10%	9%	10%	—	16%	11%	10%	7%
Accidental/unexpected	75%	75%	72%	67%	80%	85%	72%	70%
All others	16%	15%	18%	33%	4%	4%	18%	23%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	160	137	144	194	169	—
Cocaine	326	276	293	310	284	49
Heroin/morphine	380	272	254	319	266	16
Marijuana	—	—	—	—	—	—
Amphetamines	9	4	9	3	10	—
Methamphetamine	13	4	5	3	5	—
Club drugs[1]	1	—	6	5	13	—
Hallucinogens[2]	25	24	22	25	30	4
Inhalants	2	—	1	—	—	—
Narcotic analgesics[3]	311	221	271	348	277	6
Other analgesics	40	27	10	12	14	—
Benzodiazepines	80	95	58	72	94	—
Antidepressants	94	170	127	156	161	1
All other substances[3]	198	212	203	234	229	—
Total drug deaths	**554**	**467**	**453**	**528**	**492**	**76**
Total drug mentions	**1,639**	**1,442**	**1,403**	**1,681**	**1,552**	**—**
Total deaths certified	**5,710**	**5,632**	**5,841**	**5,666**	**5,632**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Portland: Multnomah County, OR

Multnomah County, OR: Deaths and population, 2001

Deaths involving drug abuse	
Total	117
Drug-induced	110
Drug-related	7
Total deaths certified	845
Population (2001)	665,810

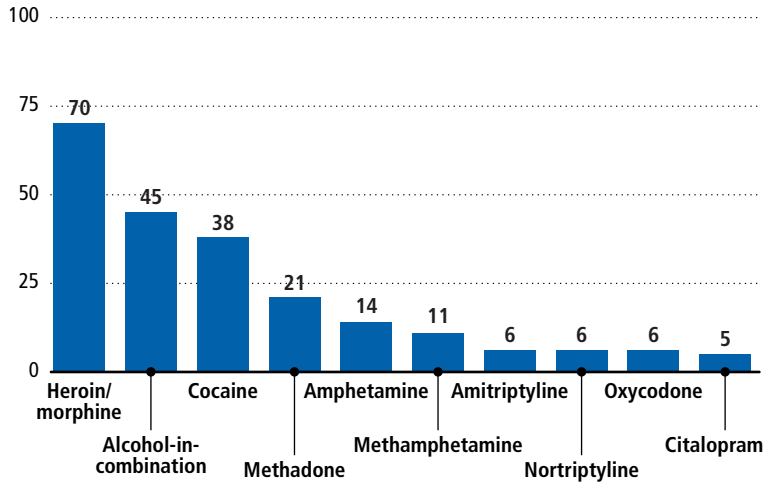
Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	87
Female	30

Age	
6-17	1
18-24	5
25-34	30
35-44	45
45-97	36

Race/Ethnicity	
White	106
Black	3
Hispanic	3
All others	5

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	38%	45%	20%	—	20%	40%	40%	39%
Number of drugs involved								
Single-drug	22%	23%	20%	100%	20%	27%	20%	19%
Multi-drug	78%	77%	80%	—	80%	73%	80%	81%
Cause of death								
Drug-induced	94%	93%	97%	100%	100%	90%	96%	94%
Drug-related	6%	7%	3%	—	—	10%	4%	6%
Manner of death								
Suicide	9%	7%	17%	—	—	3%	9%	17%
Accidental/unexpected	74%	79%	60%	100%	100%	83%	78%	58%
All others	16%	14%	23%	—	—	13%	13%	25%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	66	62	68	49	45	—
Cocaine	38	45	54	44	38	4
Heroin/morphine	98	104	125	84	70	14
Marijuana	—	—	—	—	—	—
Amphetamines	4	3	13	3	14	3
Methamphetamine	4	5	3	—	11	—
Club drugs[1]	—	—	—	1	—	—
Hallucinogens[2]	—	—	1	—	—	—
Inhalants	—	1	—	—	—	—
Narcotic analgesics[3]	8	10	19	16	31	4
Other analgesics	2	—	3	—	2	—
Benzodiazepines	3	7	5	1	7	—
Antidepressants	15	5	16	16	25	—
All other substances[3]	7	6	16	28	21	1
Total drug deaths	**127**	**129**	**162**	**119**	**117**	**26**
Total drug mentions	**245**	**248**	**323**	**242**	**264**	—
Total deaths certified	**931**	**862**	**872**	**839**	**845**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

St. Louis: St. Louis City, MO

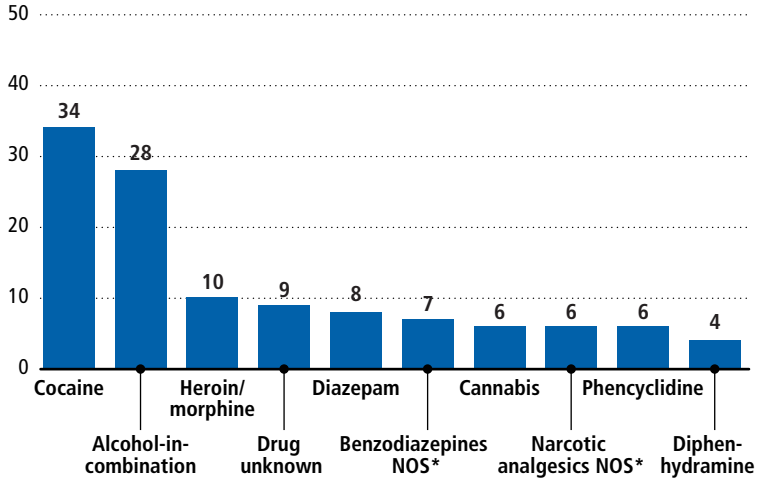
St. Louis City, MO: Deaths and population, 2001

Deaths involving drug abuse	
Total	67
Drug-induced	41
Drug-related	26
Total deaths certified	2,673
Population (2001)	339,211

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	52	6-17	—	White	25
Female	15	18-24	9	Black	42
		25-34	14	Hispanic	—
		35-44	20	All others	—
		45-97	24		

Top 10 drugs mentioned



* NOS = Not otherwise specified

Drug involvement in death by sex and age of decedent

		Sex		Age				
	TOTAL	Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	42%	42%	40%	—	22%	36%	40%	54%
Number of drugs involved								
Single-drug	33%	33%	33%	—	44%	50%	40%	13%
Multi-drug	67%	67%	67%	—	56%	50%	60%	88%
Cause of death								
Drug-induced	61%	60%	67%	—	33%	50%	65%	75%
Drug-related	39%	40%	33%	—	67%	50%	35%	25%
Manner of death								
Suicide	1%	2%	—	—	11%	—	—	—
Accidental/unexpected	54%	56%	47%	—	56%	57%	70%	38%
All others	45%	42%	53%	—	33%	43%	30%	63%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	20	15	17	19	28	—
Cocaine	50	51	47	42	34	13
Heroin/morphine	29	27	27	20	10	—
Marijuana	24	24	32	24	6	—
Amphetamines	—	—	—	—	—	—
Methamphetamine	2	2	1	1	—	—
Club drugs[1]	—	—	2	2	—	—
Hallucinogens[2]	—	1	—	2	6	4
Inhalants	—	1	—	3	—	—
Narcotic analgesics[3]	19	15	10	23	20	1
Other analgesics	4	9	3	2	4	—
Benzodiazepines	21	11	9	15	20	—
Antidepressants	12	4	6	7	11	2
All other substances[3]	9	13	22	21	25	2
Total drug deaths	**91**	**84**	**87**	**74**	**67**	**22**
Total drug mentions	**190**	**173**	**176**	**181**	**164**	**—**
Total deaths certified	**2,535**	**2,511**	**2,524**	**2,460**	**2,673**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

St. Louis: St. Louis County, MO

St. Louis County, MO: Deaths and population, 2001

Deaths involving drug abuse	
Total	125
Drug-induced	81
Drug-related	44
Total deaths certified	4,519
Population (2001)	1,015,417

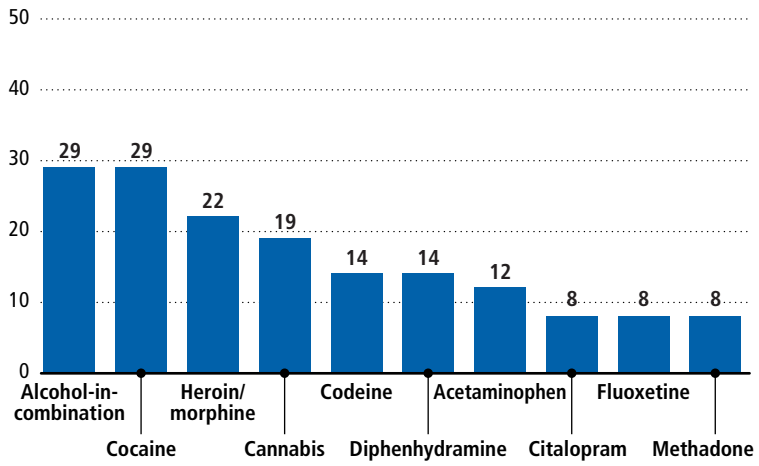
Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	82
Female	42

Age	
6-17	3
18-24	13
25-34	19
35-44	41
45-97	49

Race/Ethnicity	
White	114
Black	11
Hispanic	—
All others	—

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	23%	24%	19%	—	38%	26%	29%	14%
Number of drugs involved								
Single-drug	29%	38%	12%	67%	8%	26%	20%	41%
Multi-drug	71%	62%	88%	33%	92%	74%	80%	59%
Cause of death								
Drug-induced	65%	57%	79%	67%	46%	53%	71%	69%
Drug-related	35%	43%	21%	33%	54%	47%	29%	31%
Manner of death								
Suicide	38%	40%	33%	67%	31%	37%	29%	45%
Accidental/unexpected	26%	28%	21%	—	62%	42%	27%	12%
All others	36%	32%	45%	33%	8%	21%	44%	43%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	21	27	33	29	29	—
Cocaine	12	15	15	13	29	7
Heroin/morphine	8	15	22	25	22	1
Marijuana	11	12	23	23	19	4
Amphetamines	—	1	—	2	2	—
Methamphetamine	—	3	1	1	—	—
Club drugs[1]	—	—	1	—	1	—
Hallucinogens[2]	—	—	1	1	—	—
Inhalants	3	1	3	1	—	—
Narcotic analgesics[3]	24	20	31	33	35	3
Other analgesics	18	22	25	21	20	2
Benzodiazepines	20	19	24	22	12	—
Antidepressants	11	22	24	26	49	11
All other substances[3]	20	19	46	61	56	8
Total drug deaths	**74**	**81**	**116**	**116**	**125**	**36**
Total drug mentions	**148**	**176**	**249**	**258**	**274**	—
Total deaths certified	**4,279**	**4,280**	**4,420**	**4,427**	**4,519**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Salt Lake City: Salt Lake County, UT

Salt Lake County, UT: Deaths and population, 2001

Deaths involving drug abuse	
Total	85
Drug-induced	80
Drug-related	5
Total deaths certified	792
Population (2001)	904,331

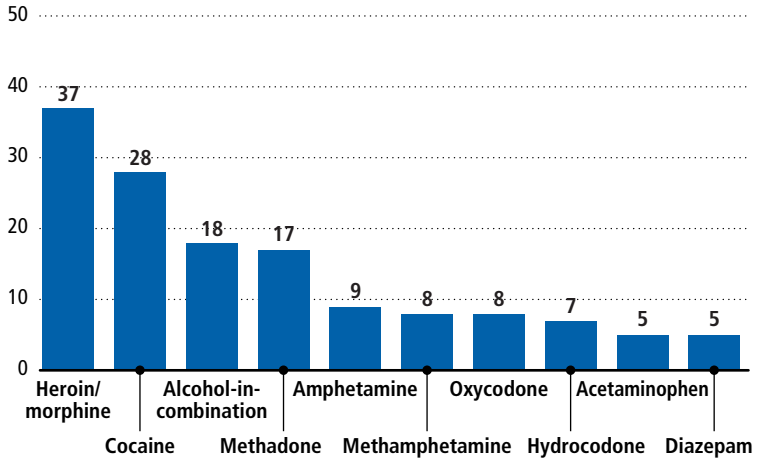
Drug abuse deaths by sex, age and race/ethnicity

Sex	
Male	53
Female	29

Age	
6-17	1
18-24	5
25-34	19
35-44	26
45-97	32

Race/Ethnicity	
White	76
Black	—
Hispanic	5
All others	4

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	21%	26%	10%	—	—	5%	31%	26%
Number of drugs involved								
Single-drug	33%	36%	31%	100%	60%	42%	27%	26%
Multi-drug	67%	64%	69%	—	40%	58%	73%	74%
Cause of death								
Drug-induced	94%	94%	93%	100%	80%	100%	92%	94%
Drug-related	6%	6%	7%	—	20%	—	8%	6%
Manner of death								
Suicide	12%	11%	14%	—	—	16%	19%	6%
Accidental/unexpected	5%	6%	3%	—	—	5%	8%	3%
All others	84%	83%	83%	100%	100%	79%	73%	91%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	27	28	30	31	18	—
Cocaine	43	74	74	56	28	4
Heroin/morphine	65	79	87	75	37	12
Marijuana	2	1	1	—	1	—
Amphetamines	7	14	23	12	9	—
Methamphetamine	10	21	23	15	8	—
Club drugs[1]	—	—	1	2	—	—
Hallucinogens[2]	—	—	—	1	1	1
Inhalants	—	—	1	—	—	—
Narcotic analgesics[3]	16	13	24	30	35	11
Other analgesics	1	2	—	3	6	—
Benzodiazepines	6	5	7	12	8	—
Antidepressants	17	2	7	8	7	—
All other substances[3]	10	9	7	9	18	—
Total drug deaths	**95**	**112**	**138**	**117**	**85**	**28**
Total drug mentions	**204**	**248**	**285**	**254**	**176**	**—**
Total deaths certified	**717**	**695**	**731**	**688**	**792**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

San Francisco: San Francisco County, CA

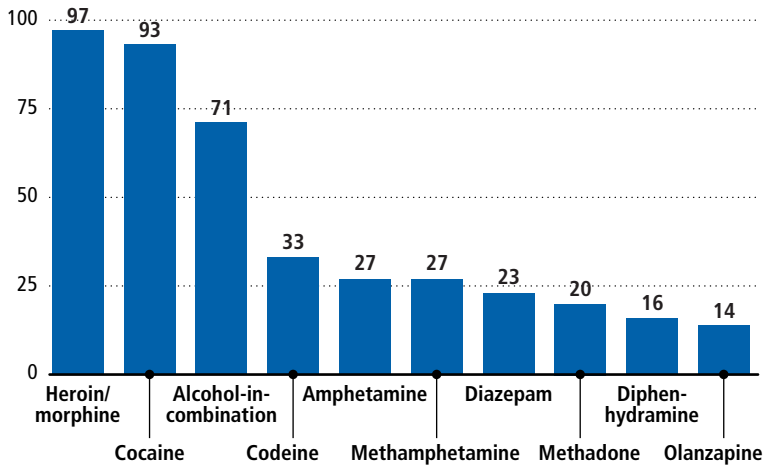
San Francisco County, CA: Deaths and population, 2001

Deaths involving drug abuse	
Total	206
Drug-induced	169
Drug-related	37
Total deaths certified	1,340
Population (2001)	770,723

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	159	6-17	1	White	120
Female	46	18-24	6	Black	41
		25-34	28	Hispanic	26
		35-44	69	All others	19
		45-97	102		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	34%	40%	17%	—	—	21%	54%	27%
Number of drugs involved								
Single-drug	18%	18%	17%	100%	33%	25%	13%	18%
Multi-drug	82%	82%	83%	—	67%	75%	87%	82%
Cause of death								
Drug-induced	82%	81%	87%	—	67%	68%	86%	85%
Drug-related	18%	19%	13%	100%	33%	32%	14%	15%
Manner of death								
Suicide	14%	13%	17%	—	17%	14%	16%	12%
Accidental/unexpected	65%	65%	63%	100%	67%	75%	70%	58%
All others	22%	22%	20%	—	17%	11%	14%	30%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	88	88	112	67	71	—
Cocaine	104	137	139	123	93	20
Heroin/morphine	123	145	166	117	97	12
Marijuana	—	—	—	—	1	1
Amphetamines	—	28	35	27	27	—
Methamphetamine	40	41	51	29	27	—
Club drugs[1]	4	1	5	6	5	—
Hallucinogens[2]	1	1	3	—	1	—
Inhalants	—	—	—	1	—	—
Narcotic analgesics[3]	123	150	159	128	75	2
Other analgesics	12	7	4	14	11	1
Benzodiazepines	43	46	38	39	37	—
Antidepressants	24	33	75	58	68	1
All other substances[3]	88	82	90	76	99	—
Total drug deaths	**227**	**253**	**287**	**217**	**206**	**37**
Total drug mentions	**650**	**759**	**877**	**685**	**612**	—
Total deaths certified	**1,645**	**1,636**	**1,539**	**1,375**	**1,340**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Seattle: King County, WA

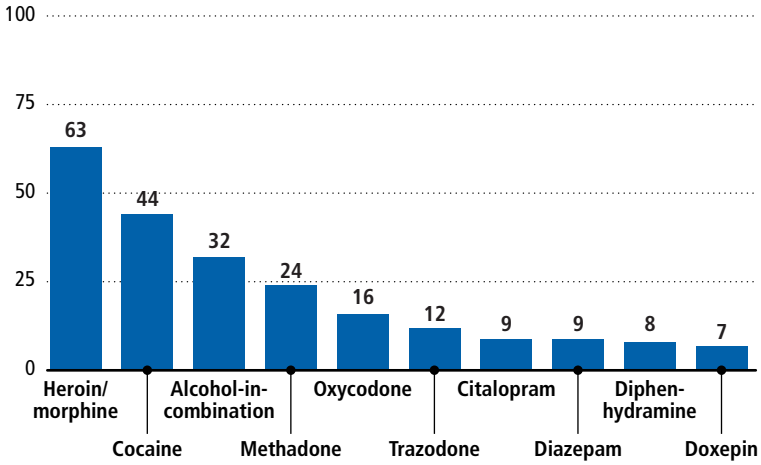
King County, WA: Deaths and population, 2001

Deaths involving drug abuse	
Total	146
Drug-induced	146
Drug-related	—
Total deaths certified	1,354
Population (2001)	1,741,785

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	95	6-17	3	White	126
Female	51	18-24	8	Black	12
		25-34	30	Hispanic	3
		35-44	50	All others	5
		45-97	55		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

		Sex		Age				
	TOTAL	Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	22%	27%	12%	—	13%	23%	32%	15%
Number of drugs involved								
Single-drug	31%	32%	29%	100%	63%	37%	20%	29%
Multi-drug	69%	68%	71%	—	38%	63%	80%	71%
Cause of death								
Drug-induced	100%	100%	100%	100%	100%	100%	100%	100%
Drug-related	—	—	—	—	—	—	—	—
Manner of death								
Suicide	13%	11%	18%	—	25%	7%	8%	20%
Accidental/unexpected	74%	82%	59%	67%	63%	83%	86%	60%
All others	13%	7%	24%	33%	13%	10%	6%	20%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	74	95	61	71	32	—
Cocaine	65	68	76	88	44	5
Heroin/morphine	110	142	117	102	63	18
Marijuana	—	1	—	1	—	—
Amphetamines	2	—	1	1	—	—
Methamphetamine	3	3	28	12	6	2
Club drugs[1]	—	—	1	2	3	2
Hallucinogens[2]	—	—	—	—	—	—
Inhalants	—	—	—	1	—	—
Narcotic analgesics[3]	31	49	21	53	57	9
Other analgesics	20	11	13	21	11	3
Benzodiazepines	26	37	15	20	20	—
Antidepressants	40	63	48	59	66	4
All other substances[3]	34	50	36	34	50	2
Total drug deaths	**169**	**215**	**199**	**215**	**146**	**45**
Total drug mentions	**405**	**519**	**417**	**465**	**352**	**—**
Total deaths certified	**1,306**	**1,317**	**1,267**	**1,316**	**1,354**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Washington, DC: District of Columbia

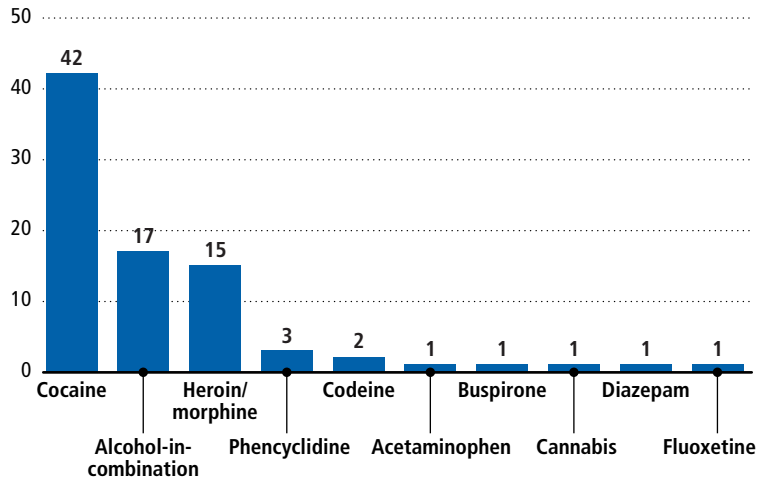
District of Columbia: Deaths and population, 2001

Deaths involving drug abuse	
Total	53
Drug-induced	45
Drug-related	8
Total deaths certified	1,582
Population (2001)	571,822

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	40	6-17	—	White	3
Female	12	18-24	1	Black	50
		25-34	2	Hispanic	—
		35-44	25	All others	—
		45-97	25		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	32%	30%	42%	—	—	50%	40%	24%
Number of drugs involved								
Single-drug	45%	45%	42%	—	—	50%	36%	56%
Multi-drug	55%	55%	58%	—	100%	50%	64%	44%
Cause of death								
Drug-induced	85%	80%	100%	—	—	50%	84%	92%
Drug-related	15%	20%	—	—	100%	50%	16%	8%
Manner of death								
Suicide	8%	10%	—	—	—	50%	4%	8%
Accidental/unexpected	77%	73%	92%	—	100%	50%	68%	88%
All others	15%	18%	8%	—	—	—	28%	4%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	29	44	37	26	17	—
Cocaine	33	63	64	54	42	18
Heroin/morphine	41	53	41	36	15	4
Marijuana	—	—	—	1	1	—
Amphetamines	—	—	—	1	—	—
Methamphetamine	—	1	—	1	—	—
Club drugs[1]	—	—	—	—	—	—
Hallucinogens[2]	1	—	2	1	3	1
Inhalants	—	—	—	—	—	—
Narcotic analgesics[3]	6	22	15	20	6	—
Other analgesics	2	3	3	2	1	—
Benzodiazepines	13	13	11	10	1	1
Antidepressants	4	14	11	4	1	—
All other substances[3]	7	30	18	10	1	—
Total drug deaths	**79**	**145**	**121**	**100**	**53**	**24**
Total drug mentions	**136**	**243**	**202**	**166**	**88**	—
Total deaths certified	**1,414**	**1,607**	**1,763**	**1,751**	**1,582**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Washington, DC: Montgomery County, MD

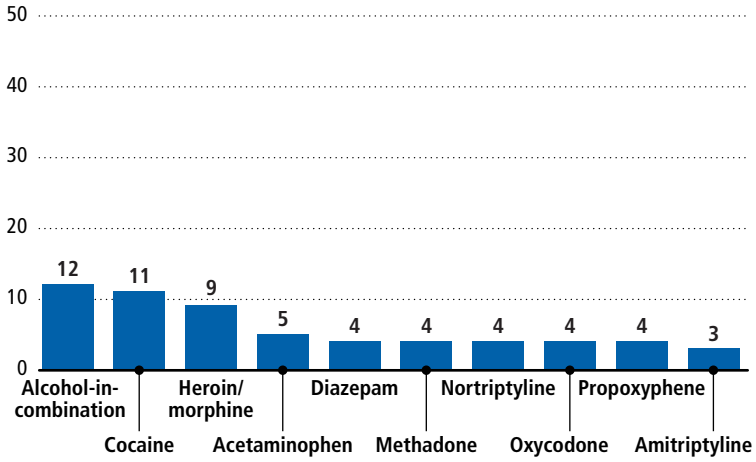
Montgomery County, MD: Deaths and population, 2001

Deaths involving drug abuse	
Total	32
Drug-induced	27
Drug-related	5
Total deaths certified	400
Population (2001)	891,347

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	24	6-17	—	White	23
Female	8	18-24	5	Black	7
		25-34	5	Hispanic	2
		35-44	10	All others	—
		45-97	11		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

		Sex		Age				
	TOTAL	Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	38%	42%	25%	—	20%	80%	20%	42%
Number of drugs involved								
Single-drug	16%	17%	13%	—	20%	20%	20%	8%
Multi-drug	84%	83%	88%	—	80%	80%	80%	92%
Cause of death								
Drug-induced	84%	79%	100%	—	100%	60%	100%	75%
Drug-related	16%	21%	—	—	—	40%	—	25%
Manner of death								
Suicide	19%	13%	38%	—	20%	—	—	42%
Accidental/unexpected	13%	17%	—	—	—	40%	—	17%
All others	69%	71%	63%	—	80%	60%	100%	42%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	14	8	8	10	12	—
Cocaine	12	5	9	6	11	1
Heroin/morphine	13	9	13	11	9	2
Marijuana	—	—	—	2	—	—
Amphetamines	1	—	—	—	—	—
Methamphetamine	1	—	2	—	—	—
Club drugs[1]	—	—	—	—	—	—
Hallucinogens[2]	—	—	—	1	—	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics[3]	13	9	11	18	18	2
Other analgesics	9	3	9	9	7	—
Benzodiazepines	7	3	4	5	6	—
Antidepressants	16	8	12	18	20	—
All other substances[3]	32	12	27	21	23	—
Total drug deaths	**32**	**18**	**26**	**34**	**32**	**5**
Total drug mentions	**118**	**57**	**95**	**101**	**106**	**—**
Total deaths certified	**524**	**473**	**500**	**434**	**400**	**—**

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

Washington, DC: Prince George's County, MD

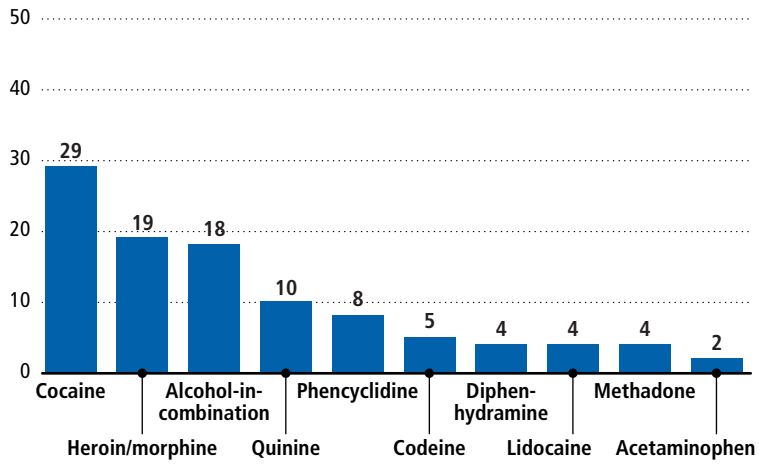
Prince George's County, MD: Deaths and population, 2001

Deaths involving drug abuse	
Total	57
Drug-induced	39
Drug-related	18
Total deaths certified	1,033
Population (2001)	816,791

Drug abuse deaths by sex, age and race/ethnicity

Sex		Age		Race/Ethnicity	
Male	50	6-17	—	White	17
Female	7	18-24	7	Black	39
		25-34	8	Hispanic	1
		35-44	25	All others	—
		45-97	17		

Top 10 drugs mentioned



Drug involvement in death by sex and age of decedent

	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
Alcohol involved	32%	34%	14%	—	29%	63%	24%	29%
Number of drugs involved								
Single-drug	28%	30%	14%	—	43%	25%	24%	29%
Multi-drug	72%	70%	86%	—	57%	75%	76%	71%
Cause of death								
Drug-induced	68%	66%	86%	—	29%	50%	72%	88%
Drug-related	32%	34%	14%	—	71%	50%	28%	12%
Manner of death								
Suicide	7%	4%	29%	—	29%	—	4%	6%
Accidental/unexpected	11%	12%	—	—	14%	13%	8%	12%
All others	82%	84%	71%	—	57%	88%	88%	82%

Drug mentions by drug category

Drug category	1997	1998	1999	2000	2001	Single-drug deaths, 2001
Alcohol-in-combination	20	28	24	28	18	—
Cocaine	24	39	15	33	29	9
Heroin/morphine	32	31	23	23	19	2
Marijuana	—	—	—	—	—	—
Amphetamines	—	—	—	—	—	—
Methamphetamine	—	—	1	—	—	—
Club drugs[1]	—	—	—	1	1	—
Hallucinogens[2]	2	3	2	7	8	4
Inhalants	—	—	—	—	—	—
Narcotic analgesics[3]	16	15	8	13	13	—
Other analgesics	6	4	5	6	4	—
Benzodiazepines	9	3	—	—	3	—
Antidepressants	16	8	10	8	8	—
All other substances[3]	45	47	31	28	27	1
Total drug deaths	**54**	**59**	**42**	**54**	**57**	**16**
Total drug mentions	**170**	**178**	**119**	**147**	**130**	—
Total deaths certified	**982**	**1,231**	**1,265**	**890**	**1,033**	—

[1] Includes Ecstasy [MDMA], Ketamine, GHB-GBL, and Rohypnol. [2] Includes PCP, LSD, and miscellaneous hallucinogens. [3] Not tabulated above.

SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network 2001 (09/2002 update).

APPENDIX A: DAWN MEDICAL EXAMINER REPORT FORM

FORM NUMBER

XXXXXXX

(Sample Form Only)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE

SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION

DRUG ABUSE WARNING NETWORK (DAWN) MEDICAL EXAMINER REPORT

(Sample Form Only)

FORM APPROVED:
OMB NO. 0930-0078
Expires: 11/30/2002

1. PROVIDER NUMBER

2. CROSS REFERENCE *(Facility Use Only)*

3. DATE OF DEATH — Month / Day / Year

INFORMATION ON DECEASED

4. AGE *(Must be 06-97 yrs.)*

5. SEX
1 ☐ Male
2 ☐ Female

6a. ETHNICITY *(mark [x] one response)*
1 ☐ Hispanic or Latino
2 ☐ Not Hispanic or Latino
3 ☐ Unknown

6b. RACE *(mark [x] for all that apply)*
☐ White
☐ Black or African American
☐ American Indian or Alaska Native
☐ Asian
☐ Native Hawaiian or Other Pacific Islander
☐ Unknown

7. DECEDENT'S HOME ZIP CODE — –
(Otherwise mark [X] one response)
1 ☐ Unknown 2 ☐ No Fixed Address

8. CAUSE OF DEATH *(See reverse side)*

A. Was this a **DRUG-INDUCED CASE** (e.g., the drug[s] directly caused the death as documented in County records such as the death certificate and/or autopsy findings)?

1 ☐ Yes ☐ No

B.1 If not drug induced, please select one of the following **DRUG-RELATED CASE** categories:

2 ☐ Drug Abuse in Combination with Physiological Condition

3 ☐ Drug Abuse in Combination with External Physical Event

4 ☐ Drug Abuse-Caused Medical Disorder (Whether abuse is past or present)

B.2 Please mark [X] **confirmed** if the drug-related case in B.1 is based on a documented conclusion in County records (e.g., death certificate states that drug abuse contributed to the death but was not the primary cause):

☐ Confirmed

Please mark [X] **presumed** if the drug-related case in B.1 is based on positive toxicology (e.g., presence of illicit substances or legal drugs exceeding therapeutic levels) **-- OR --** on other documentation of past or present substance abuse that may be related to the cause of the death.

☐ Presumed

9. MANNER OF DEATH
1 ☐ Accidental/Unexpected
2 ☐ Suicide
3 ☐ Homicide
4 ☐ Undetermined
5 ☐ Natural

10. FACTORS SUPPORTING ***DAWN*** CASE DETERMINATION *(Mark [X] for **all** that apply)*
1 ☐ Death Certificate
2 ☐ Toxicological Laboratory Report
3 ☐ Autopsy
4 ☐ Inspection of Scene of Death
5 ☐ External Physical Signs
6 ☐ Statement of Hospital/Family/Friends
7 ☐ Other *(Specify)* _____

DRUG/SUBSTANCE INFORMATION

11. ALCOHOL INVOLVED *(Mark [X] one response)*
1 ☐ Yes (If YES, please note concentration _____) 2 ☐ No

12. LIST EACH DRUG/SUBSTANCE NAME IN ONE OF THE SPACES BELOW

SAMHSA USE ONLY

1 _____
2 _____
3 _____
4 _____
5 _____
6 _____

*For each non-alcohol substance listed above, mark [X] **one** response in each data item below.*

13. ROUTE OF ADMINISTRATION

		SUBSTANCES 1	2	3	4	5	6
Oral	01						
Injection	02						
Inhaled	03						
Smoked *(Includes Freebase)*	04						
Sniffed, Snorted	05						
Unknown	06						
Other	07						

14. LAB TEST USED TO IDENTIFY DRUG

DRUG #	FINDINGS *(List test methods, specimen, and findings for each drug listed)*

15. CODED REMARKS
(If case involves an IV drug user with HIV+/AIDS, please write "HIV+" or "AIDS" in the first four spaces below.)

SMA 100-2
REV. 11/99

EF

APPENDIX B: GLOSSARY OF TERMS

This glossary defines terms used by the Drug Abuse Warning Network (DAWN) in data collection activities, analyses, and publications. DAWN collects data and publishes findings separately for emergency departments (EDs) and death investigation jurisdictions. As a result, there are a number of terms that are unique to each component of DAWN.

This appendix is divided into 3 sections. The first section contains terms common to both the ED component and the mortality data component of DAWN. The second section focuses on terms specific to the DAWN ED system, while the third section focuses on terms specific to the mortality data system.

Definitions of Terms Common to DAWN's ED and Mortality Components

Drug abuse: The nonmedical use of a substance for any of the following reasons: psychic effect, dependence, or suicide attempt/gesture. In DAWN, nonmedical use means:

- The use of prescription drugs in a manner inconsistent with accepted medical practice;
- The use of over-the-counter drugs contrary to approved labeling; or
- The use of any substance (e.g., heroin, marijuana, peyote, glue, aerosols) for psychic effect, dependence, or suicide.

Drug category: A generic grouping of substances reported to DAWN, based on the classification of generic drugs by Multum Information Services. Multum Information Services is a subsidiary of the Cerner Corporation and a developer of clinical drug information systems and a drug knowledge base. More information is available at www.multum.com. The DAWN system has accumulated a vocabulary of thousands of substance names that have been mentioned in incidents of abuse. This vocabulary is updated monthly by the inclusion of new abuse substances and, through receipt of identifying information, the reclassification of drugs. Occasionally, this reclassification may result in a drug being shifted to a different drug grouping. The DAWN drug groupings are periodically reviewed in order to reflect the most recent changes in pharmaceutical classifications and drug legislation. Occasional changes in drug classification should be taken into consideration when comparing drug data from this publication with other DAWN publications. These classifications may involve street names and brand names, which are sometimes used to identify a substance and its generic drug group. Individual drugs comprising the most commonly reported drug categories can be found in Tables 2.3 to 2.7 of Emergency Department Trends From DAWN.

Additional clarification is provided for the following drug categories:

- *Alcohol-in-combination* – DAWN does not gather data on alcohol used alone, only alcohol used concomitantly with another abused substance. Therefore, all alcohol mentions are combination mentions.
- *All other substances not tabulated above (NTA)* – This category contains any substance reported to DAWN that could not be classified in other categories and has too few mentions to warrant being reported

independently in DAWN tables. This category also includes certain terms that cannot be assigned reliably to any new category such as: (1) ambiguous, nonspecific terms that could fall into any of several categories (e.g., "AIDS medicine" could be an anti-infective, an anticonvulsant, or any number of other drugs); (2) undocumented, nonspecific terms (e.g., "thought organizer"); and (3) street terms for illicit substances that could not be linked reliably to a particular illicit substance (e.g., "T," "butterflies").

- *Amphetamines* – This class of substances has been extracted from the category of central nervous system (CNS) stimulants because of its importance as a major substance of abuse. For purposes of classification, "amphetamines" (plural) includes a class of compounds derived from or related to the drug amphetamine. Although some "designer" drugs fall into the class of amphetamines, we choose to report some of them individually as major substances of abuse (e.g., methamphetamine). This category does not include other CNS stimulants, such as caffeine or methylphenidate.
- *Club drugs* – During the 1990s, use of certain illicit drugs was linked to "raves" and dance clubs. These substances are commonly referred to as "club drugs." When used in DAWN, the term club drugs includes Ketamine, flunitrazepam (Rohypnol), gamma-hydroxy butyrate (GHB, or its precursor, gamma butyrolactone [GBL]), and methylenedioxymethamphetamine (MDMA or Ecstasy). Although commonly used in the rave scene, methamphetamine and hallucinogens are classified separately from club drugs in DAWN.
- *Drug unknown* – "Drug unknown" may be recorded when drug abuse was known or suspected to have been involved, but the specific substance could not be determined. This includes 2 types of cases: those in which the drug was reported to DAWN as "unknown" and those in which drugs were reported to DAWN as "polysubstances." For the purposes of DAWN, polysubstance refers to the abuse of more than one substance when the individual substances were not identified by the source record. Because DAWN cases are identified through retrospective medical chart review, there will always be cases in which the drug abuse was known but the particular substance was unknown or unknowable.
- *Heroin and Heroin/morphine* – This is the only drug classified differently in the ED and mortality components of DAWN. In the ED publications, heroin is classified as a major substance of abuse, separate from morphine, which is classified as a narcotic analgesic under CNS agents. In the mortality data publications, heroin and morphine are classified together in a single category. When heroin is ingested, it is metabolized to morphine, so that the toxicology testing commonly used in death investigations often does not distinguish between the 2. Therefore, a mention of either substance is recorded as heroin/morphine. A case mentioning both heroin and morphine will be "de-duplicated" and counted as a single heroin/morphine mention.
- *Illicit combinations* – This category includes compounds composed of 2 or more major substances of abuse that are mixed and taken together. For example, "speedball," which usually refers to the combination of heroin and cocaine taken at once, would be classified as an illicit combination, whereas separate mentions of heroin and cocaine would be classified separately in the categories heroin and cocaine. Compounds consisting of a major substance of abuse and another substance are classified in the category of the major substance (e.g., heroin with scopolamine is classified as heroin).
- *Inhalants* – This category includes anesthetic gases and psychoactive nonpharmaceutical substances for which the documented route of administration was inhaled, sniffed, or snorted. Psychoactive nonpharmaceuticals fall into one of the following 3 categories: (1) volatile solvents-adhesives (model airplane glue, rubber cement, household glue), aerosols (spray paint, hairspray, air freshener, deodorant, fabric protector), solvents and gases (nail polish remover, paint thinner, correction fluid and thinner, toxic markers, pure toluene, cigar lighter fluid, gasoline, carburetor cleaner, octane booster), cleaning agents (dry cleaning fluid, spot remover, degreaser), food products (vegetable cooking spray, dessert topping spray such as whipped cream, whippets), and gases (butane, propane, helium); (2) nitrites-amyl nitrites ("poppers," "snappers") and butyl nitrites ("rush," "locker

room," "bolt," "climax," "video head cleaner"); or (3) chlorofluorohydrocarbons (freons). Anesthetic gases (e.g., nitrous oxide, ether, chloroform) are presumed to have been inhaled.

- *Major Substances of Abuse* – We use this term to refer to the most commonly abused drugs (e.g., alcohol-in-combination and cocaine) and those drugs that are typically referred to as "illicit."
- *Other Substances of Abuse* – We use this term to refer to pharmaceutical agents not included in the Major Substances of Abuse.

Drug mention: This refers to a substance that was recorded ("mentioned") in a DAWN case report. In addition to alcohol-in-combination, up to 4 substances ("mentions") can be reported for each ED episode, and up to 6 substances can be reported for each drug abuse death. Therefore, the total number of drug mentions exceeds the total number of ED visits or deaths. Even when only one drug is mentioned, it should not be assumed that the substance was the sole and direct cause of the episode or death; allowances should be made for reportable drugs not mentioned or other contributory factors. (See also **Single-drug episode/death**.)

Metropolitan area: An area comprising a relatively large core city or cities and the adjacent geographic areas. Conceptually, these areas are integrated economic and social units with a large population nucleus. The current DAWN ED sample, which was redesigned in the 1980s, is based on the definitions of Metropolitan Statistical Areas (MSAs) and Primary Metropolitan Statistical Area (PMSAs) issued by the Office of Management and Budget (OMB) in 1983, with a few exceptions. Metropolitan areas represented in the DAWN mortality data system are consistent with those represented in the DAWN ED system, also with a few exceptions. Users of DAWN should note that the ED component provides estimates for each of the 21 metropolitan areas. However, in the mortality data component, only raw counts are provided, and in many instances less than 100 percent of the MSA is represented in those counts.

Not otherwise specified (NOS): Catch-all category for substances that are not specifically named in the listing. Terms are classified into an NOS category only when assignment to a more specific category is not possible based on information in the source documentation (ED patient charts and death investigation case files).

Not tabulated above (NTA): Designation used when categories are not presented in complete detail; smaller units are combined in the NTA category.

Race/ethnicity: Beginning in January 2000, the race and ethnicity categories collected on DAWN case report forms changed to match a change in the standard protocol issued by the OMB in 1997.[1] The new protocol permits separate reporting of race and Hispanic ethnicity; the ability to capture more than one race for an individual; modifications in nomenclature (e.g., "Black" was changed to "Black or African American"); division of certain categories ("Asian or Pacific Islander" was split into 2 categories, "Asian" and "Native Hawaiian or Other Pacific Islander"); and elimination of the "Other" category.

[1] See Office of Management and Budget, *Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity, Federal Register,* 62 FR 58782, October 30, 1997.

The race/ethnicity categories on the DAWN data collection forms are as follows:

Race

- *White* – A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- *Black or African American* – A person having origins in any of the black racial groups of Africa.
- *American Indian or Alaska Native* – A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- *Asian* – A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- *Native Hawaiian or Other Pacific Islander* – A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- *Unknown* – Used when documentation of race is not available from source records.

Ethnicity

- *Hispanic or Latino* – A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
- *Not Hispanic or Latino* – Ethnicity does not meet the definition of Hispanic or Latino.
- *Unknown* – Used when documentation of ethnicity is not available from source records.

Despite the increased detail allowed by the new categories, the actual race/ethnicity data reported to DAWN changed very little because race and ethnicity are often not documented with this level of specificity in patient/decedent records. As a result, we have retained the classification used previously to tabulate DAWN data. The one exception is that we now collapse the less commonly used categories into a category termed "Not tabulated above (NTA)" instead of "Other." Categories used to tabulate race and ethnicity data in the ED publications are:

- *White* – Anyone meeting the definition of white (above). Those who are identified as white and Hispanic are classified as Hispanic.
- *Black* – Anyone meeting the definition of black or African American (above). Those who are identified as black or African American and Hispanic are classified as Hispanic.
- *Hispanic* – Anyone whose ethnicity is Hispanic or Latino is placed in the category Hispanic, regardless of race.
- *Race/ethnicity NTA* – This includes those categories that are too small to report independently including: 2 or more races, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander.
- *Unknown* – Race and ethnicity are unknown. Those who are identified only as Hispanic are classified as Hispanic.

In *Mortality Data From DAWN, r*ace/ethnicity data are tabulated as White, Black, Hispanic, and All others, where "All others" includes other reported races and ethnicities as well as unknown or missing data.

Route of drug administration: DAWN reporters are asked to record the method by which the substance was taken into the drug abuser's body according to the following categories:

- *Oral* – Substance was ingested through the mouth (swallowed).
- *Injection* – Substance entered the body through a vein (intravenously), into the muscle (intramuscularly), or under the skin (subcutaneously).
- *Inhaled* – Gases or fumes of a substance were taken into the body by inhaling through the nose or mouth into the lungs (e.g., inhaling the fumes of glue, aerosols, paints, gasoline).
- *Smoked (includes freebase)* – Substance was consumed by smoking a cigarette, pipe, or similar device.
- *Sniffed/snorted* – Substance, acquired in a powder or crystalline form, was forcefully inhaled through the nose.
- *Other* – This category is used when the route of administration of the substance cannot logically be included as any of the above.

Readers should note that this information is often not documented in patient/decedent files and is therefore missing in DAWN tabulations. Caution should therefore be exercised in interpreting this information.

Single-drug episode/death: A single-drug episode or death is that in which only one drug was involved. Because multiple substances may be recorded for each DAWN case (see **Drug mention**), readers should exercise caution in interpreting the relationship between a given drug and the number of associated ED visits or deaths. For example, if records for a given patient "mentioned" marijuana, this does not mean that marijuana was the only drug involved in the ED visit or that the marijuana caused the ED visit. One should always consider whether and how many other drugs were used in combination, but even then attributing a causal relationship between the visit and a particular drug may not be possible. Additionally, because alcohol is only documented if used in combination with another drug, DAWN cannot provide single-drug episode/death totals for alcohol.

Definitions of Terms for the DAWN ED Component

Coterminous U.S.: The contiguous 48 States and Washington, DC; excludes Alaska and Hawaii. National estimates from DAWN refer only to the coterminous U.S.

Disposition of ED patient: Suggestions or recommendations made or actions taken by the hospital as they relate to the patient's presenting problem:

- *Treated and released or referred* – The patient was given appropriate ED treatment and was released or, after appropriate ED treatment, the hospital referred the patient to another agency or to a private physician for additional services.
- *Admitted to hospital* – The patient was admitted as an inpatient to a hospital.
- *Left against medical advice* – The patient left the treatment setting without a physician's approval.
- *Died* – The patient expired.

Drug abuse episode: A reported ED visit that involved drug abuse. Episodes involving patients under the age of 6 or over the age of 97 are not reported to the DAWN system. The number of ED patients in DAWN is not synonymous with the number of patients involved. One patient may make repeated visits to an ED or to several EDs, thus producing a number of episodes. It is impossible to determine the number of unique patients involved in the reported ED episodes because no patient identifiers are collected.

Drug concomitance: This term refers to whether a drug abuse episode involved a single drug (one mention) or multiple drugs (multiple mentions).

Drug use motive: DAWN classifies ED drug abuse episodes according to one or more of the following reasons for taking a substance(s):

- *Psychic effects* – A conscious action to use drugs to improve or enhance any physical, emotional, or social situation or condition. Two categories of psychic effect are:
  - Use of drugs for experimentation or to enhance a social situation (e.g., curiosity, peer pressure, "just wanted to know what it felt like," "wanted to have fun," "to get high," "for kicks," "to party"); and
  - Use of drugs to improve or enhance any mental, emotional, or physical state (e.g., depression, anxiety, to relieve headache, reduce pain, stay awake, lose weight, relax, help study, get to sleep). Referred to in DAWN as "other psychic effects."
- *Dependence* – A physiological or psychological condition characterized by a compulsion to take the drug on a continuous or periodic basis in order to experience its effects or to avoid the discomfort of its absence (e.g., had to take, had to have, needed a fix).
- *Suicide attempt or gesture* – Successful or unsuccessful action(s) taken for the purpose of self destruction or to gain attention.
- *Other reason* – Used when the reason for taking the substance cannot be classified into the categories above.

Estimate: A statistical estimate is the value of a parameter (such as the number of drug-related ED episodes) for the universe that is derived by applying sampling weights to data from a sample. DAWN produces representative statistical estimates for 21 metropolitan areas based on data from a sample of EDs in each of the 21 areas. An estimate for the coterminous U.S. is produced by summing estimates for the 21 metropolitan areas and an estimate for the National Panel.

Form in which drug was acquired: The form in which the substance was received by the user/abuser, not the form in which the substance was consumed. Categories are: tablet/capsule/pill, aerosol, liquid, powder/crystal, paper, pieces/chunks, injectable liquid, cigarette, plant material, unknown, and other. Readers should note that this information is often not documented in ED records and is therefore missing in DAWN tabulations. Caution should therefore be exercised in interpreting this information.

Hospital emergency department (ED): Only hospitals that meet eligibility criteria for DAWN are recruited to participate. To be eligible, hospitals must be non-Federal, short-stay, general medical and surgical facilities with EDs that are open 24 hours a day, 7 days a week, and located in the coterminous U.S. Specialty hospitals; hospital units of institutions; long-term care facilities; pediatric hospitals; hospitals operating part-time EDs; hospitals in Alaska and Hawaii; and hospitals operated by the Veterans Health Administration and the Indian Health Service are excluded.

National Panel: This term is used to denote 2 concepts relative to DAWN ED data: (1) The universe of eligible hospitals outside the 21 DAWN metropolitan areas but within the coterminous U.S. and (2) the sample of hospitals in DAWN that were selected from this universe. The National Panel sample is weighted to produce estimates for the National Panel universe. (See also **Metropolitan area.**)

p-value: A measure of the probability (p) that the difference between 2 estimates could have occurred by chance, if the estimates being compared were really the same. The larger the p-value, the more likely the difference could have occurred by chance. For example, if the difference between 2 DAWN estimates has a p-value of 0.01, that means that there is a 1 percent probability that the difference observed could be due to chance alone.

Population: See **Universe.**

Precision: The extent to which an estimate agrees with its mean value in repeated sampling. The precision of an estimate is measured inversely by its standard error (SE) or relative standard error (RSE). In DAWN publications, estimates with RSEs of 50 percent or higher are regarded as too imprecise to be published. ED table cells where such estimates would have appeared contain the symbol "…" (3 dots). (See also **Relative standard error.**)

Rank: A rank indicates the relative frequency of a measure, such as mentions for a particular drug category. For example, a drug category ranked second indicates that it accounted for the second highest number of mentions among all drug categories. When 2 or more drugs receive equal numbers of mentions, they are assigned the same rank. A difference in rank should be considered only as indicative of a difference in frequency among drugs reported to DAWN, regardless of the size of the difference. Such differences are not necessarily meaningful or statistically significant.

Reason for present ED contact: The reason for the patient's visit to the ED, based on documentation provided in the medical record. Categories are:

- *Overdose/toxic ingestion* – Either intentional or accidental (e.g., effects of suicide attempt, coma). Anyone whose reason for contact is overdose is placed in this category, regardless of other reasons.
- *Unexpected reaction* – The drug's effect was different than anticipated, thus causing concern (e.g., bad trip, panic, hallucinations).
- *Withdrawal* – Symptoms which occur when a patient stops taking a substance upon which he or she is physiologically dependent and suffers physical symptoms, including abdominal pain, cold sweat, hyperactivity, and tremors that require treatment.
- *Chronic effects* – Secondary conditions resulting from habitual use or dependence, including malnutrition, tetanus, blood poisoning, and so forth.
- *Seeking detoxification* – Patients with identified problems with chronic substance abuse who seek admission to a detoxification program and receive treatment from ED staff. This category was added to the data collection form in 1987. Some hospitals require patients to be processed in the ED prior to admission for detoxification. Caution should therefore be exercised in interpretation of this category and the remaining information.
- *Accident/injury* – Injuries resulting from accidents that were caused by or related to drug abuse. This category was added to the data collection form in 1987.
- *Other* – Reasons which cannot be classified into one of the aforementioned categories.

Reason for taking substance: See **Drug use motive.**

Relative standard error (RSE): A measure of an estimate's relative precision. The RSE of an estimate is equal to the estimate's standard error (SE) divided by the estimate itself. For example, an estimate of 2,000 cocaine mentions with an SE of 200 mentions has an RSE of 10 percent. The larger the RSE, the less precise the estimate. Estimates with an RSE of 50 percent or more are not published by DAWN. (See also **Precision** and **Standard error.**)

Sampling: Sampling is the process of selecting a proper subset of elements from the full population so that the subset can be used to make inference to the population as a whole. A probability sample is one in which each element has a known and positive chance (probability) of selection. A simple random sample is one in which each member has the same chance of selection. In DAWN, a sample of hospitals is selected in order to make inference to all hospitals; DAWN uses simple random sampling within strata.

Sampling frame: A list of units from which the ED sample is drawn. All members of the sampling frame have a probability of being selected. A sampling frame is constructed such that there is no duplication and each unit is identifiable. Ideally, the sampling frame and the universe are the same. The sampling frame for the DAWN hospital ED sample is derived from the American Hospital Association (AHA) Annual Survey of Hospitals.

Sampling unit: A member of a sample selected from a sampling frame. For the DAWN sample, the units are hospitals, and data are collected for all drug-related ED episodes at the responding hospitals selected for the sample.

Sampling weights: Numeric coefficients used to derive population estimates from a sample.

Significance level: The p-value cut-off point that is used to determine whether the difference between two estimates is statistically significant. By convention in most public health research, a difference is considered statistically significant if the p-value is less than 0.05; in other words, if there is less than a 5 percent probability that the difference between the estimates is due to chance. In DAWN, only results with a p-value less than 0.05 are considered statistically significant.

Source of substance: The immediate source of the substance that the patient abused is coded as follows:

- *Patient's own legal prescription* – This is coded only when the abuser was legally prescribed the drug of abuse. If one patient obtains a drug by legal prescription and sells it to another who abuses it, the source to the abuser is marked "street buy." If the patient for whom the prescription was issued gives the drug to another patient who abuses it, the source to the abuse is "other unauthorized procurement."
- *Street buy* – The drug abuser purchased a drug and/or prescription from a source other than legitimate channels.
- *Other unauthorized procurement* – The drug was acquired in a manner not consistent with accepted medical care but was not bought on the street. This category includes drugs purchased using forged prescriptions, stolen, or received as a gift.
- *Other* – Used when the source of the substance cannot logically be included as any of the above. This category includes all over-the-counter medications.
- *Unknown* – Reported when information on source was unavailable.

Readers should note that this information is often not documented in ED records and is therefore missing in DAWN tabulations. Caution should therefore be exercised in interpreting this information.

Standard error (SE): A measure of the sampling variability or precision of an estimate. The SE of an estimate is expressed in the same units as the estimate itself. For example, an estimate of 10,000 cocaine mentions with an SE of 500 indicates that the SE is 500 mentions.

Strata (plural), **stratum** (singular): Subgroups of a population within which separate ED samples are drawn. Stratification is used to increase the precision of estimates for a given sample size, or, conversely, to reduce the sample size required to achieve the desired level of precision. The DAWN ED sample is stratified into 21 metropolitan area cells plus an additional cell for the National Panel. Then, within these cells strata are defined according to the annual number of ED visits, whether the hospital is located inside or outside the central city of the metropolitan area, and by the presence or absence of an organized outpatient department, alcohol/chemical dependence inpatient unit, or both. The strata are as follows:

Stratum	Annual ED visits	Location within metropolitan area	Outpatient department or alcohol/chemical dependence inpatient unit
In the 21 DAWN metropolitan areas:			
0	>80,000	Not applicable	Not applicable
1	<80,000	Central city	Both
2	<80,000	Central city	One only
3	<80,000	Central city	Neither
4	<80,000	Outside Central city	Both
5	<80,000	Outside Central city	One only
6	<80,000	Outside Central city	Neither
In the National Panel:			
0	>80,000	Not applicable	Not applicable
7	<80,000	Not applicable	Both
8	<80,000	Not applicable	One only
9	<80,000	Not applicable	Neither

Note: Stratum "0" is defined for each of the 21 metropolitan areas and the National Panel cells. See *Drug Abuse Warning Network Sample Design and Estimation Procedures: Technical Report,* November 1997.

Statistically significant: When comparing 2 estimates, it is important to distinguish the differences that are likely to be real from those that are likely due to chance (sampling error and random fluctuation). A "statistically significant" difference between two estimates is one that is unlikely to have occurred by chance. Statistical significance is determined by comparing the p-value for the difference to a preset significance level. (See also **p-value** and **Significance level.**) In DAWN, a statistically significant difference has a p-value of less than 0.05, which means that there is less than a 5 percent probability that the difference could have occurred by chance.

Universe: The entire set of units for which generalizations are drawn. The universe for the DAWN ED sample is all non-Federal, short-stay, general medical and surgical hospitals in the coterminous U.S. with EDs open 24 hours a day, 7 days a week. (See also **Coterminous U.S.**).

Definitions of Terms for the DAWN Mortality Component

Cause of death: Cases are reportable to DAWN if the death investigation concludes that the death was either directly or indirectly caused by drug abuse. If a death was directly caused by drug abuse (e.g., a drug overdose), DAWN refers to the death as drug-induced. If drug abuse was a contributing factor in the death, but not the immediate or sole cause, then DAWN refers to the death as drug-related. It is important to note that DAWN data include both types of deaths. It is also important to note that a drug-induced death may involve more than a single drug. (See **Single-drug episode.**)

Certified death: Any case accepted and reviewed by a medical examiner or coroner, who uses information from the death investigation to complete the death certificate.

Consistent panel: DAWN does not impute missing data for jurisdictions that have not reported for all or part of a given year. Therefore, tables and charts showing trends in deaths over time are based on a consistent panel of reporting jurisdictions. A consistent panel includes those jurisdictions that have reported data for at least 10 months of each year reflected in the trend table/chart. The reason for a consistent panel is to ensure that apparent changes over time are not a result of gaps in reporting. Because participating jurisdictions may change from year to year, consistent panels used in published reports will also change from year to year. This means that trends published in one annual publication are not necessarily comparable to trends published in subsequent annual publications.

Coroner: Death investigation jurisdictions typically use either a medical examiner system or a coroner system. Unlike medical examiners, coroners need not be physicians; usually the only prerequisite for serving as a coroner is that the individual be more than 18 years of age and a resident of the county or district to be served. Coroners are typically elected rather than appointed. They may have jurisdiction over counties or districts within states. (See also **Jurisdiction** and **Medical examiner.**)

Drug combinations: Published tables from the DAWN mortality data refer to "drug combinations" rather than "drug concomitance" (the term used in the ED component). This term refers to multiple drug mentions for a single death, and tables show particular combinations of substances reported for deaths. Readers should note that DAWN cannot differentiate between drugs actually used in combination (simultaneously) and drugs used sequentially.

Drug-induced death: A death directly resulting from drug abuse or other substance abuse, such as drug overdoses or the interactive effects of drug combinations. When more than one drug is mentioned, it cannot be determined which or whether one drug was the sole and direct cause of the episode or death.

Drug-related death: A death in which the abuse of a drug is a contributing factor, but is not the sole cause of death. Such cases include drug abuse that exacerbates a pre-existing physiological condition; drug abuse in combination with an external physical event (e.g., a fall or automobile accident); or a medical disorder that was itself caused by drug abuse (e.g., hepatitis contracted through injection drug use). Drug-related deaths are classified into 2 types, confirmed and presumed. The drug-relatedness is "confirmed" if documentation in the decedent's file substantiates that conclusion. The drug-relatedness is "presumed" if the investigation suggests drug involvement, but the medical examiner/coroner has insufficient evidence to list drug abuse as a

contributing cause on the death certificate. Both confirmed and presumed deaths are included in the published mortality data tables.

Jurisdiction: DAWN uses the term "jurisdiction" to mean the geographic area for which a medical examiner/coroner's office is responsible. In many states, there is a 1:1 correspondence between jurisdictions and counties. In some states, there are multiple medical examiner/coroner offices within a given county, or there may be multiple counties covered by a "district" that includes one or more medical examiners/coroners. A few states are organized as a single statewide jurisdiction.

Understanding jurisdictions is important because this assists readers in interpreting aggregated data. Published DAWN mortality data are aggregated into metropolitan areas, which often comprise multiple jurisdictions. In some states, there are different death investigation procedures for different jurisdictions (most notably, some jurisdictions have medical examiner systems, while others have coroner systems). There are nearly always some differences in death investigation procedures across states (and notably, some metropolitan areas include jurisdictions in multiple states). Readers should be mindful of these variations when interpreting or comparing data.

Information on death investigation practices and an updated list of jurisdictions throughout the U.S. and Canada are available from the Centers for Disease Control and Prevention, Epidemiological Program Office at www.cdc.gov/epo/dphsi/mecisp/death_investigation.htm.

Manner of death: This variable is used to describe how the decedent died. It is applicable to both drug-induced and drug-related deaths. On the DAWN data collection form, manner of death is coded into the following categories:

- *Accidental/Unexpected* – Although the drug abuse was deliberate, the resulting death was unintended.
- *Suicide* – Death in which there is evidence that the decedent deliberately used drugs to bring about his or her demise.
- *Homicide* – Death in which the decedent's life was taken by another individual by means of drugs. These cases, which do not involve the intentional abuse of drugs by the decedent, are not currently included in published tabulations of DAWN mortality data.
- *Natural* – Death was due to natural causes such as a medical disorder or disease process, if drug abuse caused or worsened the decedent's condition.
- *Undetermined* – The manner of death cannot be determined from all available evidence.

In *Mortality Data From DAWN,* manner of death is collapsed into 3 categories: suicide, accidental/unexpected, and "all others." The "all others" category includes cases for which manner of death was recorded as natural, unknown, or undetermined, and cases for which manner of death was missing.

Medical Examiner (ME): Death investigation jurisdictions typically use either a medical examiner system or a coroner system. Most medical examiners are licensed physicians or forensic pathologists, and are generally appointed (rather than elected). They may have jurisdiction over a county, district, or entire state. (See also **Coroner** and **Jurisdiction.**)