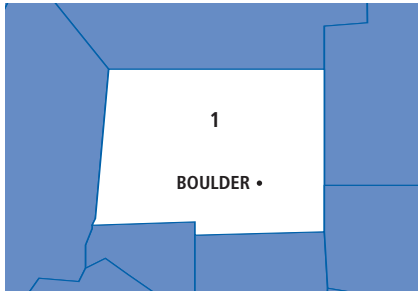


---

## ABBREVIATED PROFILES FOR AREAS WITH FEW CASES

# Boulder, CO

**ERRATA**



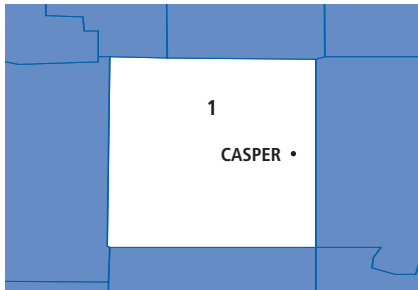
Metro area population, 2001 297,686  
 Percent of population covered by DAWN 100%

## 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	—	—	—	—	297,686
<b>Total, participating (1)</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>297,686</b>

\*Errors were identified in the data for 2001, so these have been removed.

# Casper, WY

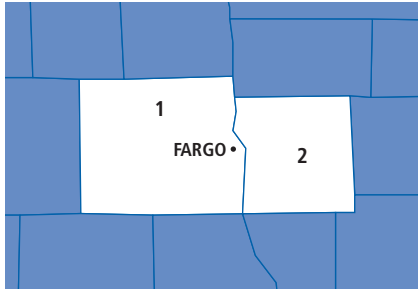


Metro area population, 2001 66,798  
 Percent of population covered by DAWN 100%

## 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
<b>Total, participating (1)</b>	<b>9</b>	<b>2</b>	<b>7</b>	<b>115</b>	<b>66,798</b>

# Fargo, ND

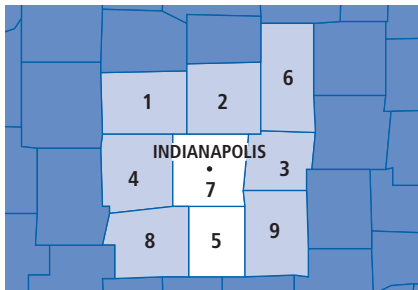


Metro area population, 2001 175,630  
 Percent of population covered by DAWN 100%

## Metro area overview: Deaths and population by county, 2001

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

# Indianapolis, IN



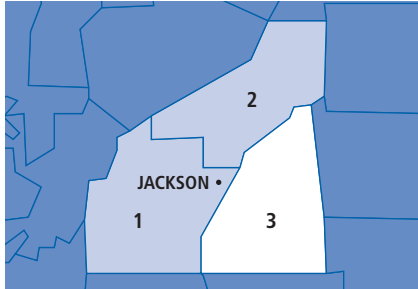
Metro area population, 2001 1,632,452  
 Percent of population covered by DAWN 60%

## Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse			Total deaths certified	Total population (2001)
	TOTAL	Drug-induced	Drug-related		
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
<b>Total, participating (2)</b>	<b>4</b>	<b>4</b>	<b>—</b>	<b>1,212</b>	<b>976,178</b>

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

## Jackson, MS



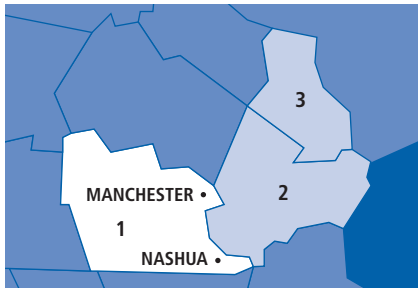
Metro area population, 2001 445,344  
 Percent of population covered by DAWN 27%

### Metro area overview: Deaths and population by county, 2001

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

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

## Manchester-Nashua, NH



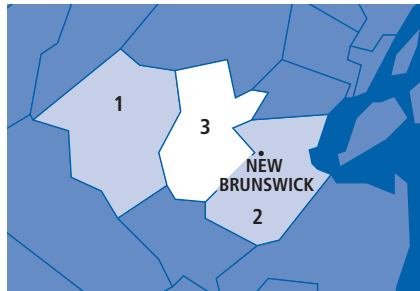
Metro area population, 2001 786,367  
 Percent of population covered by DAWN 49%

### Metro area overview: Deaths and population by county, 2001

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

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

# Middlesex-Somerset, NJ



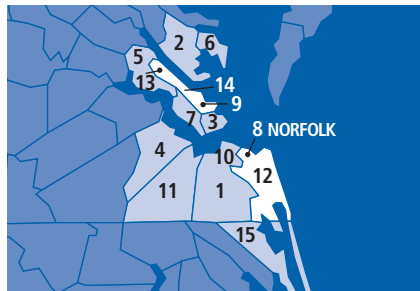
Metro area population, 2001 1,184,281  
 Percent of population covered by DAWN 25%

## Metro area overview: Deaths and population by county, 2001

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

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%

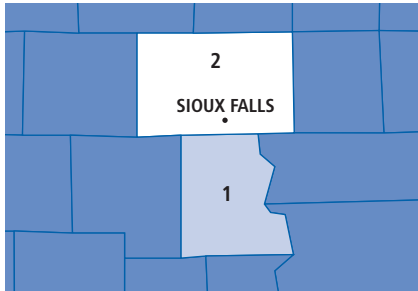
## Metro area overview: Deaths and population by county, 2001

Metro area component	Deaths involving drug abuse			Total deaths certified	Total population (2001)
	TOTAL	Drug-induced	Drug-related		
<b>Virginia jurisdictions</b>					
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
<b>North Carolina jurisdictions</b>					
15. Currituck County					19,018
<b>Total, participating (3)</b>	<b>24</b>	<b>24</b>	<b>—</b>	<b>582</b>	<b>759,572</b>

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
<b>Total, participating (1)</b>	<b>3</b>	<b>3</b>	<b>—</b>	<b>438</b>	<b>150,327</b>

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

---

## AREA SPOTLIGHTS

# Atlanta: Fulton County, GA



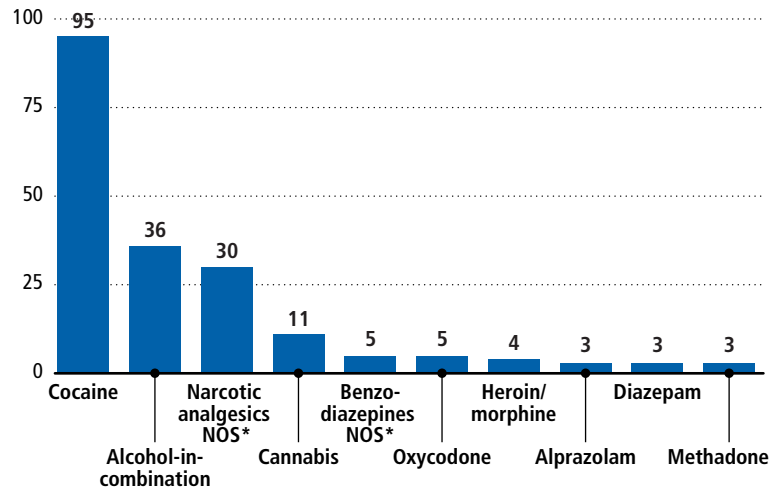
## Fulton County, GA: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	27%	28%	26%	—	—	24%	40%	25%
<b>Number of drugs involved</b>								
Single-drug	56%	55%	62%	50%	71%	67%	45%	59%
Multi-drug	44%	45%	38%	50%	29%	33%	55%	41%
<b>Cause of death</b>								
Drug-induced	69%	69%	68%	50%	43%	57%	75%	72%
Drug-related	31%	31%	32%	50%	57%	43%	25%	28%
<b>Manner of death</b>								
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 <sup>1</sup>	1	—	2	—	1	1
Hallucinogens <sup>2</sup>	—	1	—	—	—	—
Inhalants	—	—	4	1	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	17	20	20	24	2	1
<b>Total drug deaths</b>	<b>58</b>	<b>125</b>	<b>158</b>	<b>114</b>	<b>131</b>	<b>74</b>
<b>Total drug mentions</b>	<b>123</b>	<b>247</b>	<b>262</b>	<b>237</b>	<b>209</b>	<b>—</b>
<b>Total deaths certified</b>	<b>1,377</b>	<b>1,496</b>	<b>1,397</b>	<b>1,345</b>	<b>1,359</b>	<b>—</b>

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



# Baltimore: Baltimore City, MD



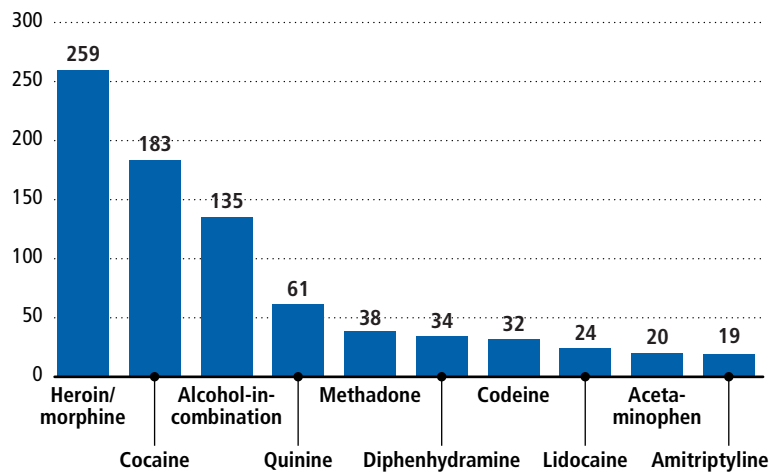
## Baltimore City, MD: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## Top 10 drugs mentioned



## Drug involvement in death by sex and age of decedent

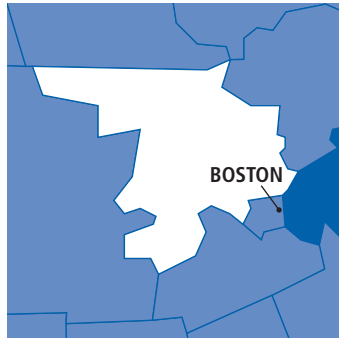
	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
<b>Alcohol involved</b>	41%	44%	31%	50%	22%	25%	50%	39%
<b>Number of drugs involved</b>								
Single-drug	13%	13%	13%	—	33%	19%	9%	16%
Multi-drug	87%	87%	87%	100%	67%	81%	91%	84%
<b>Cause of death</b>								
Drug-induced	93%	92%	94%	100%	100%	90%	95%	90%
Drug-related	7%	8%	6%	—	—	10%	5%	10%
<b>Manner of death</b>								
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 <sup>1</sup>	—	2	2	1	1	—
Hallucinogens <sup>2</sup>	—	—	—	1	1	1
Inhalants	—	—	2	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	353	393	305	226	214	—
<b>Total drug deaths</b>	<b>357</b>	<b>379</b>	<b>404</b>	<b>360</b>	<b>329</b>	<b>44</b>
<b>Total drug mentions</b>	<b>1,257</b>	<b>1,372</b>	<b>1,263</b>	<b>1,094</b>	<b>987</b>	<b>—</b>
<b>Total deaths certified</b>	<b>3,464</b>	<b>3,488</b>	<b>3,687</b>	<b>3,507</b>	<b>3,246</b>	<b>—</b>

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

# Boston: Middlesex County, MA



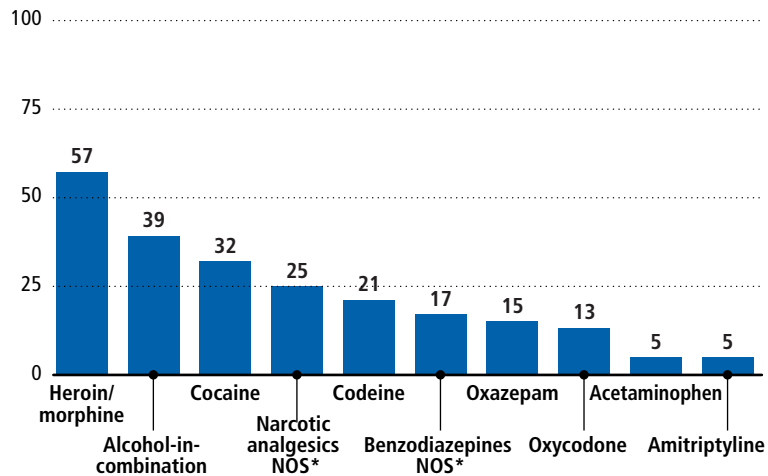
## Middlesex County, MA: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## Top 10 drugs mentioned



\* NOS = Not otherwise specified

## Drug involvement in death by sex and age of decedent

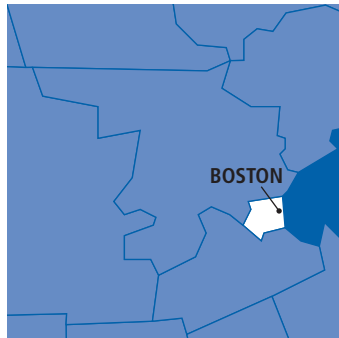
	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
<b>Alcohol involved</b>	32%	32%	33%	—	19%	45%	36%	26%
<b>Number of drugs involved</b>								
Single-drug	23%	28%	14%	—	44%	18%	15%	29%
Multi-drug	77%	72%	86%	100%	56%	82%	85%	71%
<b>Cause of death</b>								
Drug-induced	93%	90%	98%	100%	88%	100%	96%	85%
Drug-related	7%	10%	2%	—	13%	—	4%	15%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	—	1	2	2
Hallucinogens <sup>2</sup>	—	—	—	1	—	—
Inhalants	1	1	2	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	27	24	13	11	25	2
<b>Total drug deaths</b>	<b>81</b>	<b>120</b>	<b>104</b>	<b>104</b>	<b>121</b>	<b>28</b>
<b>Total drug mentions</b>	<b>190</b>	<b>285</b>	<b>184</b>	<b>197</b>	<b>303</b>	<b>—</b>
<b>Total deaths certified</b>	<b>610</b>	<b>637</b>	<b>646</b>	<b>580</b>	<b>642</b>	<b>—</b>

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

# Boston: Suffolk County, MA



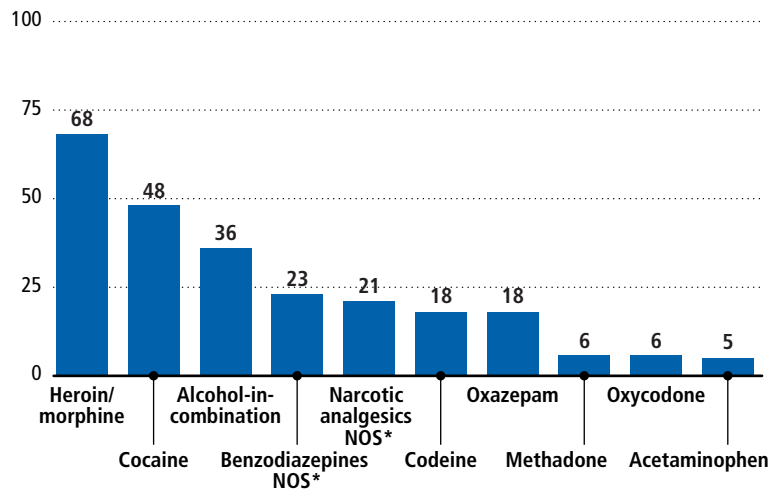
## Suffolk County, MA: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	31%	34%	17%	—	13%	40%	29%	34%
<b>Number of drugs involved</b>								
Single-drug	24%	25%	21%	—	20%	24%	21%	31%
Multi-drug	76%	75%	79%	—	80%	76%	79%	69%
<b>Cause of death</b>								
Drug-induced	91%	91%	88%	—	93%	96%	90%	86%
Drug-related	9%	9%	13%	—	7%	4%	10%	14%
<b>Manner of death</b>								
Suicide	4%	4%	4%	—	7%	4%	2%	7%
Accidental/unexpected	—	—	—	—	—	—	—	—
All others	96%	96%	96%	—	93%	96%	98%	93%

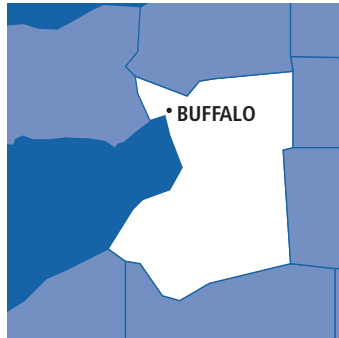
## Drug mentions by drug category

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 <sup>1</sup>	—	—	—	—	2	—
Hallucinogens <sup>2</sup>	—	—	—	—	—	—
Inhalants	2	2	2	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	17	17	2	7	4	2
<b>Total drug deaths</b>	<b>74</b>	<b>82</b>	<b>100</b>	<b>94</b>	<b>117</b>	<b>28</b>
<b>Total drug mentions</b>	<b>166</b>	<b>162</b>	<b>167</b>	<b>178</b>	<b>281</b>	<b>—</b>
<b>Total deaths certified</b>	<b>750</b>	<b>766</b>	<b>771</b>	<b>753</b>	<b>850</b>	<b>—</b>

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

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

# Buffalo: Erie County, NY



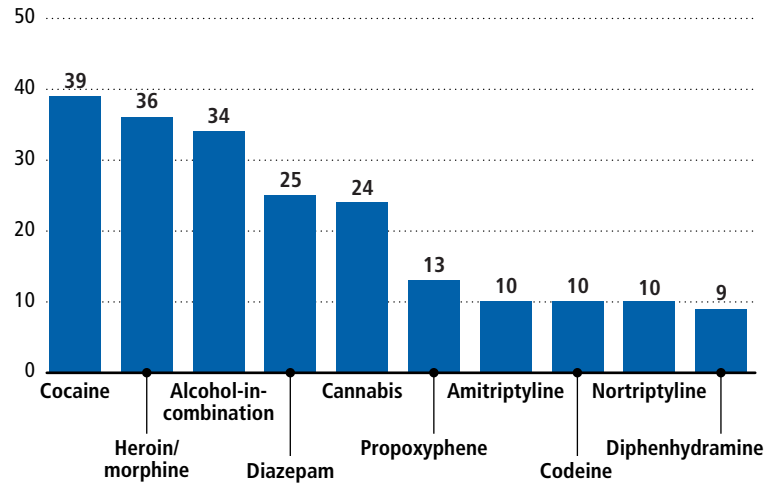
## Erie County, NY: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## Top 10 drugs mentioned



## Drug involvement in death by sex and age of decedent

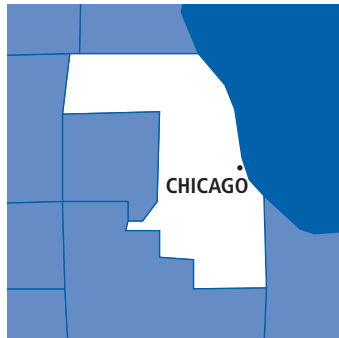
	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
<b>Alcohol involved</b>	30%	30%	29%	—	—	33%	39%	27%
<b>Number of drugs involved</b>								
Single-drug	18%	19%	14%	100%	50%	17%	22%	10%
Multi-drug	82%	81%	86%	—	50%	83%	78%	90%
<b>Cause of death</b>								
Drug-induced	47%	47%	50%	—	17%	50%	56%	46%
Drug-related	53%	53%	50%	100%	83%	50%	44%	54%
<b>Manner of death</b>								
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 <sup>1</sup>	—	1	1	2	1	1
Hallucinogens <sup>2</sup>	—	—	—	—	—	—
Inhalants	1	3	—	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	89	42	37	30	52	2
<b>Total drug deaths</b>	<b>128</b>	<b>82</b>	<b>100</b>	<b>83</b>	<b>114</b>	<b>20</b>
<b>Total drug mentions</b>	<b>357</b>	<b>224</b>	<b>246</b>	<b>229</b>	<b>339</b>	<b>—</b>
<b>Total deaths certified</b>	<b>972</b>	<b>938</b>	<b>987</b>	<b>943</b>	<b>1,017</b>	<b>—</b>

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

# Chicago: Cook County, IL



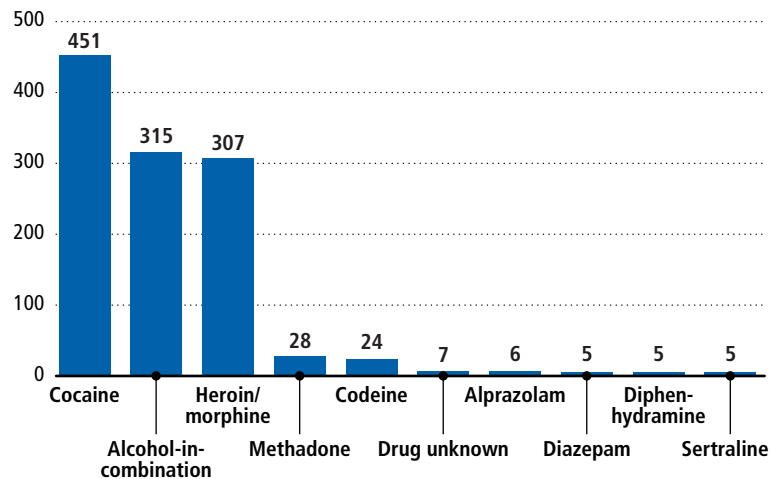
## Cook County, IL: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	46%	49%	38%	60%	47%	45%	47%	47%
<b>Number of drugs involved</b>								
Single-drug	38%	37%	40%	20%	32%	34%	39%	39%
Multi-drug	62%	63%	60%	80%	68%	66%	61%	61%
<b>Cause of death</b>								
Drug-induced	74%	75%	72%	40%	55%	66%	75%	85%
Drug-related	26%	25%	28%	60%	45%	34%	25%	15%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	—	3	4	1
Hallucinogens <sup>2</sup>	6	3	1	4	4	—
Inhalants	—	—	—	—	5	1
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	46	17	45	26	24	2
<b>Total drug deaths</b>	<b>613</b>	<b>672</b>	<b>751</b>	<b>703</b>	<b>679</b>	<b>255</b>
<b>Total drug mentions</b>	<b>1,214</b>	<b>1,297</b>	<b>1,417</b>	<b>1,351</b>	<b>1,208</b>	<b>—</b>
<b>Total deaths certified</b>	<b>5,262</b>	<b>5,439</b>	<b>5,481</b>	<b>5,301</b>	<b>5,161</b>	<b>—</b>

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

# Dallas: Dallas County, TX



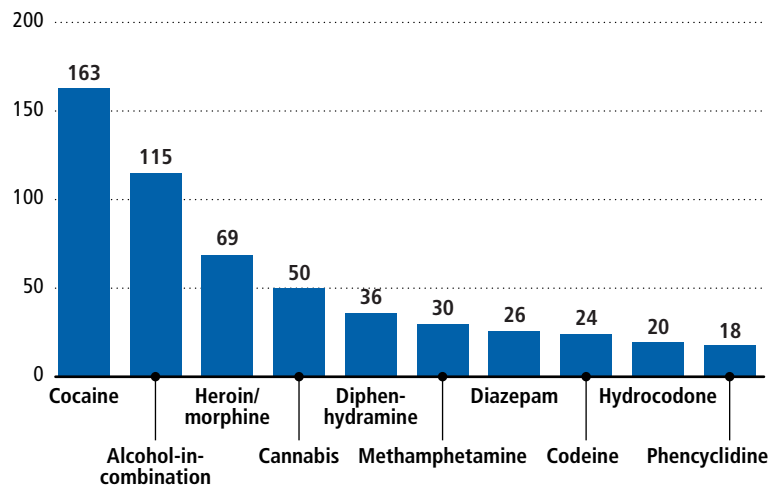
## Dallas County, TX: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	40%	43%	34%	—	41%	55%	36%	34%
<b>Number of drugs involved</b>								
Single-drug	21%	21%	22%	100%	14%	20%	22%	24%
Multi-drug	79%	79%	78%	—	86%	80%	78%	76%
<b>Cause of death</b>								
Drug-induced	66%	66%	66%	—	50%	50%	70%	83%
Drug-related	34%	34%	34%	100%	50%	50%	30%	17%
<b>Manner of death</b>								
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 <sup>1</sup>	4	2	1	6	10	1
Hallucinogens <sup>2</sup>	—	—	4	7	18	5
Inhalants	—	—	—	—	1	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	186	156	117	167	77	1
<b>Total drug deaths</b>	<b>329</b>	<b>316</b>	<b>273</b>	<b>271</b>	<b>285</b>	<b>60</b>
<b>Total drug mentions</b>	<b>885</b>	<b>760</b>	<b>728</b>	<b>828</b>	<b>705</b>	<b>—</b>
<b>Total deaths certified</b>	<b>2,988</b>	<b>3,079</b>	<b>2,997</b>	<b>3,283</b>	<b>2,562</b>	<b>—</b>

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

# Denver: Denver County, CO



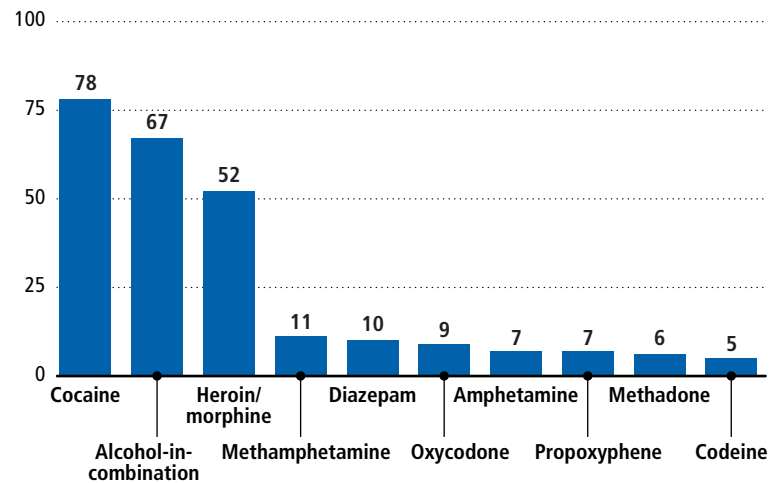
## Denver County, CO: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	46%	47%	38%	—	33%	64%	51%	34%
<b>Number of drugs involved</b>								
Single-drug	32%	34%	26%	—	42%	28%	23%	42%
Multi-drug	68%	66%	74%	—	58%	72%	77%	58%
<b>Cause of death</b>								
Drug-induced	69%	71%	59%	—	67%	60%	68%	74%
Drug-related	31%	29%	41%	—	33%	40%	32%	26%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	—	1	1	1
Hallucinogens <sup>2</sup>	—	—	—	1	—	—
Inhalants	—	1	—	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	4	11	12	23	12	3
<b>Total drug deaths</b>	<b>84</b>	<b>84</b>	<b>135</b>	<b>123</b>	<b>147</b>	<b>47</b>
<b>Total drug mentions</b>	<b>162</b>	<b>163</b>	<b>252</b>	<b>239</b>	<b>296</b>	<b>—</b>
<b>Total deaths certified</b>	<b>2,885</b>	<b>2,879</b>	<b>2,940</b>	<b>2,943</b>	<b>2,867</b>	<b>—</b>

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

# Detroit: Wayne County, MI



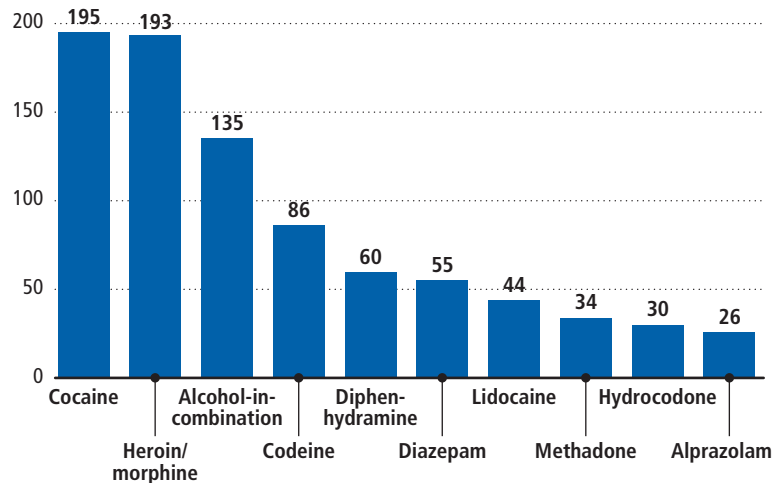
## Wayne County, MI: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	30%	32%	26%	—	27%	30%	32%	30%
<b>Number of drugs involved</b>								
Single-drug	21%	21%	22%	25%	36%	11%	18%	25%
Multi-drug	79%	79%	78%	75%	64%	89%	82%	75%
<b>Cause of death</b>								
Drug-induced	53%	57%	44%	—	73%	72%	60%	44%
Drug-related	47%	43%	56%	100%	27%	28%	40%	56%
<b>Manner of death</b>								
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 <sup>1</sup>	—	1	1	2	1	1
Hallucinogens <sup>2</sup>	—	1	—	—	—	—
Inhalants	3	—	1	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	304	294	363	299	267	11
<b>Total drug deaths</b>	<b>364</b>	<b>412</b>	<b>412</b>	<b>402</b>	<b>446</b>	<b>94</b>
<b>Total drug mentions</b>	<b>1,002</b>	<b>1,084</b>	<b>1,133</b>	<b>1,172</b>	<b>1,177</b>	<b>—</b>
<b>Total deaths certified</b>	<b>3,046</b>	<b>2,928</b>	<b>3,316</b>	<b>3,327</b>	<b>3,256</b>	<b>—</b>

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



# Kansas City: Jackson County, MO



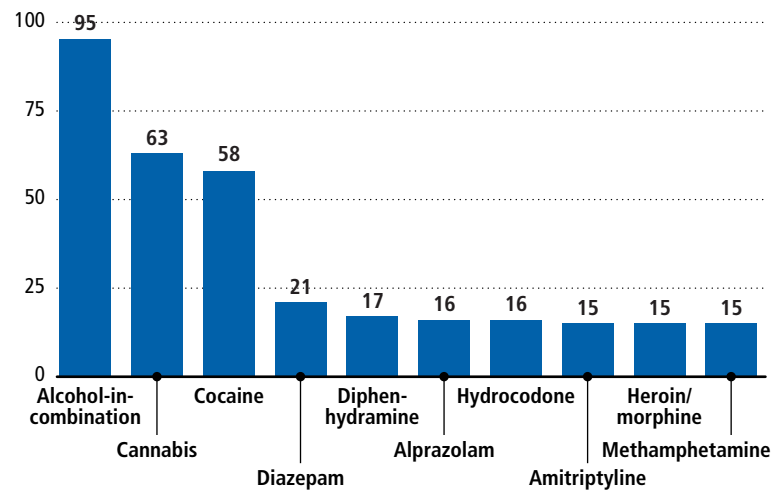
## Jackson County, MO: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	38%	41%	31%	38%	42%	46%	41%	31%
<b>Number of drugs involved</b>								
Single-drug	32%	31%	35%	25%	39%	18%	26%	40%
Multi-drug	68%	69%	65%	75%	61%	82%	74%	60%
<b>Cause of death</b>								
Drug-induced	58%	55%	65%	38%	23%	46%	64%	70%
Drug-related	42%	45%	35%	63%	77%	54%	36%	30%
<b>Manner of death</b>								
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 <sup>1</sup>	—	1	—	—	2	—
Hallucinogens <sup>2</sup>	2	—	6	7	10	5
Inhalants	1	—	—	1	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	49	68	106	82	98	10
<b>Total drug deaths</b>	<b>136</b>	<b>231</b>	<b>237</b>	<b>222</b>	<b>252</b>	<b>81</b>
<b>Total drug mentions</b>	<b>309</b>	<b>480</b>	<b>547</b>	<b>528</b>	<b>568</b>	<b>—</b>
<b>Total deaths certified</b>	<b>1,659</b>	<b>1,743</b>	<b>2,012</b>	<b>1,961</b>	<b>2,028</b>	<b>—</b>

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

# Long Island: Nassau County, NY



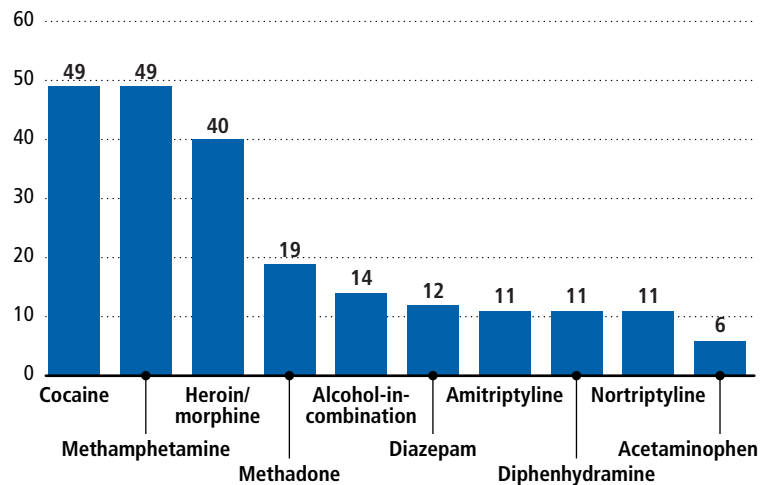
## Nassau County, NY: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	14%	14%	12%	—	—	5%	23%	13%
<b>Number of drugs involved</b>								
Single-drug	16%	16%	15%	—	33%	10%	9%	23%
Multi-drug	84%	84%	85%	100%	67%	90%	91%	78%
<b>Cause of death</b>								
Drug-induced	88%	87%	92%	100%	17%	95%	94%	90%
Drug-related	12%	13%	8%	—	83%	5%	6%	10%
<b>Manner of death</b>								
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 <sup>1</sup>	1	2	—	1	3	1
Hallucinogens <sup>2</sup>	—	1	8	10	3	1
Inhalants	2	3	1	1	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	38	35	28	44	43	4
<b>Total drug deaths</b>	<b>108</b>	<b>85</b>	<b>103</b>	<b>102</b>	<b>102</b>	<b>16</b>
<b>Total drug mentions</b>	<b>233</b>	<b>170</b>	<b>275</b>	<b>259</b>	<b>302</b>	<b>—</b>
<b>Total deaths certified</b>	<b>5,007</b>	<b>4,675</b>	<b>4,628</b>	<b>4,817</b>	<b>4,869</b>	<b>—</b>

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

# Long Island: Suffolk County, NY



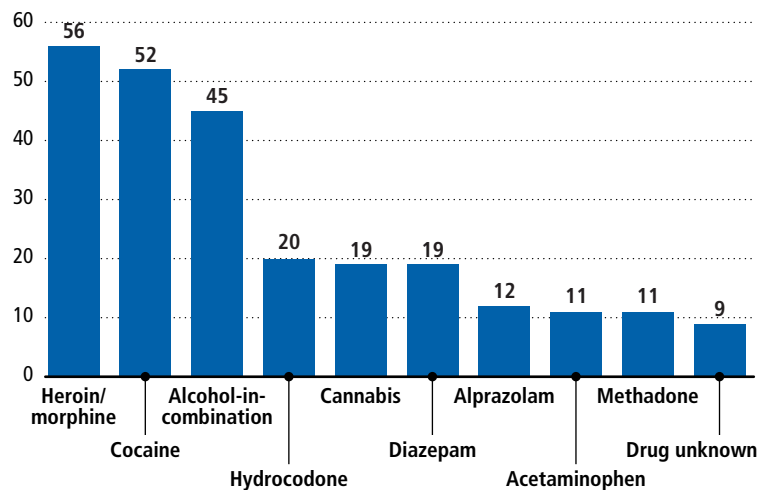
## Suffolk County, NY: Deaths and population, 2001

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	6-17	White
83	—	90
Female	18-24	Black
27	12	8
	25-34	Hispanic
	21	6
	35-44	All others
	47	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
<b>Alcohol involved</b>	41%	43%	30%	—	33%	57%	38%	35%
<b>Number of drugs involved</b>								
Single-drug	11%	11%	11%	—	8%	5%	15%	10%
Multi-drug	89%	89%	89%	—	92%	95%	85%	90%
<b>Cause of death</b>								
Drug-induced	92%	89%	100%	—	100%	95%	91%	87%
Drug-related	8%	11%	—	—	—	5%	9%	13%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	1	2	1	—
Hallucinogens <sup>2</sup>	—	1	1	—	2	1
Inhalants	1	2	—	2	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	32	73	74	64	40	2
<b>Total drug deaths</b>	<b>62</b>	<b>88</b>	<b>112</b>	<b>107</b>	<b>111</b>	<b>12</b>
<b>Total drug mentions</b>	<b>184</b>	<b>310</b>	<b>378</b>	<b>375</b>	<b>360</b>	<b>—</b>
<b>Total deaths certified</b>	<b>4,154</b>	<b>4,275</b>	<b>4,256</b>	<b>4,402</b>	<b>4,454</b>	<b>—</b>

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

# Milwaukee: Milwaukee County, WI



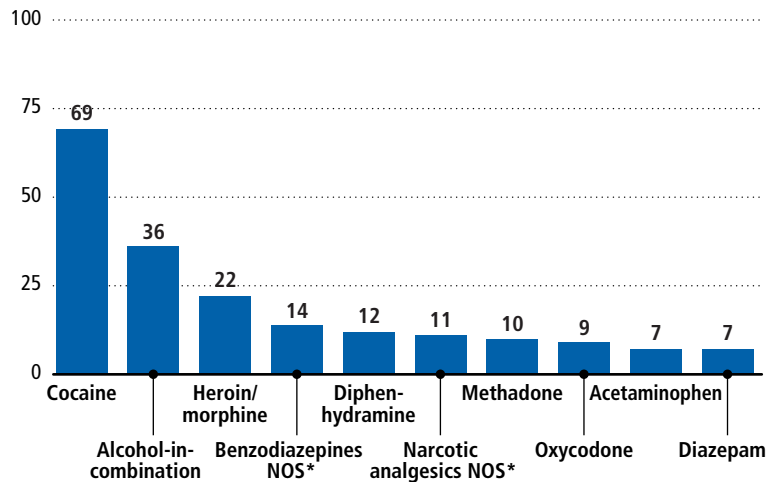
## Milwaukee County, WI: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## Top 10 drugs mentioned



\* NOS = Not otherwise specified

## Drug involvement in death by sex and age of decedent

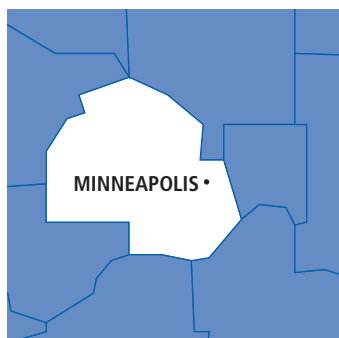
	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
<b>Alcohol involved</b>	29%	31%	27%	—	50%	13%	40%	23%
<b>Number of drugs involved</b>								
Single-drug	32%	28%	38%	—	—	33%	27%	40%
Multi-drug	68%	72%	62%	100%	100%	67%	73%	60%
<b>Cause of death</b>								
Drug-induced	85%	88%	78%	100%	50%	100%	79%	88%
Drug-related	15%	12%	22%	—	50%	—	21%	12%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	—	—	2	—
Hallucinogens <sup>2</sup>	—	—	—	—	—	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics <sup>3</sup>	—	—	—	60	45	6
Other analgesics	—	—	—	16	11	2
Benzodiazepines	—	—	—	28	27	3
Antidepressants	—	—	—	30	23	2
All other substances <sup>3</sup>	—	—	—	47	38	4
<b>Total drug deaths</b>	—	—	—	<b>110</b>	<b>123</b>	<b>39</b>
<b>Total drug mentions</b>	—	—	—	<b>318</b>	<b>278</b>	—
<b>Total deaths certified</b>	—	—	—	<b>1,936</b>	<b>1,851</b>	—

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

# Minneapolis-St. Paul: Hennepin County, MN



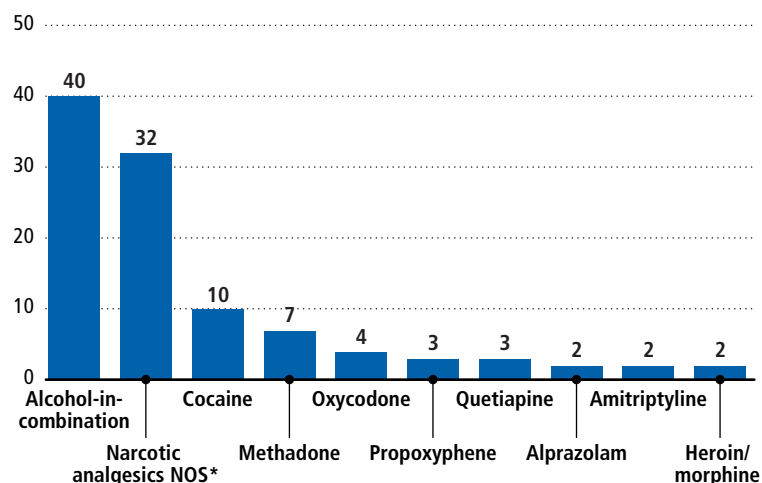
## Hennepin County, MN: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	53%	49%	63%	—	17%	33%	66%	55%
<b>Number of drugs involved</b>								
Single-drug	42%	46%	32%	—	83%	67%	31%	39%
Multi-drug	58%	54%	68%	100%	17%	33%	69%	61%
<b>Cause of death</b>								
Drug-induced	91%	91%	89%	100%	100%	100%	90%	87%
Drug-related	9%	9%	11%	—	—	—	10%	13%
<b>Manner of death</b>								
Suicide	28%	19%	53%	100%	33%	—	24%	35%
Accidental/unexpected	71%	79%	47%	—	67%	100%	76%	61%
All others	1%	2%	—	—	—	—	—	3%

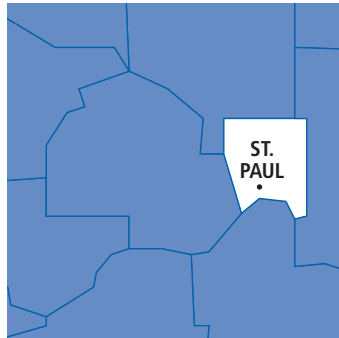
## Drug mentions by drug category

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 <sup>1</sup>	—	1	1	2	—	—
Hallucinogens <sup>2</sup>	—	—	—	—	1	—
Inhalants	1	—	—	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	15	12	4	11	2	—
<b>Total drug deaths</b>	<b>57</b>	<b>56</b>	<b>45</b>	<b>52</b>	<b>76</b>	<b>32</b>
<b>Total drug mentions</b>	<b>122</b>	<b>110</b>	<b>87</b>	<b>99</b>	<b>131</b>	<b>—</b>
<b>Total deaths certified</b>	<b>1,401</b>	<b>1,348</b>	<b>1,274</b>	<b>1,314</b>	<b>1,378</b>	<b>—</b>

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

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

# Minneapolis-St. Paul: Ramsey County, MN



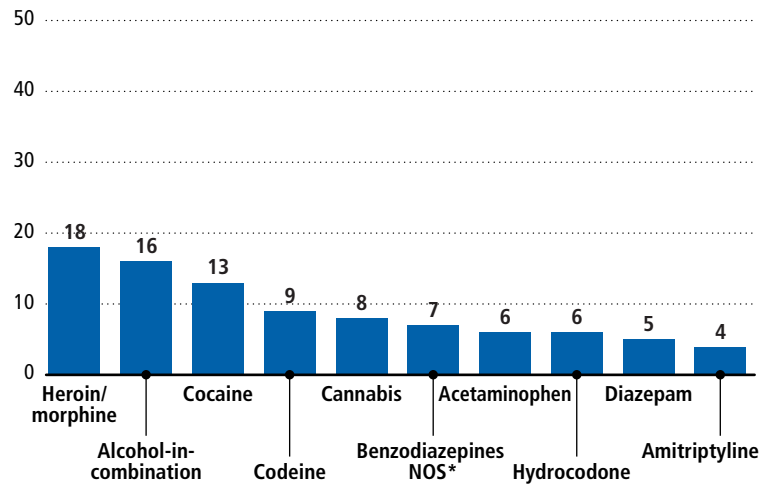
## Ramsey County, MN: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	34%	43%	18%	—	—	36%	42%	37%
<b>Number of drugs involved</b>								
Single-drug	15%	17%	12%	—	20%	18%	8%	16%
Multi-drug	85%	83%	88%	—	80%	82%	92%	84%
<b>Cause of death</b>								
Drug-induced	68%	53%	94%	—	60%	64%	58%	79%
Drug-related	32%	47%	6%	—	40%	36%	42%	21%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	1	2	—	—
Hallucinogens <sup>2</sup>	—	—	—	—	—	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	11	16	14	5	14	1
<b>Total drug deaths</b>	<b>29</b>	<b>39</b>	<b>37</b>	<b>36</b>	<b>47</b>	<b>7</b>
<b>Total drug mentions</b>	<b>76</b>	<b>103</b>	<b>113</b>	<b>87</b>	<b>133</b>	<b>—</b>
<b>Total deaths certified</b>	<b>1,276</b>	<b>1,302</b>	<b>1,253</b>	<b>1,344</b>	<b>1,214</b>	<b>—</b>

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

# New Orleans: Orleans Parish, LA



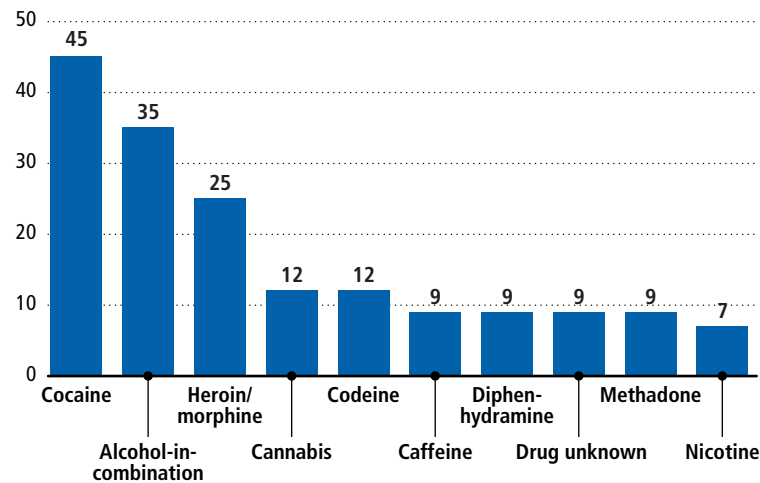
## Orleans Parish, LA: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## Top 10 drugs mentioned



## Drug involvement in death by sex and age of decedent

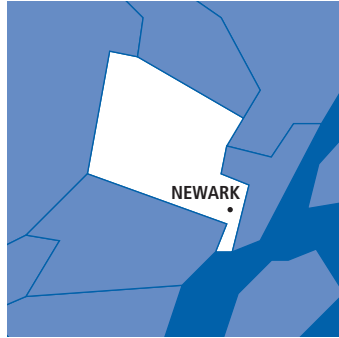
	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
<b>Alcohol involved</b>	42%	44%	25%	—	59%	39%	43%	32%
<b>Number of drugs involved</b>								
Single-drug	20%	17%	42%	—	18%	17%	19%	25%
Multi-drug	80%	83%	58%	—	82%	83%	81%	75%
<b>Cause of death</b>								
Drug-induced	70%	71%	67%	—	76%	78%	71%	61%
Drug-related	30%	29%	33%	—	24%	22%	29%	39%
<b>Manner of death</b>								
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 <sup>1</sup>	—	1	4	2	6	—
Hallucinogens <sup>2</sup>	—	—	1	—	—	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	15	12	37	25	62	—
<b>Total drug deaths</b>	<b>56</b>	<b>76</b>	<b>94</b>	<b>103</b>	<b>84</b>	<b>17</b>
<b>Total drug mentions</b>	<b>124</b>	<b>167</b>	<b>264</b>	<b>250</b>	<b>249</b>	<b>—</b>
<b>Total deaths certified</b>	<b>2,086</b>	<b>2,027</b>	<b>1,895</b>	<b>1,844</b>	<b>1,876</b>	<b>—</b>

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

# Newark: Essex County, NJ



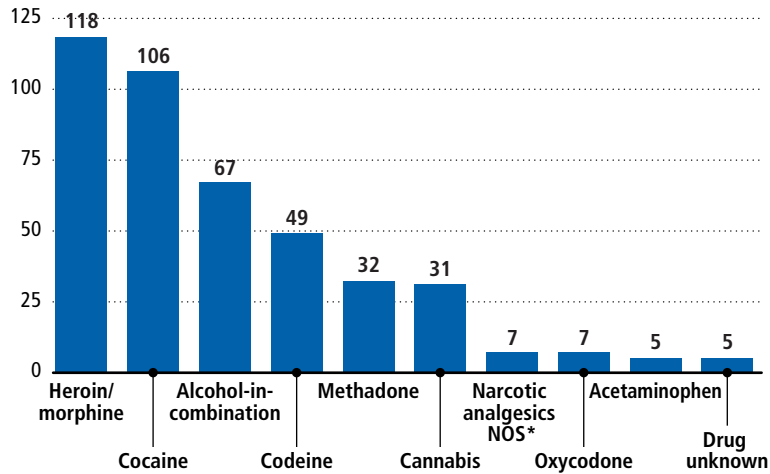
## Essex County, NJ: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	31%	36%	18%	—	24%	27%	35%	35%
<b>Number of drugs involved</b>								
Single-drug	28%	29%	25%	67%	36%	23%	23%	32%
Multi-drug	72%	71%	75%	33%	64%	77%	77%	68%
<b>Cause of death</b>								
Drug-induced	69%	63%	88%	33%	44%	61%	81%	76%
Drug-related	31%	37%	13%	67%	56%	39%	19%	24%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	—	1	2	—
Hallucinogens <sup>2</sup>	—	—	—	1	—	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	7	8	6	2	13	1
<b>Total drug deaths</b>	<b>145</b>	<b>127</b>	<b>144</b>	<b>158</b>	<b>215</b>	<b>60</b>
<b>Total drug mentions</b>	<b>326</b>	<b>244</b>	<b>296</b>	<b>315</b>	<b>469</b>	<b>—</b>
<b>Total deaths certified</b>	<b>2,446</b>	<b>2,738</b>	<b>2,620</b>	<b>2,487</b>	<b>2,441</b>	<b>—</b>

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



# Philadelphia: Camden County, NJ



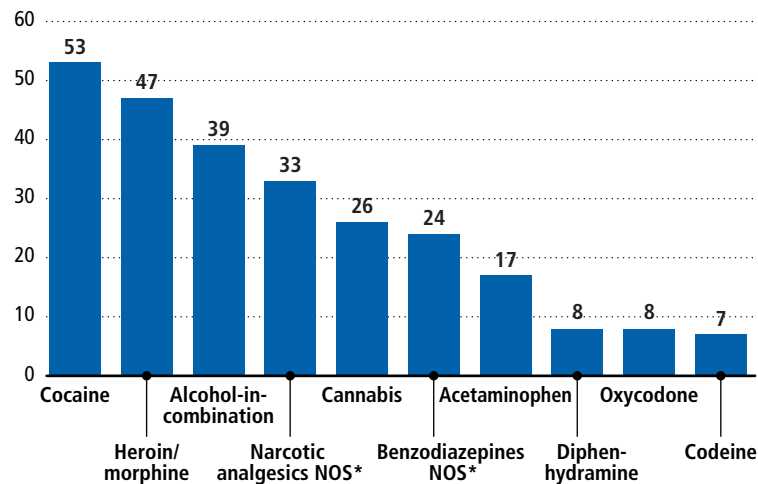
## Camden County, NJ: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	35%	40%	22%	—	30%	36%	44%	27%
<b>Number of drugs involved</b>								
Single-drug	13%	12%	17%	100%	25%	14%	8%	7%
Multi-drug	87%	88%	83%	—	75%	86%	92%	93%
<b>Cause of death</b>								
Drug-induced	77%	71%	89%	—	50%	64%	95%	87%
Drug-related	23%	29%	11%	100%	50%	36%	5%	13%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	1	—	—	—
Hallucinogens <sup>2</sup>	1	4	2	2	2	—
Inhalants	3	1	4	—	1	1
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	50	25	45	35	34	—
<b>Total drug deaths</b>	<b>127</b>	<b>98</b>	<b>108</b>	<b>117</b>	<b>113</b>	<b>15</b>
<b>Total drug mentions</b>	<b>375</b>	<b>262</b>	<b>305</b>	<b>357</b>	<b>358</b>	<b>—</b>
<b>Total deaths certified</b>	<b>1,642</b>	<b>1,446</b>	<b>1,397</b>	<b>1,497</b>	<b>1,374</b>	<b>—</b>

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

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

# Philadelphia: Philadelphia County, PA



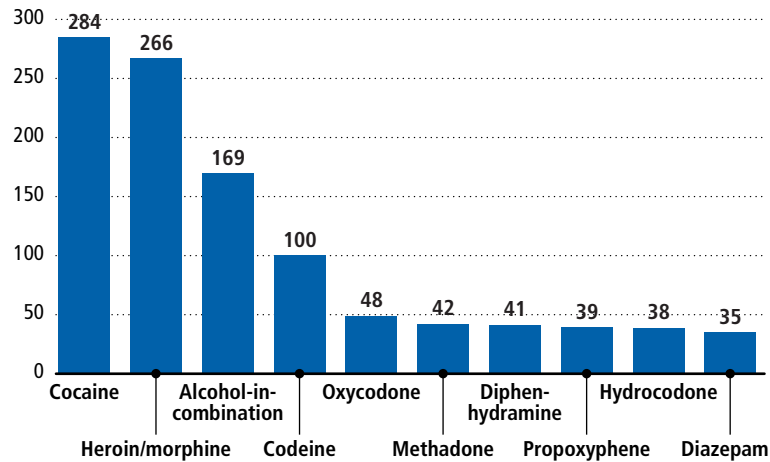
## Philadelphia County, PA: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## Top 10 drugs mentioned



## Drug involvement in death by sex and age of decedent

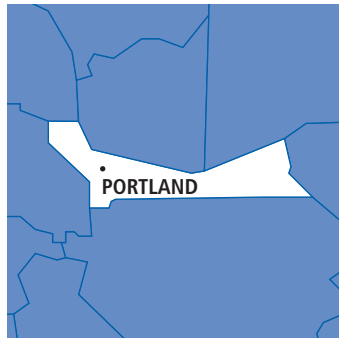
	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
<b>Alcohol involved</b>	34%	36%	31%	—	22%	33%	40%	34%
<b>Number of drugs involved</b>								
Single-drug	15%	14%	19%	—	12%	15%	14%	19%
Multi-drug	85%	86%	81%	100%	88%	85%	86%	81%
<b>Cause of death</b>								
Drug-induced	88%	86%	93%	100%	74%	84%	89%	94%
Drug-related	12%	14%	7%	—	26%	16%	11%	6%
<b>Manner of death</b>								
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 <sup>1</sup>	1	—	6	5	13	—
Hallucinogens <sup>2</sup>	25	24	22	25	30	4
Inhalants	2	—	1	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	198	212	203	234	229	—
<b>Total drug deaths</b>	<b>554</b>	<b>467</b>	<b>453</b>	<b>528</b>	<b>492</b>	<b>76</b>
<b>Total drug mentions</b>	<b>1,639</b>	<b>1,442</b>	<b>1,403</b>	<b>1,681</b>	<b>1,552</b>	<b>—</b>
<b>Total deaths certified</b>	<b>5,710</b>	<b>5,632</b>	<b>5,841</b>	<b>5,666</b>	<b>5,632</b>	<b>—</b>

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

# Portland: Multnomah County, OR



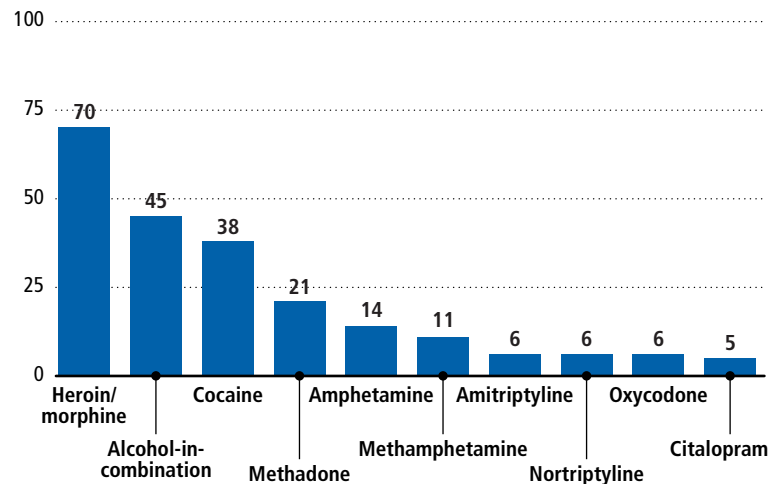
## Multnomah County, OR: Deaths and population, 2001

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	Age	Race/Ethnicity
Male	6-17	White
87	1	106
Female	18-24	Black
30	5	3
	25-34	Hispanic
	30	3
	35-44	All others
	45	5
	45-97	
	36	

## 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 <sup>1</sup>	—	—	—	1	—	—
Hallucinogens <sup>2</sup>	—	—	1	—	—	—
Inhalants	—	1	—	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	7	6	16	28	21	1
<b>Total drug deaths</b>	<b>127</b>	<b>129</b>	<b>162</b>	<b>119</b>	<b>117</b>	<b>26</b>
<b>Total drug mentions</b>	<b>245</b>	<b>248</b>	<b>323</b>	<b>242</b>	<b>264</b>	<b>—</b>
<b>Total deaths certified</b>	<b>931</b>	<b>862</b>	<b>872</b>	<b>839</b>	<b>845</b>	<b>—</b>

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

# St. Louis: St. Louis City, MO



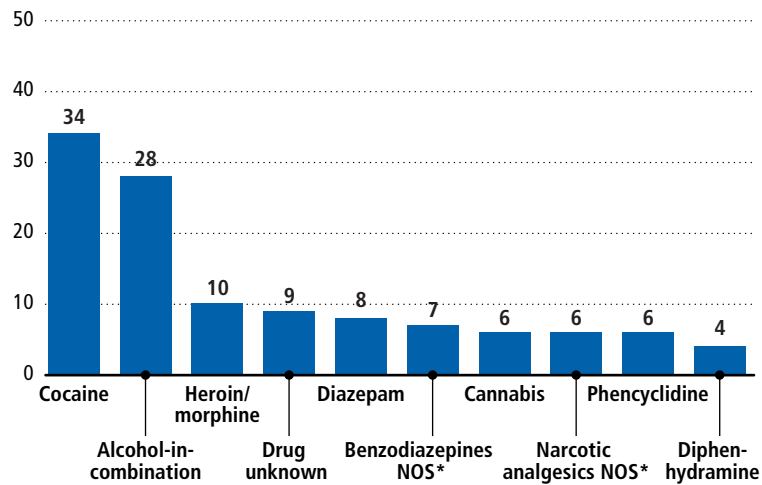
## St. Louis City, MO: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	42%	42%	40%	—	22%	36%	40%	54%
<b>Number of drugs involved</b>								
Single-drug	33%	33%	33%	—	44%	50%	40%	13%
Multi-drug	67%	67%	67%	—	56%	50%	60%	88%
<b>Cause of death</b>								
Drug-induced	61%	60%	67%	—	33%	50%	65%	75%
Drug-related	39%	40%	33%	—	67%	50%	35%	25%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	2	2	—	—
Hallucinogens <sup>2</sup>	—	1	—	2	6	4
Inhalants	—	1	—	3	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	9	13	22	21	25	2
<b>Total drug deaths</b>	<b>91</b>	<b>84</b>	<b>87</b>	<b>74</b>	<b>67</b>	<b>22</b>
<b>Total drug mentions</b>	<b>190</b>	<b>173</b>	<b>176</b>	<b>181</b>	<b>164</b>	<b>—</b>
<b>Total deaths certified</b>	<b>2,535</b>	<b>2,511</b>	<b>2,524</b>	<b>2,460</b>	<b>2,673</b>	<b>—</b>

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

# St. Louis: St. Louis County, MO



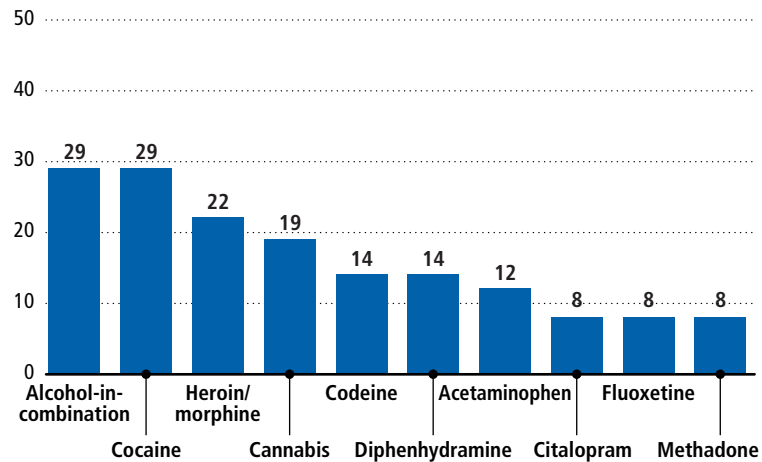
## St. Louis County, MO: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	23%	24%	19%	—	38%	26%	29%	14%
<b>Number of drugs involved</b>								
Single-drug	29%	38%	12%	67%	8%	26%	20%	41%
Multi-drug	71%	62%	88%	33%	92%	74%	80%	59%
<b>Cause of death</b>								
Drug-induced	65%	57%	79%	67%	46%	53%	71%	69%
Drug-related	35%	43%	21%	33%	54%	47%	29%	31%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	1	—	1	—
Hallucinogens <sup>2</sup>	—	—	1	1	—	—
Inhalants	3	1	3	1	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	20	19	46	61	56	8
<b>Total drug deaths</b>	<b>74</b>	<b>81</b>	<b>116</b>	<b>116</b>	<b>125</b>	<b>36</b>
<b>Total drug mentions</b>	<b>148</b>	<b>176</b>	<b>249</b>	<b>258</b>	<b>274</b>	<b>—</b>
<b>Total deaths certified</b>	<b>4,279</b>	<b>4,280</b>	<b>4,420</b>	<b>4,427</b>	<b>4,519</b>	<b>—</b>

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

# Salt Lake City: Salt Lake County, UT



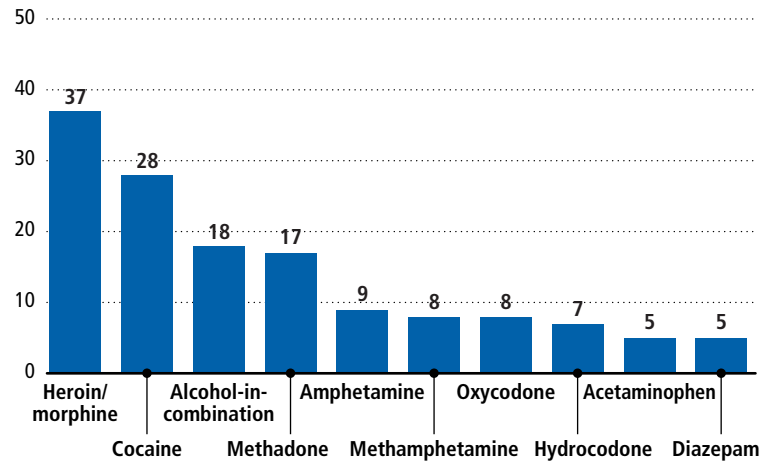
## Salt Lake County, UT: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	21%	26%	10%	—	—	5%	31%	26%
<b>Number of drugs involved</b>								
Single-drug	33%	36%	31%	100%	60%	42%	27%	26%
Multi-drug	67%	64%	69%	—	40%	58%	73%	74%
<b>Cause of death</b>								
Drug-induced	94%	94%	93%	100%	80%	100%	92%	94%
Drug-related	6%	6%	7%	—	20%	—	8%	6%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	1	2	—	—
Hallucinogens <sup>2</sup>	—	—	—	1	1	1
Inhalants	—	—	1	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	10	9	7	9	18	—
<b>Total drug deaths</b>	<b>95</b>	<b>112</b>	<b>138</b>	<b>117</b>	<b>85</b>	<b>28</b>
<b>Total drug mentions</b>	<b>204</b>	<b>248</b>	<b>285</b>	<b>254</b>	<b>176</b>	<b>—</b>
<b>Total deaths certified</b>	<b>717</b>	<b>695</b>	<b>731</b>	<b>688</b>	<b>792</b>	<b>—</b>

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

# San Francisco: San Francisco County, CA



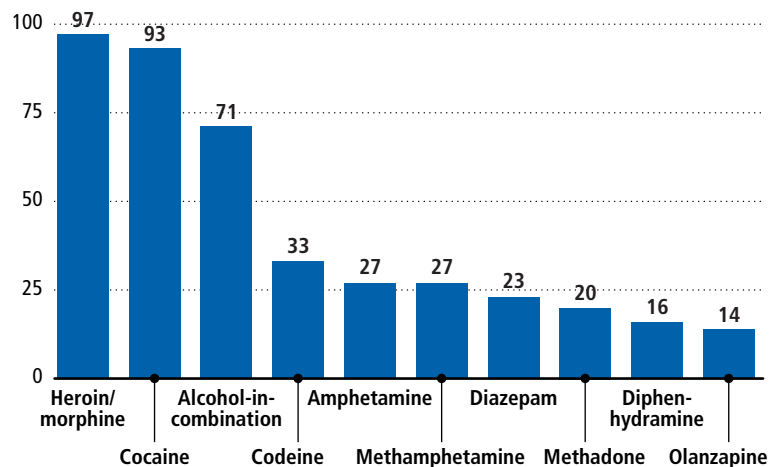
## San Francisco County, CA: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	34%	40%	17%	—	—	21%	54%	27%
<b>Number of drugs involved</b>								
Single-drug	18%	18%	17%	100%	33%	25%	13%	18%
Multi-drug	82%	82%	83%	—	67%	75%	87%	82%
<b>Cause of death</b>								
Drug-induced	82%	81%	87%	—	67%	68%	86%	85%
Drug-related	18%	19%	13%	100%	33%	32%	14%	15%
<b>Manner of death</b>								
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 <sup>1</sup>	4	1	5	6	5	—
Hallucinogens <sup>2</sup>	1	1	3	—	1	—
Inhalants	—	—	—	1	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	88	82	90	76	99	—
<b>Total drug deaths</b>	<b>227</b>	<b>253</b>	<b>287</b>	<b>217</b>	<b>206</b>	<b>37</b>
<b>Total drug mentions</b>	<b>650</b>	<b>759</b>	<b>877</b>	<b>685</b>	<b>612</b>	<b>—</b>
<b>Total deaths certified</b>	<b>1,645</b>	<b>1,636</b>	<b>1,539</b>	<b>1,375</b>	<b>1,340</b>	<b>—</b>

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

# Seattle: King County, WA



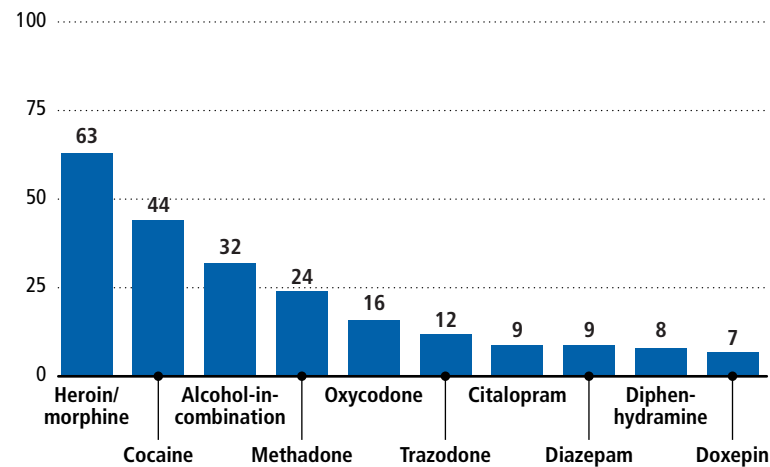
## King County, WA: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	22%	27%	12%	—	13%	23%	32%	15%
<b>Number of drugs involved</b>								
Single-drug	31%	32%	29%	100%	63%	37%	20%	29%
Multi-drug	69%	68%	71%	—	38%	63%	80%	71%
<b>Cause of death</b>								
Drug-induced	100%	100%	100%	100%	100%	100%	100%	100%
Drug-related	—	—	—	—	—	—	—	—
<b>Manner of death</b>								
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%

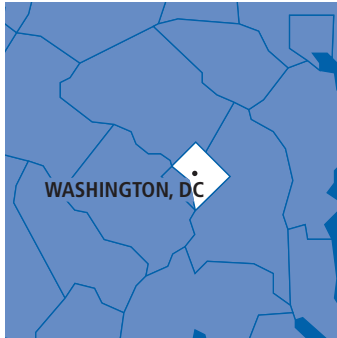
## Drug mentions by drug category

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 <sup>1</sup>	—	—	1	2	3	2
Hallucinogens <sup>2</sup>	—	—	—	—	—	—
Inhalants	—	—	—	1	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	34	50	36	34	50	2
<b>Total drug deaths</b>	<b>169</b>	<b>215</b>	<b>199</b>	<b>215</b>	<b>146</b>	<b>45</b>
<b>Total drug mentions</b>	<b>405</b>	<b>519</b>	<b>417</b>	<b>465</b>	<b>352</b>	<b>—</b>
<b>Total deaths certified</b>	<b>1,306</b>	<b>1,317</b>	<b>1,267</b>	<b>1,316</b>	<b>1,354</b>	<b>—</b>

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



# Washington, DC: District of Columbia



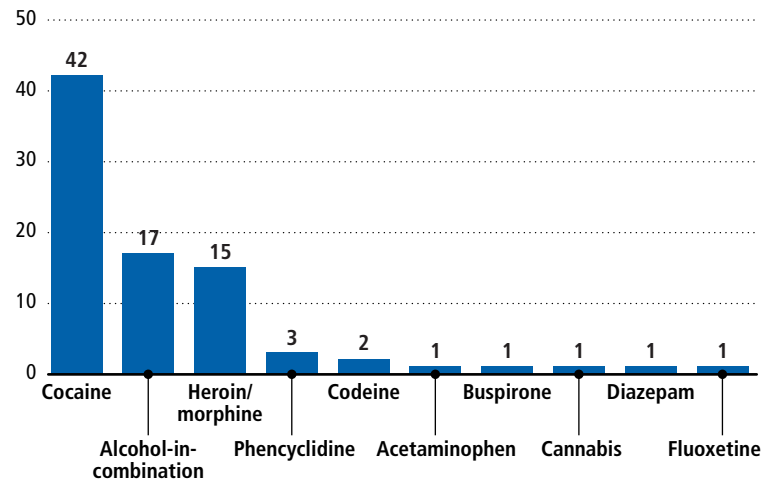
## District of Columbia: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## Top 10 drugs mentioned



## Drug involvement in death by sex and age of decedent

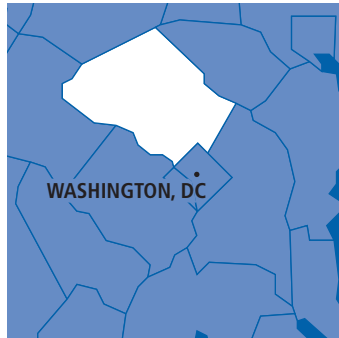
	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
<b>Alcohol involved</b>	32%	30%	42%	—	—	50%	40%	24%
<b>Number of drugs involved</b>								
Single-drug	45%	45%	42%	—	—	50%	36%	56%
Multi-drug	55%	55%	58%	—	100%	50%	64%	44%
<b>Cause of death</b>								
Drug-induced	85%	80%	100%	—	—	50%	84%	92%
Drug-related	15%	20%	—	—	100%	50%	16%	8%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	—	—	—	—
Hallucinogens <sup>2</sup>	1	—	2	1	3	1
Inhalants	—	—	—	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	7	30	18	10	1	—
<b>Total drug deaths</b>	<b>79</b>	<b>145</b>	<b>121</b>	<b>100</b>	<b>53</b>	<b>24</b>
<b>Total drug mentions</b>	<b>136</b>	<b>243</b>	<b>202</b>	<b>166</b>	<b>88</b>	<b>—</b>
<b>Total deaths certified</b>	<b>1,414</b>	<b>1,607</b>	<b>1,763</b>	<b>1,751</b>	<b>1,582</b>	<b>—</b>

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

# Washington, DC: Montgomery County, MD



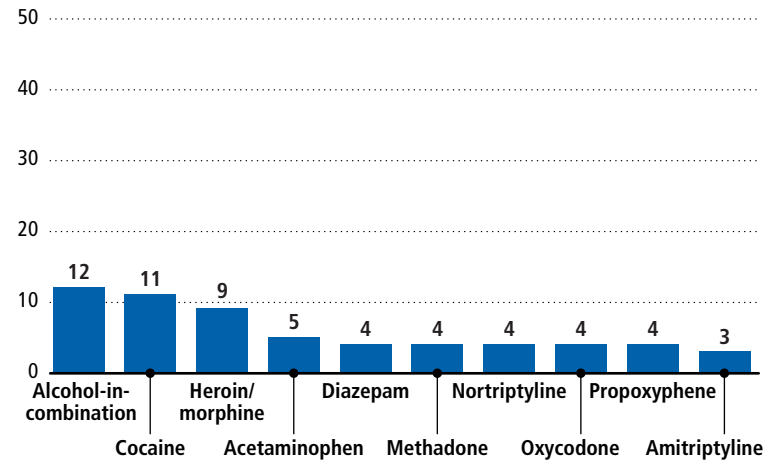
## Montgomery County, MD: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## Top 10 drugs mentioned



## Drug involvement in death by sex and age of decedent

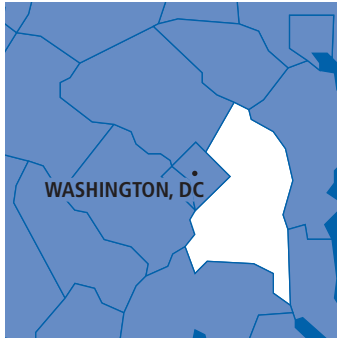
	TOTAL	Sex		Age				
		Male	Female	6-17	18-24	25-34	35-44	45-97
<b>Alcohol involved</b>	38%	42%	25%	—	20%	80%	20%	42%
<b>Number of drugs involved</b>								
Single-drug	16%	17%	13%	—	20%	20%	20%	8%
Multi-drug	84%	83%	88%	—	80%	80%	80%	92%
<b>Cause of death</b>								
Drug-induced	84%	79%	100%	—	100%	60%	100%	75%
Drug-related	16%	21%	—	—	—	40%	—	25%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	—	—	—	—
Hallucinogens <sup>2</sup>	—	—	—	1	—	—
Inhalants	—	—	—	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	32	12	27	21	23	—
<b>Total drug deaths</b>	<b>32</b>	<b>18</b>	<b>26</b>	<b>34</b>	<b>32</b>	<b>5</b>
<b>Total drug mentions</b>	<b>118</b>	<b>57</b>	<b>95</b>	<b>101</b>	<b>106</b>	<b>—</b>
<b>Total deaths certified</b>	<b>524</b>	<b>473</b>	<b>500</b>	<b>434</b>	<b>400</b>	<b>—</b>

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

# Washington, DC: Prince George's County, MD



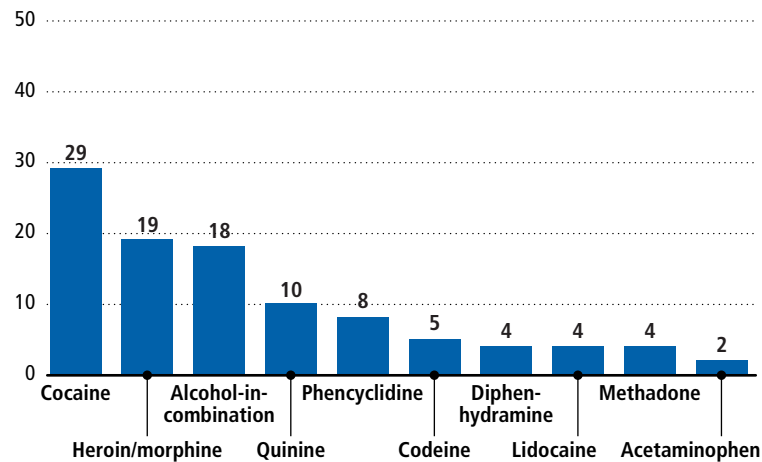
## Prince George's County, MD: Deaths and population, 2001

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

## Drug abuse deaths by sex, age and race/ethnicity

Sex	Age	Race/Ethnicity
Male	6-17	White
Female	18-24	Black
	25-34	Hispanic
	35-44	All others
	45-97	

## 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
<b>Alcohol involved</b>	32%	34%	14%	—	29%	63%	24%	29%
<b>Number of drugs involved</b>								
Single-drug	28%	30%	14%	—	43%	25%	24%	29%
Multi-drug	72%	70%	86%	—	57%	75%	76%	71%
<b>Cause of death</b>								
Drug-induced	68%	66%	86%	—	29%	50%	72%	88%
Drug-related	32%	34%	14%	—	71%	50%	28%	12%
<b>Manner of death</b>								
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 <sup>1</sup>	—	—	—	1	1	—
Hallucinogens <sup>2</sup>	2	3	2	7	8	4
Inhalants	—	—	—	—	—	—
Narcotic analgesics <sup>3</sup>	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 <sup>3</sup>	45	47	31	28	27	1
<b>Total drug deaths</b>	<b>54</b>	<b>59</b>	<b>42</b>	<b>54</b>	<b>57</b>	<b>16</b>
<b>Total drug mentions</b>	<b>170</b>	<b>178</b>	<b>119</b>	<b>147</b>	<b>130</b>	<b>—</b>
<b>Total deaths certified</b>	<b>982</b>	<b>1,231</b>	<b>1,265</b>	<b>890</b>	<b>1,033</b>	<b>—</b>

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



---

**APPENDIX A: DAWN MEDICAL EXAMINER REPORT FORM**

XXXXXXXX

SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION

**DRUG ABUSE WARNING NETWORK (DAWN)  
MEDICAL EXAMINER REPORT**

(Sample Form Only)

(Sample Form Only)

1. PROVIDER NUMBER

3. DATE OF DEATH

Month	Day	Year
<input type="text"/>	<input type="text"/>	<input type="text"/>

2. CROSS REFERENCE (Facility Use Only)

**DRUG/SUBSTANCE INFORMATION**

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

**INFORMATION ON DECEASED**

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

5. SEX  
1  Male  
2  Female

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

SAMHSA USE ONLY					
1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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

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

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					

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

14. LAB TEST USED TO IDENTIFY DRUG

DRUG #	FINDINGS (List test methods, specimen, and findings for each drug listed)
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

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) \_\_\_\_\_

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

---

## 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](http://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 methylenedioxyamphetamine (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.<sup>1</sup> 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.

<sup>1</sup> 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*, race/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.”
- *Streetbuy*– 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
<b>In the 21 DAWN metropolitan areas:</b>			
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
<b>In the National Panel:</b>			
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](http://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**.)