

INJURY MORTALITY AMONG ARIZONA RESIDENTS



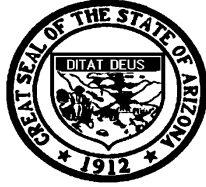
DRUG-RELATED DEATHS

ARIZONA,
1994-2004

Public Health Services
Bureau of Public Health Statistics
Health Status and Vital Statistics Section



~ Leadership for a Healthy Arizona ~



Janet Napolitano, Governor
State of Arizona

Susan Gerard, Director
Arizona Department of Health Services

HEALTH STATUS AND VITAL STATISTICS SECTION
BUREAU OF PUBLIC HEALTH STATISTICS
ARIZONA DEPARTMENT OF HEALTH SERVICES
150 N. 18th Avenue, Suite 550
Phoenix, Arizona 85007-3248
Phone: 602/542-7333; FAX: 602/542-2940
www.azdhs.gov/plan

This publication can be made available in alternative format.
Please contact the Bureau of Public Health Statistics
at 602/542-7333 (voice) or call 1-800-367-8939 (TDD).

The Arizona Department of Health Services is
an Equal Employment Opportunity Agency.

*Permission to quote from or reproduce materials from this
publication is granted when due acknowledgment is made.*

DRUG-RELATED DEATHS ARIZONA, 1994-2004

BY

CHRISTOPHER K. MRELA, PH.D., *ASSISTANT REGISTRAR OF VITAL STATISTICS*
CLARE TORRES, *SENIOR HEALTH DATA ANALYST*

January 2006

Acknowledgment

Grateful acknowledgement is made to Richard S. Porter for reviewing the typescript.

DRUG-RELATED DEATHS, ARIZONA, 1994-2004

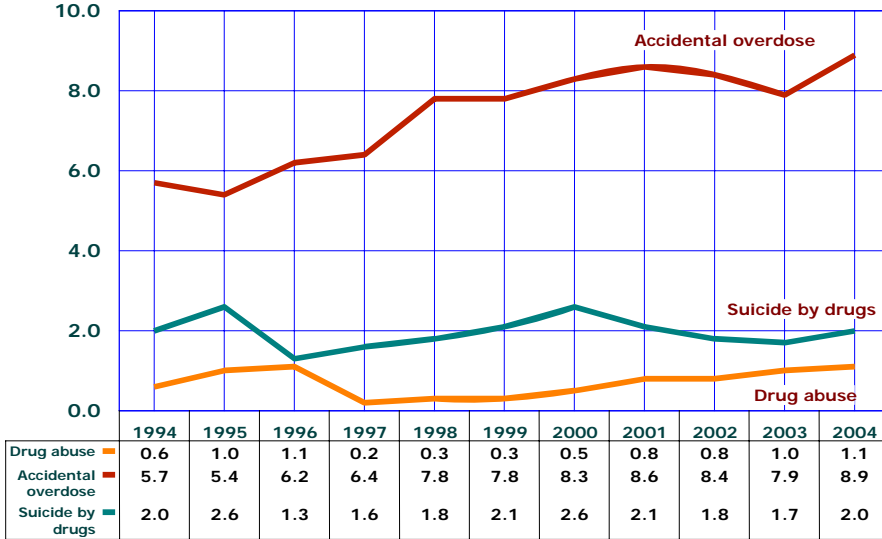
TABLE OF CONTENTS

Key Findings/Figures	1-5
Data Tables	6-20
8-1 Drug-related deaths by category and specific diagnosis, Arizona residents, 2004.....	6
8-2 Drug-related mortality by category and year, Arizona residents, 1994-2004.....	7
8-3 Drug-related mortality rates by category and year, Arizona residents, 1994-2004	8
8-4 Drug-related deaths by race/ethnic group and year, Arizona residents, 1994-2004.....	9
8-5 Drug-related mortality by race/ethnic group, age group and year, Arizona residents, 1994-2004.....	10
8-6 Drug-related mortality in urban and rural areas by year, Arizona residents, 1994-2004.....	12
8-7 Drug-related mortality by gender and year, Arizona residents, 1994-2004.....	13
8-8 Drug-related deaths by county of residence and year, Arizona, 1994-2004	14
8-9 Drug-related deaths by 5-year age groups and year, Arizona residents, 1994-2004.....	18
8-10 Selected substances involved in unintentional or undetermined drug poisoning deaths, Arizona, 2004.....	19
8-11 Drug-related deaths based on underlying cause and any mention of drug poisoning on the death certificates of Arizona residents, 2004	20
TECHNICAL NOTES	21
ICD-10 codes used to identify drug-related deaths	22

DRUG-RELATED DEATHS, ARIZONA, 1994-2004

KEY FINDINGS

Figure 8-1
Drug-Related Death Rates* by Mortality Category and Year, Arizona, 1994-2004



* Number of deaths per 100,000 population.

Note: Drug-related mortality from 2000 to present is classified according to the Tenth Revision of the Classification of Diseases (ICD-10). The drug-related mortality for 1994-1999 is classified by ICD-9. The rates for 2000-2001 are from the WISQARS site at http://webappa.cdc.gov/sasweb/nicpc/mortrate_10_sy.html.

Causes of death attributable to drug-related mortality include not only deaths from dependent and nondependent use of drugs (legal or illegal), but also poisoning by and adverse effects of medically prescribed and other drugs. The category of "drug-related deaths" excludes accidents, homicides and other causes indirectly related to drug use. Also excluded are newborn deaths due to mother's drug use.

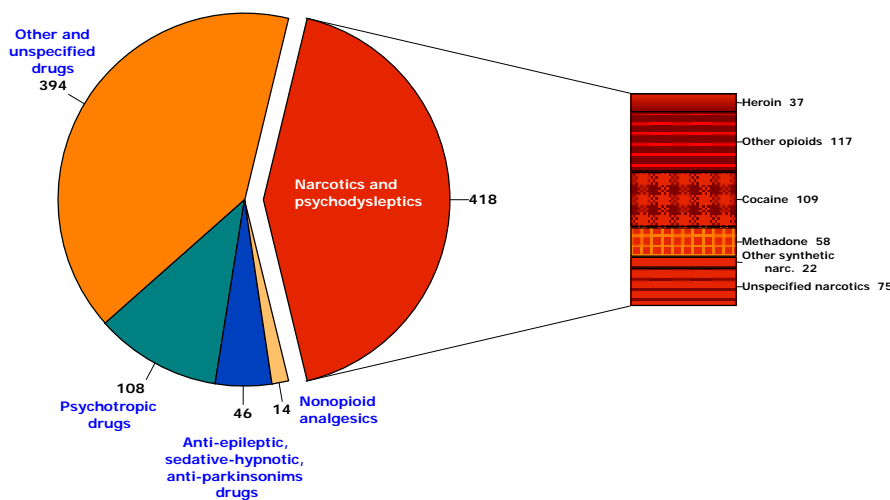
This report provides data on poisoning by misuse of, abuse of, or dependence on drugs, medications and biological substances other than alcohol.

Accidental overdoses of drugs, followed by intentional self-poisoning (suicide) and drug abuse are the three major categories of drug-related mortality (Figure 8-1). In 2004, 747 Arizonans died from drug poisoning in various circumstances (Table 1), 2.1 times as many as in 1994 (Table 2).

Effective with data for 2000, causes of drug-related death are classified by the Tenth Revision of the International Classification of Diseases (ICD-10), replacing the Ninth Revision (ICD-9) used in 1979-1999. In addition, beginning with the 2000 data year, cause-of-death data presented in this publication were coded by the National Center for Health Statistics using computerized procedures for coding of medical information. Both the conversion to ICD-10 and computerized coding contributed to at least some the breaks in comparability over time of cause of death statistics for accidental poisoning by drugs and intentional self-poisoning by drugs (see *Technical Notes* for more detail).

Figure 8-2
Selected Substances Involved in Unintentional or Undetermined Drug Poisoning Deaths, Arizona Residents, 2004

N = 980 mentions of ICD-10 T-codes on 629 death records



In 2004, 629 deaths of Arizona residents were attributed to mental and behavioral disorders due psychoactive substance use, accidental overdose of drugs or drug poisoning of undetermined intent (Table 8-2). Narcotics and psychodysleptics were mentioned 418 times on 337 death records (53.6 percent of the 629 deaths; Figure 8-2, Table 8-10). The specific narcotic substances associated most frequently with poisoning deaths were cocaine (109), methadone (58) and heroin (37). However, non-specific categories such as "other opioids", "other synthetic narcotics", and "other and unspecified narcotics" accounted for the absolute majority (51.2 percent) of the 418 mentions of ICD-10 T-codes for narcotics.

Note: more than one substance can be mentioned on a death certificate. The sum of all identified ICD-10 T-codes for substances (980) is greater than the combined number (629) of fatal overdoses or drug poisonings of undetermined intent (see Table 8-10).

DRUG-RELATED DEATHS, ARIZONA, 1994-2004

KEY FINDINGS

Figure 8-3
Age-Adjusted Mortality Rates for Drug-Induced Deaths by Gender and Race/Ethnic Group, Arizona, 2004

In 2004, American Indian male residents of Arizona had the highest age-adjusted rate of drug-related deaths, (23.0 per 100,000; **Figure 8-3**) followed by Blacks and White non-Hispanics. Among females, the rate for drug-induced deaths for White non-Hispanics was the highest, followed by the death rate of Black or African American females. There were no drug related deaths among Asian female residents of the State.

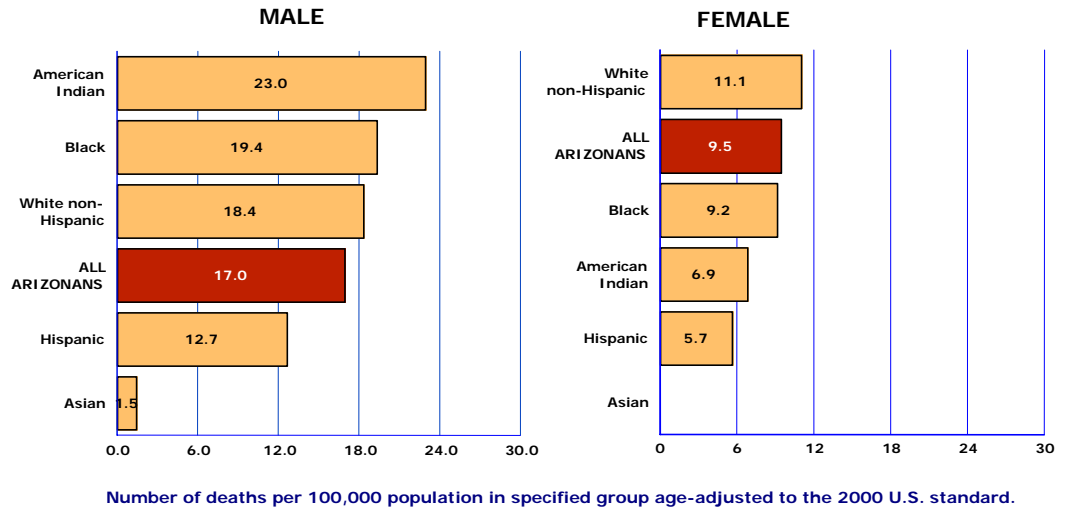
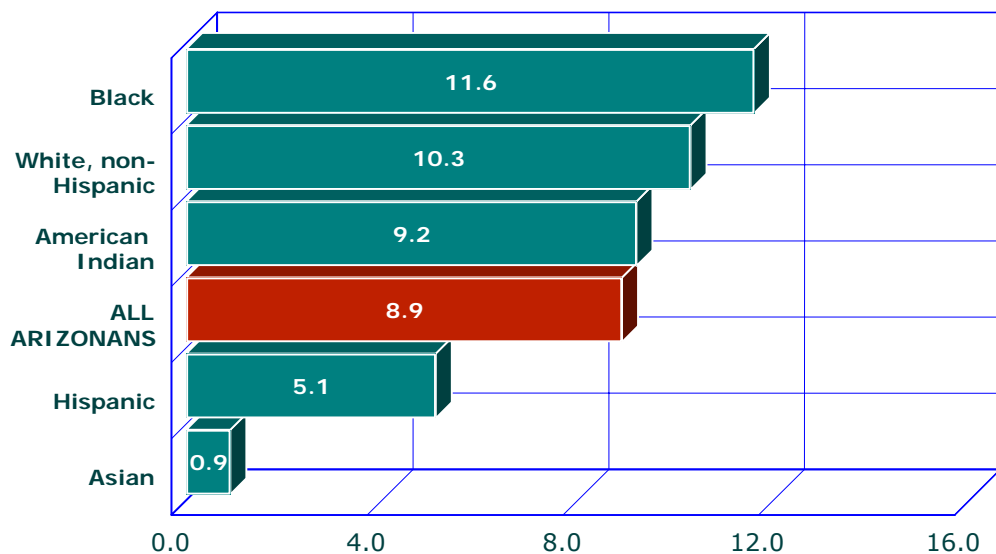


Figure 8-4
Mortality Rates* for Accidental Drug Overdoses by Race/Ethnic Group, Arizona, 2004

In 2004, Black, White non-Hispanic and American Indian residents of the State had the highest mortality rates for accidental overdoses of drugs (**Figure 8-4**).

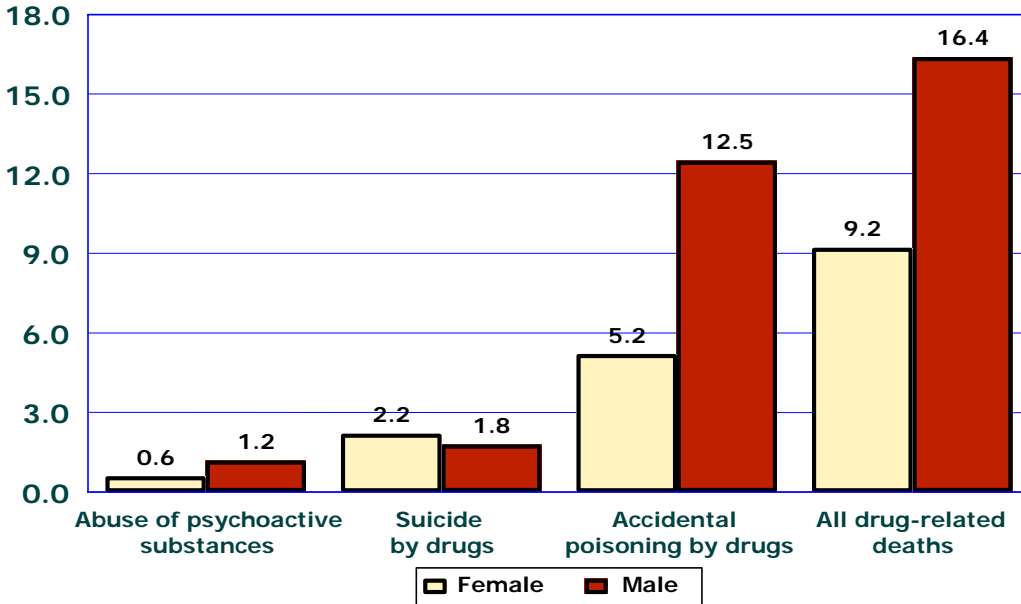


* Number of drug-related deaths per 100,000 persons in specified group ((unadjusted for differences in the age composition)

NOTE: Psychoactive substances include cannabis, cocaine, codeine, heroine, LSD, mescaline, methadone, morphine, opium.

KEY FINDINGS

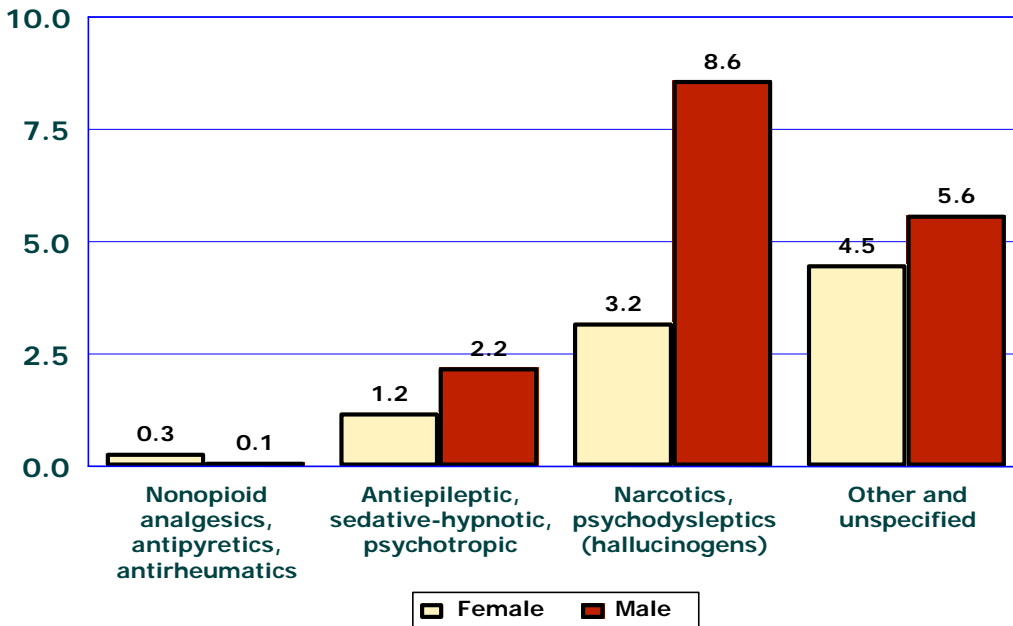
Figure 8-5
Drug-Related Death Rates* by Mortality Category
and Gender, Arizona, 2004



The 2004 rate of drug-related deaths among males (16.4/100,000) was 1.8 times the rate for females (9.2/100,000; **Figure 8-5**). The death rate for accidental overdoses among males (12.5/100,000) was 2.4 times the female rate of 5.2/100,000. In contrast, the female rate for suicide by drugs exceeded the respective rate among males by 22 percent.

* Number of drug-related deaths per 100,000 persons in specified group

Figure 8-6
Drug-Related Death Rates* by Type of Drug and Gender,
Arizona, 2004



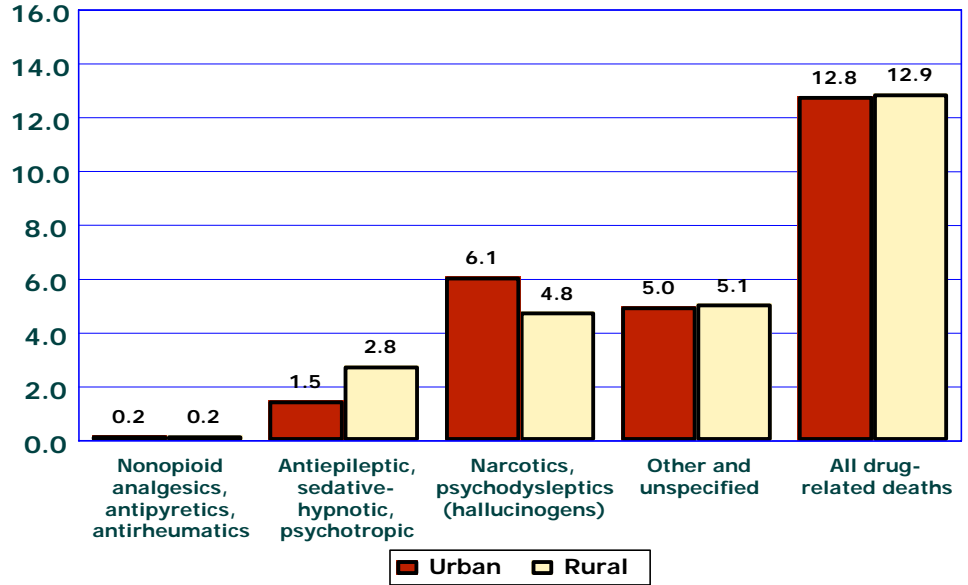
The male mortality rate for narcotics and psychodysleptics (hallucinogens, 8.6 per 100,000) was 2.7 times higher than the respective female rate of 3.2 deaths per 100,000 (**Figure 8-6**). With the exception of nonopioid analgesics, antipyretics and antirheumatics, all gender-specific mortality rates by type of drug were greater for males than females.

* Number of drug-related deaths per 100,000 persons in specified group.

KEY FINDINGS

Figure 8-7
Drug-Related Death Rates by Type of Drug and Urban*/Rural Area, Arizona, 2004

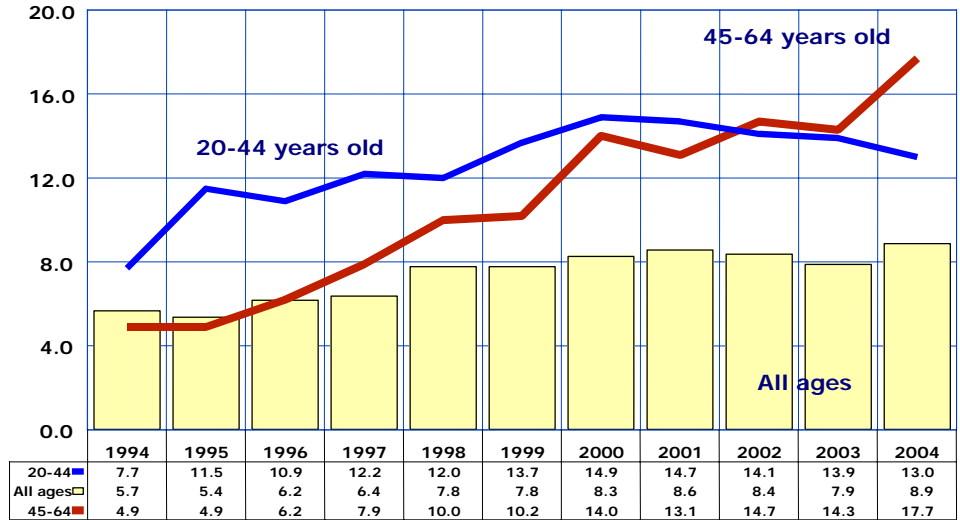
Relative to rural residents, the 2004 mortality risk of urban residents was no different for all types of drugs combined (Figure 8-7). However, urban compared to rural residents were 1.3 times more likely to die from the abuse of narcotics and psychodysleptics (6.1/100,000 vs. 4.8/100,000). In contrast, rural residents had a mortality disadvantage with respect to urban residents on overdoses of sedative-hypnotic and psychotropic drugs.



* Number of drug-related deaths per 100,000 persons in specified group.

Among Arizonans of all ages, the overall mortality rate for accidental drug overdoses increased by 56 percent from 5.7 deaths per 100,000 in 1994 to 8.9/100,000 in 2004 (Figure 8-8). In 2004, 517 Arizonans died from drug overdoses (Table 1), 2.3 times as many as in 1994 (Table 2). Middle-aged adults (45-64 years old) experienced an unprecedented increase in mortality from accidental drug overdoses. In 2004, 211 of middle-aged adults were attributed to accidental poisoning by drugs compared to 36 deaths in 1994. The 2004 rate for accidental drug overdoses among middle-aged Arizonans (17.7/100,000) was 3.6 times greater than the rate of 4.9/100,000 reported for 1994. Among young adults 20-44 years old, the mortality rate for accidental poisoning by drugs declined from a high of 14.9 deaths per 100,000 in 2000 to 13.0/100,000 in 2004.

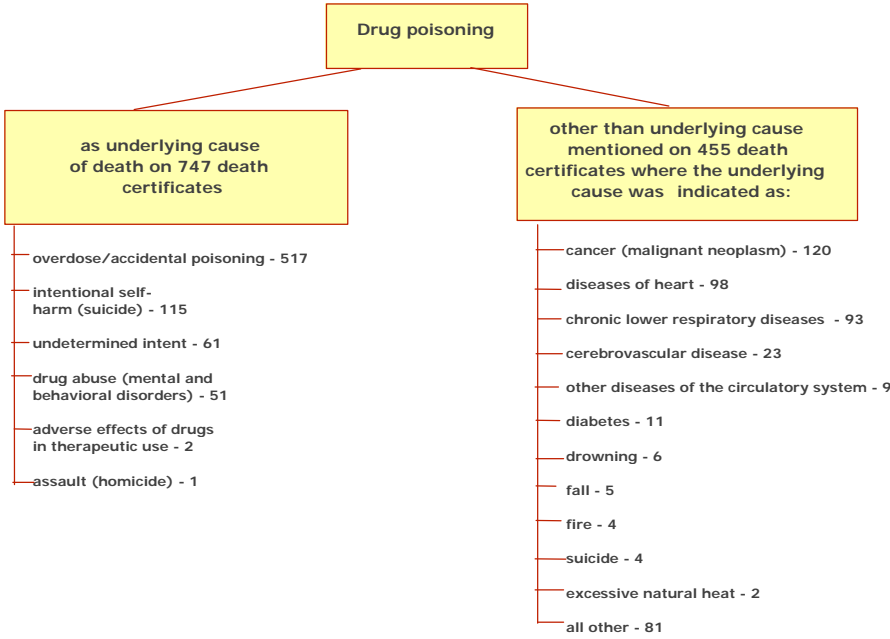
Figure 8-8
Comparison of Mortality Rates for Accidental Drug Overdoses Among Young Adults 20-44 Years Old, Middle-Aged Adults 45-64 Years Old and Arizonans of all Ages, 1994-2004



Number of deaths per 100,000 persons in specified group.

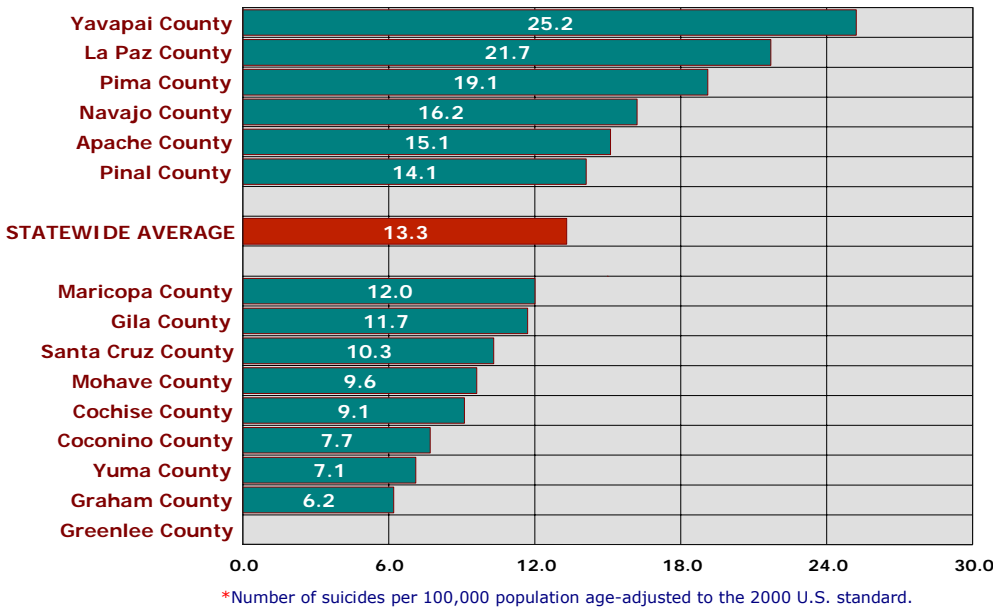
KEY FINDINGS

Figure 8-9
Drug-related Deaths Based on Underlying Cause or Any
Mention of Drug Poisoning on the Death Certificates of
Arizona Residents, 2004



In various circumstances drug poisoning was indicated as the underlying cause of death on 747 death certificates of Arizona residents who died in 2004. In addition, drug poisoning was mentioned on 455 death certificates of Arizonans who died in 2004 from the underlying causes such as cancer, diseases of heart, chronic lower respiratory diseases, stroke (cerebrovascular disease), fall-related injuries, drowning, fire and flames or exposure to excessive natural heat (Figure 8-9, Table 8-11).

Figure 8-10
Age-Adjusted Mortality Rates for Drug Induced Deaths
by County of Residence in Arizona, 2004



In 2004 the age-adjusted rates for drug-induced deaths varied in Arizona from 6.2 deaths per 100,000 residents of Graham County, to 25.2 deaths per 100,000 residents of Yavapai County. Including Yavapai, six counties exceeded the statewide rate of 13.3 deaths per 100,000 resident population in 2004. There were no drug-induced deaths in Greenlee County.

Yavapai County experienced an unprecedented increase in drug-induced mortality from 23 deaths in 2003 to 47 deaths in 2004 (Table 8-8). Accidental drug overdoses and poisoning by drugs, where it was undetermined whether it was unintentionally or purposely inflicted, accounted for the majority of this increase.

Note: There were no drug-induced deaths in Greenlee County. The rates for Gila, Graham, Santa Cruz and La Paz are based on fewer than 10 deaths. These rates are not statistically reliable.

**TABLE 8-1
DRUG-RELATED DEATHS BY CATEGORY AND SPECIFIC DIAGNOSIS, ARIZONA RESIDENTS, 2004**

Category	Description/type of drugs	Specific ICD-10 code for the underlying cause of death	Number of deaths
Abuse of psychoactive substances (Mental and behavioral disorders due to use of psychoactive substances, F11-F19) *	Opioids	F11.0 - F11.9	2
	Cocaine	F14.0 - F14.9	5
	Other stimulants including caffeine	F15.0 - F15.9	9
	Tobacco	F17.0 - F17.9	7
	Volatile solvents	F18.0 - F18.9	0
	Other psychoactive substances or multiple drug use	F19.0 - F19.9	28
Accidental poisoning by and exposure to drugs, medicaments and biological substances (X40-X49)	Nonopioid analgesics, antipyretics and anti-rheumatics	X40	3
	Anti-epileptic, sedative-hypnotic, anti-parkinsonism and psychotropic drugs not elsewhere classified	X41	65
	Narcotics and psychodysleptics (hallucinogens) not elsewhere classified, (include cannabis, cocaine, codeine, heroin, LSD, mescaline, methadone, morphine, opium)	X42	257
Intentional self-poisoning by and exposure to drugs, medicaments biological substances (X60-X64)	Accidental poisoning by and exposure to other drugs acting on the autonomic nervous system	X43	1
	Other and unspecified drugs, medicaments and biological substances	X44	191
	Nonopioid analgesics, antipyretics and anti-rheumatics	X60	4
	Anti-epileptic, sedative-hypnotic, anti-parkinsonism and psychotropic drugs not elsewhere classified	X61	24
	Narcotics and psychodysleptics (hallucinogens) not elsewhere classified, (include cannabis, cocaine, codeine, heroin, LSD, mescaline, methadone, morphine, opium)	X62	25
	Other drugs acting on the autonomic nervous system	X63	0
	Other and unspecified drugs, medicaments and biological substances	X64	62
	Homicidal poisoning by any biological substance, drug, medication		
Assault by drugs, medicaments and biological substances (X85)		X85	1
Accidental poisoning by and exposure to drugs, medicaments and biological substances, undetermined intent (Y10-Y14)	Nonopioid analgesics, antipyretics and anti-rheumatics	Y10	4
	Anti-epileptic, sedative-hypnotic, anti-parkinsonism and psychotropic drugs not elsewhere classified	Y11	9
	Narcotics and psychodysleptics (hallucinogens) not elsewhere classified, (include cannabis, cocaine, codeine, heroin, LSD, mescaline, methadone, morphine, opium)	Y12	17
	Other and unspecified drugs, medicaments and biological substances	Y14	31
	Agents primarily affecting blood constituents, anticoagulants	Y44.0 - Y44.9	1
	Analgesics, antipyretics and anti-inflammatory drugs	Y45.0 - Y45.9	0
Drugs, medicaments and biological substances causing adverse effects in therapeutic use (Y40-Y59)	Antiepileptics and antiparkinsonism drugs	Y46.0 - Y46.8	0
	Agents primarily affecting the cardiovascular system	Y52.0 - Y52.9	0
	Agents primarily affecting the gastrointestinal system	Y53.0 - Y53.6	0
	Other and unspecified drugs and medications	Y57.0 - Y57.9	1
	Other vaccine or biological substance, unspecified	Y59.0 - Y59.9	0
TOTAL			747

Note: The category titles and codes are according to the Tenth Revision of the International Classification of Diseases (ICD-10). Beginning with the 2000 data year the drug related mortality is classified by ICD-10, replacing the Ninth Revision (ICD-9) used during 1979-1999.

* This report provides data on poisoning by misuse of, abuse of, or dependence on drugs, medications and biological substances other than alcohol. The above table excludes ICD-10 codes F10.0-F10.9 for mental and behavioral health disorders due to use of alcohol. See Table 8-10, which identifies specific substances involved in poisoning deaths.

**TABLE 8-2
DRUG-RELATED MORTALITY BY CATEGORY AND YEAR, ARIZONA RESIDENTS, 1994-2004**

	1994	1995	1996	1997	1998	1999	2000		2001		2002	2003	2004
							unmodified	modified	unmodified	modified			
Abuse of psychoactive substances	25	42	49	10	16	14	25	25	44	44	43	57	51
Accidental poisoning by drugs	224	221	268	289	362	383	230	424	414	457	458	447	517
Intentional self-poisoning by drugs	81	108	56	73	87	101	58	133	76	113	100	93	115
Assault by drugs	0	0	1	2	1	1	0	0	2	4	1	1	1
Undetermined intent of poisoning by drugs	18	18	21	27	37	41	21	32	41	41	43	48	61
Drugs causing adverse effects in therapeutic use	9	8	9	7	5	3	3	3	6	6	9	6	2
Total	357	397	404	408	508	543	337	617	583	659	654	652	747

Note: Before data for 2000, mortality medical information was based on manual coding of an underlying death for each certificate in accordance with WHO rules, and done locally by the Office of Vital Records. Effective with the 2000 data year, cause-of-death data presented in this publication were coded by the National Center for Health Statistics, using computerized procedures of SuperMICAR (Mortality Medical Indexing and Retrieval) and ACME (Automated Classification of Medical Entities) systems. The conversion to computerized coding contributed to at least some of the breaks in comparability over time of cause-of-death statistics for accidental poisoning by drugs and intentional self-poisoning by drugs.

Table 8-2 provides two data columns for 2000 and 2001: Unmodified and modified for the misclassification of the underlying cause of death. The numbers used in the "modified" column for 2000-2001 are from the WISQARS site at http://webappa.cdc.gov/sasweb/ncipc/mortrate10_sy.html.

**TABLE 8-3
DRUG-RELATED MORTALITY RATES BY CATEGORY AND YEAR, ARIZONA RESIDENTS, 1994-2004**

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Abuse of psychoactive substances	0.6	1.0	1.1	0.2	0.3	0.3	0.5	0.8	0.8	1.0	0.9
Accidents in the use of drugs	5.7	5.4	6.2	6.4	7.8	7.8	8.3	8.6	8.4	7.9	8.9
Intentional self-poisoning by drugs	2.0	2.6	1.3	1.6	1.8	2.1	2.6	2.1	1.8	1.7	2.0
Assault by drugs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Undetermined intent of poisoning by drugs	0.4	0.4	0.5	0.6	0.8	0.8	0.6	0.8	0.8	0.9	1.1
Drugs causing adverse effects in therapeutic use	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0
Total	8.9	9.5	9.3	8.9	10.8	11.1	12.0	12.4	12.0	11.6	12.8

0.0: Quantity equal or less than 0.05.

Note: In this report, the rates for 2000 and 2001 are from the WISQARS site at http://webappa.cdc.gov/sasweb/ncipc/mortrate10_sy.html. The numerators used to calculate these rates are provided in Table 8-2 as the "modified" data columns.

**TABLE 8-4
DRUG-RELATED DEATHS BY RACE/ETHNIC GROUP AND YEAR, ARIZONA RESIDENTS, 1994-2004**

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
White non-Hispanic											
Total	251	306	286	291	372	380	247	428	474	474	572
Abuse of psychoactive substances	13	27	38	4	10	7	14	30	30	43	36
Accidental poisoning by drugs	145	156	181	187	248	258	159	292	311	306	390
Intentional self-poisoning by drugs	71	101	47	68	80	79	53	66	88	80	95
Assault by drugs	0	0	1	2	1	1	0	2	0	1	1
Undetermined intent of poisoning by drugs	14	15	14	24	29	32	19	32	36	38	49
Drugs causing adverse effects in therapeutic use	8	7	5	6	4	3	2	6	9	6	1
Hispanic or Latino											
Total	55	63	76	66	88	100	57	106	112	117	109
Abuse of psychoactive substances	10	9	7	2	3	6	6	11	7	7	10
Accidental poisoning by drugs	42	47	61	61	75	81	45	81	94	93	75
Intentional self-poisoning by drugs	2	4	5	0	4	10	4	6	7	9	14
Assault by drugs	0	0	0	0	0	0	0	0	1	0	0
Undetermined intent of poisoning by drugs	1	2	3	3	5	3	1	8	3	8	9
Drugs causing adverse effects in therapeutic use	0	1	0	0	1	0	1	0	0	0	1
Black or African American											
Total	19	14	20	23	18	29	14	21	32	37	23
Abuse of psychoactive substances	1	3	2	1	1	0	2	1	2	6	0
Accidental poisoning by drugs	14	9	15	19	17	23	12	20	27	27	21
Intentional self-poisoning by drugs	3	2	0	3	0	3	0	0	1	3	2
Undetermined intent of poisoning by drugs	0	0	1	0	0	3	0	0	2	1	0
Drugs causing adverse effects in therapeutic use	1	0	2	0	0	0	0	0	0	0	0
American Indian or Alaska Native											
Total	28	12	19	22	26	24	15	23	31	21	37
Abuse of psychoactive substances	1	2	2	3	2	1	2	2	4	1	4
Accidental poisoning by drugs	23	8	8	17	19	16	12	17	23	18	26
Intentional self-poisoning by drugs	2	1	4	2	2	5	1	4	4	1	4
Undetermined intent of poisoning by drugs	2	1	3	0	3	2	0	0	0	1	3
Drugs causing adverse effects in therapeutic use	0	0	2	0	0	0	0	0	0	0	0
Asian or Pacific Islander											
Total	4	1	0	2	2	3	0	1	0	0	1
Abuse of psychoactive substances	0	1	0	0	0	0	0	0	0	0	0
Accidental poisoning by drugs	0	0	0	1	1	1	0	1	0	0	1
Intentional self-poisoning by drugs	3	0	0	0	1	2	0	0	0	0	0
Undetermined intent of poisoning by drugs	1	0	0	0	0	0	0	0	0	0	0
Drugs causing adverse effects in therapeutic use	0	0	0	1	0	0	0	0	0	0	0
Other/Unknown											
Total	0	1	3	4	2	7	4	4	5	3	5
Abuse of psychoactive substances	0	0	0	0	0	0	1	0	0	0	1
Accidental poisoning by drugs	0	1	3	4	2	4	2	3	3	3	4
Intentional self-poisoning by drugs	0	0	0	0	0	2	0	0	0	0	0
Undetermined intent of poisoning by drugs	0	0	0	0	0	1	1	1	2	0	0

Note: See footnote on Table 8-2. In the above table, the numbers in 2000-2001 data column have not been modified for the misclassification of the underlying cause of death.

TABLE 8-5
 DRUG-RELATED MORTALITY BY RACE/ETHNIC GROUP, AGE GROUP AND YEAR, ARIZONA RESIDENTS, 1994-2004

		1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total, all causes	Total	357	397	404	408	508	543	337	583	654	652	747
	Age group											
	<1	1	0	0	0	0	0	2	0	1	0	1
	1-14	2	2	0	5	1	1	0	5	4	1	3
	15-19	4	7	3	6	7	6	4	14	16	17	26
	20-44	249	284	296	263	344	351	180	337	364	347	357
	45-64	75	80	81	103	138	160	121	204	226	247	316
65+	26	23	20	27	17	22	29	20	39	38	41	
	Unknown	0	1	4	4	1	3	1	3	4	0	3
White non-Hispanic	Total	251	306	286	291	372	380	247	428	474	474	572
	Age group											
	<1	1	0	0	0	0	0	1	0	0	0	1
	1-14	1	1	0	2	0	0	0	1	3	0	1
	15-19	2	5	3	1	3	1	2	7	10	13	11
	20-44	172	210	203	180	238	239	122	236	241	239	260
	45-64	52	68	60	83	115	118	95	167	185	191	259
65+	23	21	19	24	15	20	27	16	34	31	39	
	Unknown	0	1	1	1	1	2	0	1	1	0	1
Hispanic or Latino	Total	55	63	76	66	88	100	57	106	112	117	109
	Age group											
	<1	0	0	0	0	0	0	0	0	1	0	0
	1-14	0	0	0	2	1	0	0	3	1	0	0
	15-19	2	1	0	5	1	4	1	5	4	4	9
	20-44	42	53	65	47	69	70	39	72	77	79	65
	45-64	9	7	11	11	15	26	16	22	25	29	33
65+	2	2	0	1	2	0	1	4	4	5	2	
	Unknown	19	14	20	23	18	29	14	21	32	37	23
Black or African American	Total	0	0	0	0	0	0	1	0	0	0	0
	Age group											
	<1	0	1	0	1	0	0	0	0	0	1	1
	1-14	0	0	0	0	0	0	0	0	0	0	0
	15-19	0	0	0	0	0	0	1	0	0	0	0
	20-44	10	9	16	17	12	22	8	11	21	13	8
	45-64	9	4	4	4	6	5	3	10	11	22	14
65+	0	0	0	1	0	1	1	0	0	1	0	
	Unknown	0	0	0	0	0	1	0	0	0	0	0

**TABLE 8-5
DRUG-RELATED MORTALITY BY RACE/ETHNIC GROUP, AGE GROUP AND YEAR, ARIZONA RESIDENTS, 1994-2004**

		1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
American Indian or Alaska Native	Total	28	12	19	22	26	24	15	23	31	21	37
	Age group											
	1-14	1	0	0	0	0	1	0	1	0	0	1
	15-19	0	1	0	0	2	0	0	2	2	0	6
	20-44	23	10	12	18	22	16	11	17	23	16	22
45-64	3	1	6	3	2	7	4	3	5	4	8	
65+	1	0	1	1	0	0	0	0	0	1	1	0
Asian or Pacific Islander	Total	4	1	0	2	2	3	0	1	0	0	1
	Age group											
	15-19	0	0	0	0	1	0	0	0	0	0	0
	20-44	2	1	0	1	1	1	0	1	0	0	1
	45-64	2	0	0	1	0	1	0	0	0	0	0
65+	0	0	0	0	0	1	0	0	0	0	0	
Other/Unknown	Total	0	1	3	4	2	7	4	4	5	3	5
	Age group											
	15-19	0	0	0	0	0	1	0	0	0	0	0
	20-44	0	1	0	0	2	3	0	0	2	0	1
	45-64	0	0	0	1	0	3	3	2	0	1	2
Unknown	0	0	3	3	0	0	0	1	2	3	0	2

Note: See footnote on Table 8-2. In the above table, the numbers in 2000-2001 data column have not been modified for the misclassification of the underlying cause of death.

**TABLE 8-6
DRUG-RELATED MORTALITY IN URBAN AND RURAL AREAS BY YEAR, ARIZONA RESIDENTS, 1994-2004**

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total, all causes											
Total	357	397	404	408	508	543	337	583	654	652	747
Abuse of psychoactive substances	25	42	49	10	16	14	25	44	43	57	51
Accidental poisoning by drugs	224	221	268	289	362	383	230	414	458	447	517
Intentional self-poisoning by drugs	81	108	56	73	87	101	58	76	100	93	115
Assault by drugs	0	0	1	2	1	1	0	2	1	1	1
Undetermined intent of poisoning by drugs	18	18	21	27	37	41	21	41	43	48	61
Drugs causing adverse effects in therapeutic use	9	8	9	7	5	3	3	6	9	6	2
Urban											
Total	303	343	339	352	421	471	297	512	555	556	620
Abuse of psychoactive substances	22	35	41	8	14	14	23	39	37	51	45
Accidental poisoning by drugs	196	195	233	258	315	344	208	372	390	386	444
Intentional self-poisoning by drugs	63	91	48	61	66	78	48	61	86	73	89
Assault by drugs	0	0	1	2	1	0	0	2	1	1	1
Undetermined intent of poisoning by drugs	14	15	9	17	21	33	15	34	34	41	39
Drugs causing adverse effects in therapeutic use	8	7	7	6	4	2	3	4	7	4	2
Rural											
Total	50	39	50	39	73	69	40	70	99	96	126
Abuse of psychoactive substances	2	3	6	0	1	0	2	5	6	6	6
Accidental poisoning by drugs	26	22	30	23	40	38	22	41	68	61	72
Intentional self-poisoning by drugs	18	12	6	8	19	21	10	15	14	20	26
Assault by drugs	0	0	0	0	0	1	0	0	0	0	0
Undetermined intent of poisoning by drugs	3	1	7	7	12	8	6	7	9	7	22
Drugs causing adverse effects in therapeutic use	1	1	1	1	1	1	0	2	2	2	0
Unknown											
Total	0	0	0	0	0	0	0	1	0	0	1
Accidental poisoning by drugs	0	0	0	0	0	0	0	1	0	0	1

Note: See footnote on Table 8-2. In the above table, the numbers in 2000-2001 data column have not been modified for the misclassification of the underlying cause of death.

**TABLE 8-7
DRUG-RELATED MORTALITY BY GENDER AND YEAR, ARIZONA RESIDENTS, 1994-2004**

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total, all causes											
Total	357	397	404	408	508	543	337	583	654	652	747
Abuse of psychoactive substances	25	42	49	10	16	14	25	44	43	57	51
Accidental poisoning by drugs	224	221	268	289	362	383	230	414	458	447	517
Intentional self-poisoning by drugs	81	108	56	73	87	101	58	76	100	93	115
Assault by drugs	0	0	1	2	1	1	0	2	1	1	1
Undetermined intent of poisoning by drugs	18	18	21	27	37	41	21	41	43	48	61
Drugs causing adverse effects in therapeutic use	9	8	9	7	5	3	3	6	9	6	2
Male											
Total	247	277	300	301	359	396	232	401	433	432	479
Abuse of psychoactive substances	22	36	36	8	13	13	14	31	28	47	35
Accidental poisoning by drugs	171	181	220	237	287	304	184	305	334	313	366
Intentional self-poisoning by drugs	43	46	26	35	41	56	21	35	47	40	51
Assault by drugs	0	0	1	0	0	0	0	2	1	0	1
Undetermined intent of poisoning by drugs	8	10	12	17	17	21	12	25	20	28	25
Drugs causing adverse effects in therapeutic use	3	4	5	4	1	2	1	3	3	4	1
Female											
Total	110	120	104	107	149	147	105	182	221	220	268
Abuse of psychoactive substances	3	6	13	2	3	1	11	13	15	10	16
Accidental poisoning by drugs	53	40	48	52	75	79	46	109	124	134	151
Intentional self-poisoning by drugs	38	62	30	38	46	45	37	41	53	53	64
Assault by drugs	0	0	0	2	1	1	0	0	0	1	0
Undetermined intent of poisoning by drugs	10	8	9	10	20	20	9	16	23	20	36
Drugs causing adverse effects in therapeutic use	6	4	4	3	4	1	2	3	6	2	1

Note: See footnote on Table 8-2. In the above table, the numbers in 2000-2001 data column have not been modified for the misclassification of the underlying cause of death.

TABLE 8-8
 DRUG-RELATED DEATHS BY COUNTY OF RESIDENCE AND YEAR, ARIZONA, 1994-2004

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Apache											
Total	6	3	1	0	5	0	4	5	8	1	9
Abuse of psychoactive substances	1	0	0	0	0	0	0	1	1	0	0
Accidental poisoning by drugs	5	3	0	0	1	0	3	2	4	0	6
Intentional self-poisoning by drugs	0	0	1	0	1	0	1	1	1	0	1
Undetermined intent of poisoning by drugs	0	0	0	0	3	0	0	0	2	0	2
Drugs causing adverse effects in therapeutic use	0	0	0	0	0	0	0	1	0	1	0
Cochise											
Total	8	2	7	6	9	11	7	13	8	17	11
Abuse of psychoactive substances	1	0	0	0	0	0	0	1	0	2	0
Accidental poisoning by drugs	3	0	5	3	6	6	1	8	6	10	9
Intentional self-poisoning by drugs	3	2	2	1	1	5	2	4	0	4	2
Undetermined intent of poisoning by drugs	1	0	0	2	2	0	4	0	2	1	0
Coconino											
Total	3	2	6	2	10	9	9	5	11	11	10
Abuse of psychoactive substances	0	0	1	0	1	0	0	0	0	0	0
Accidental poisoning by drugs	1	1	3	2	6	5	7	2	10	11	2
Intentional self-poisoning by drugs	2	1	0	0	2	3	2	3	1	0	5
Undetermined intent of poisoning by drugs	0	0	2	0	1	1	0	0	0	0	3
Gila											
Total	5	5	4	5	9	5	3	5	10	8	6
Abuse of psychoactive substances	0	1	0	0	0	0	0	0	0	0	1
Accidental poisoning by drugs	4	2	3	4	5	4	3	3	5	6	4
Intentional self-poisoning by drugs	1	2	0	1	2	1	0	2	2	2	1
Undetermined intent of poisoning by drugs	0	0	1	0	2	0	0	0	2	0	0
Drugs causing adverse effects in therapeutic use	0	0	0	0	0	7	0	0	1	0	0
Graham											
Total	0	1	6	2	2	0	0	1	1	6	2
Abuse of psychoactive substances	0	0	1	0	0	3	0	0	1	0	0
Accidental poisoning by drugs	0	1	4	0	1	0	0	1	0	5	2
Intentional self-poisoning by drugs	0	0	0	1	1	1	0	0	0	0	0
Assault by drugs											0
Undetermined intent of poisoning by drugs	0	0	1	1	0	3	0	0	0	0	0
Drugs causing adverse effects in therapeutic use	0	0	0	0	0	0	0	0	0	1	0

TABLE 8-8
 DRUG-RELATED DEATHS BY COUNTY OF RESIDENCE AND YEAR, ARIZONA, 1994-2004

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Greenlee											
Total	0	0	0	0	0	1	0	0	0	2	0
Accidental poisoning by drugs	0	0	0	0	0	0	0	0	0	2	0
Drugs causing adverse effects in therapeutic use	0	0	0	0	0	1	0	0	0	0	0
Maricopa											
Total	214	225	231	241	299	315	123	334	360	361	408
Abuse of psychoactive substances	21	34	37	5	11	13	12	31	24	41	29
Accidental poisoning by drugs	137	123	154	179	223	235	76	238	251	231	294
Intentional self-poisoning by drugs	46	61	34	42	50	48	29	46	54	56	57
Assault by drugs	0	0	0	2	1	0	0	0	1	0	1
Undetermined intent of poisoning by drugs	3	2	2	8	10	17	3	17	24	29	25
Drugs causing adverse effects in therapeutic use	7	5	4	5	4	2	3	2	6	4	2
Mohave											
Total	9	8	7	10	6	9	6	9	17	11	17
Abuse of psychoactive substances	0	1	2	0	0	0	0	0	2	1	1
Accidental poisoning by drugs	4	6	2	3	0	2	4	5	10	8	9
Intentional self-poisoning by drugs	5	1	1	3	3	3	2	1	4	1	1
Undetermined intent of poisoning by drugs	0	0	1	3	3	3	0	3	1	1	6
Drugs causing adverse effects in therapeutic use	0	0	1	1	0	1	0	0	0	0	0
Navajo											
Total	6	2	3	3	7	12	2	8	13	11	15
Abuse of psychoactive substances											1
Accidental poisoning by drugs	3	1	2	2	4	7	0	6	10	8	11
Intentional self-poisoning by drugs	1	1	0	1	2	4	1	1	3	3	2
Undetermined intent of poisoning by drugs	1	0	1	0	1	1	1	1	0	0	1
Drugs causing adverse effects in therapeutic use	1	0	0	0	0	0	0	0	0	0	0
Pima											
Total	74	96	97	94	108	136	164	148	161	167	173
Abuse of psychoactive substances	1	0	2	1	2	1	11	4	5	5	10
Accidental poisoning by drugs	49	59	74	66	82	99	123	113	119	138	131
Intentional self-poisoning by drugs	13	25	13	18	13	22	18	13	28	14	23
Assault by drugs	0	0	0	0	0	0	0	2	0	1	0
Undetermined intent of poisoning by drugs	10	11	7	8	11	14	12	15	9	9	9
Drugs causing adverse effects in therapeutic use	1	1	1	1	0	0	0	1	0	0	0

TABLE 8-8
 DRUG-RELATED DEATHS BY COUNTY OF RESIDENCE AND YEAR, ARIZONA, 1994-2004

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Pinal											
Total	12	14	6	12	8	9	6	16	26	22	28
Abuse of psychoactive substances	0	1	1	2	0	0	0	1	4	3	2
Accidental poisoning by drugs	8	6	1	9	6	2	5	11	18	14	16
Intentional self-poisoning by drugs	3	5	1	1	2	5	1	2	3	2	7
Assault by drugs	0	0	1	0	0	0	0	0	0	0	0
Undetermined intent of poisoning by drugs	1	1	0	0	0	2	0	1	1	3	3
Drugs causing adverse effects in therapeutic use	0	1	2	0	0	0	0	1	0	0	0
Santa Cruz											
Total	0	4	2	2	5	3	2	2	4	4	4
Abuse of psychoactive substances	0	0	0	0	0	0	2	0	0	1	0
Accidental poisoning by drugs	0	3	2	2	4	2	0	1	4	1	4
Intentional self-poisoning by drugs	0	1	0	0	1	1	0	0	0	2	0
Undetermined intent of poisoning by drugs	0	0	0	0	0	0	0	1	0	0	0
Yavapai											
Total	12	9	13	7	15	10	6	20	26	23	47
Abuse of psychoactive substances	0	1	2	0	0	0	0	3	2	2	3
Accidental poisoning by drugs	5	3	8	5	10	7	4	12	18	9	23
Intentional self-poisoning by drugs	6	3	2	1	5	3	1	3	3	7	11
Undetermined intent of poisoning by drugs	1	1	1	1	0	0	1	1	2	5	10
Drugs causing adverse effects in therapeutic use	0	1	0	0	0	0	0	1	1	0	0
Yuma											
Total	3	8	5	5	6	11	4	14	8	6	11
Abuse of psychoactive substances	0	0	1	0	1	0	0	3	4	2	4
Accidental poisoning by drugs	2	7	4	4	4	8	4	10	2	3	3
Intentional self-poisoning by drugs	1	0	0	0	1	3	0	0	1	1	2
Undetermined intent of poisoning by drugs	0	1	0	1	0	0	0	1	0	0	2
Drugs causing adverse effects in therapeutic use	0	0	0	0	0	0	0	0	1	0	0
La Paz											
Total	1	3	1	2	4	3	1	2	1	2	5
Accidental poisoning by drugs	1	2	1	2	3	2	0	1	1	1	2
Intentional self-poisoning by drugs	0	1	0	0	1	1	1	0	0	1	3
Undetermined intent of poisoning by drugs	0	0	0	0	0	0	0	1	0	0	0

**TABLE 8-8
DRUG-RELATED DEATHS BY COUNTY OF RESIDENCE AND YEAR, ARIZONA, 1994-2004**

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Unknown	4	15	15	17	14	3	0	1	0	0	1
Total	1	4	2	2	1	0	0	0	0	0	0
Abuse of psychoactive substances	2	4	5	8	7	1	0	1	0	0	1
Accidental poisoning by drugs	0	5	2	4	2	2	0	0	0	0	0
Intentional self-poisoning by drugs	1	2	5	3	4	0	0	0	0	0	0
Undetermined intent of poisoning by drugs	0	0	1	0	0	0	0	0	0	0	0
Drugs causing adverse effects in therapeutic use	0	0	1	0	0	0	0	0	0	0	0

Note: See footnote on Table 8-2. In the above table, the numbers in 2000-2001 data column have not been modified for the misclassification of the underlying cause of death.

**TABLE 8-9
DRUG-RELATED DEATHS BY 5-YEAR AGE GROUPS AND YEAR, ARIZONA RESIDENTS, 1994-2004**

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<1	1	0	0	0	0	0	2	0	1	0	1
1-4	0	1	0	2	0	0	0	2	1	1	0
5-9	0	0	0	0	0	1	0	0	1	0	1
10-14	2	1	0	3	1	0	0	3	2	0	2
15-19	4	7	3	6	7	6	4	14	16	17	26
20-24	18	18	26	23	25	28	14	22	32	33	46
25-29	32	34	28	29	45	51	30	41	46	32	33
30-34	62	54	69	56	69	61	33	62	61	70	52
35-39	68	97	83	81	101	87	42	98	104	91	99
40-44	69	81	90	74	104	124	61	114	121	121	127
45-49	32	43	52	55	71	89	69	105	103	118	142
50-54	22	16	18	27	34	49	33	59	71	73	105
55-59	12	13	5	16	27	15	13	22	40	40	46
60-64	9	8	6	5	6	7	6	18	12	16	23
65-69	9	5	6	6	3	4	4	5	10	9	12
70-74	8	5	4	9	1	5	4	4	8	6	9
75-79	4	5	5	7	8	7	9	3	9	8	13
80-84	1	5	2	5	2	3	4	4	6	8	3
85-89	1	2	1	0	2	2	6	3	2	7	2
90-94	2	1	1	0	1	0	2	1	3	0	1
95-99	1	0	1	0	0	1	0	0	1	0	1
Unknown	0	1	4	4	1	3	1	3	4	2	3
Total	357	397	404	408	508	543	337	583	654	652	747

Note: See footnote on Table 8-2. In the above table, the numbers in 2000-2001 data column have not been modified for the misclassification of the underlying cause of death.

**TABLE 8-10
SELECTED SUBSTANCES INVOLVED IN UNINTENTIONAL OR UNDETERMINED DRUG POISONING DEATHS, ARIZONA, 2004**

	Gender		Race/Ethnicity								Age group						Marital status				
	Total	M	F	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Unknown	<1	1-14	15-19	20-44	45-64	65+	Un-known	Never married	Married	Widowed	Divorced	Not stated
Narcotics and psychodysleptics	337	243	94	238	63	17	17	1	1	0	1	16	170	143	7	0	124	92	4	105	12
Heroin	37	31	6	28	5	0	3	1	0	0	0	1	19	17	0	0	16	9	1	8	3
Other opioids (e.g., codeine, morphine, oxycodone)	117	76	41	90	17	5	4	0	1	0	1	8	54	49	5	0	39	35	1	39	3
Methadone	58	42	16	43	11	2	2	0	0	0	0	5	29	24	0	0	21	17	0	19	1
Other synthetic narcotics	22	13	9	18	3	0	1	0	0	0	0	0	10	11	1	0	5	7	2	8	0
Cocaine	109	84	25	64	27	11	7	0	0	0	0	7	61	41	0	0	49	22	1	33	4
Other and unspecified narcotics	75	57	18	54	15	1	5	0	0	0	0	0	45	28	2	0	25	23	1	21	5
Psychotropic drugs, not elsewhere classified	104	67	37	83	13	2	5	0	1	0	0	2	56	43	2	1	35	34	1	30	4
Tricyclic and tetracyclic antidepressants	18	13	5	15	1	1	1	0	0	0	0	0	8	10	0	0	9	5	0	3	1
Other/unspecified antidepressants	19	6	13	11	6	1	1	0	0	0	0	0	10	8	1	0	3	8	0	8	0
Psychostimulants (e.g., methamphetamine)	68	51	17	56	7	1	3	0	1	0	0	2	40	25	0	1	24	21	0	20	3
Other/unspecified psychotropic drugs	3	2	1	2	1	0	0	0	0	0	0	0	1	1	1	0	1	0	1	1	0
Antiepileptic, sedative-hypnotic and antiparkinson drugs	42	24	18	33	7	0	2	0	0	0	0	2	19	17	4	0	12	16	2	12	0
Barbiturates	2	1	1	1	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1	0
Benzodiazepines	34	21	13	27	5	0	2	0	0	0	0	2	16	12	4	0	10	13	1	10	0
Other antiepileptic and sedative-hypnotic drugs	10	3	7	9	1	0	0	0	0	0	0	0	6	4	0	0	1	7	1	1	0
Nonopioid analgesics (e.g., acetaminophen)	14	3	11	12	2	0	0	0	0	0	0	1	8	3	2	0	6	4	1	3	0
Other and unspecified drugs	394	253	141	310	50	10	19	1	4	1	2	13	188	166	21	3	127	128	8	118	13
Total deaths	629	426	203	475	94	21	33	1	5	1	2	22	312	259	30	3	220	181	15	192	21

Note: Unlike the data in Table 8-1, which are based on the underlying cause of death, the specific substance in the above table are identified using ICD-10 T-codes. The sum of all identified T-codes for substances (980) is greater than the combined number (629) of fatal overdoses or drug poisonings of undetermined intent. It may not be possible to identify the underlying causal agent in deaths involving multiple drugs.

**TABLE 8-11
DRUG-RELATED DEATHS BASED ON UNDERLYING CAUSE AND ANY MENTION OF DRUG POISONING
ON THE DEATH CERTIFICATES OF ARIZONA RESIDENTS, 2004**

	Drug poisoning as the underlying cause of death	Other than underlying cause										All mentions of drug poisoning*	
		2nd listed	3rd listed	4th listed	5th listed	6th listed	7th listed	8th listed	9th listed	10th listed	11th listed		12th listed
Total, all causes	747	364	323	320	252	126	46	24	6	4	0	1	1,202
Malignant neoplasms	NA	0	80	18	9	7	4	2	0	0	0	0	120
Diabetes	NA	0	7	4	0	0	0	0	0	0	0	0	11
Diseases of heart	NA	47	15	14	17	6	3	3	0	1	0	0	97
Cerebrovascular diseases	NA	5	8	4	5	1	1	0	0	0	0	0	23
Atherosclerosis	NA	1	0	0	0	0	0	0	0	0	0	0	1
Other diseases of circulatory system	NA	6	1	2	0	1	0	1	0	0	0	0	9
Influenza and pneumonia	NA	2	0	0	2	1	0	0	0	0	0	0	4
Chronic lower respiratory diseases	NA	78	11	3	0	1	0	0	0	0	0	0	93
Mental and behavioral disorders	51	40	22	10	5	0	0	0	0	0	0	0	60
Falls	NA	1	0	0	1	2	0	1	0	0	0	0	5
Accidental drowning and submersion	NA	1	1	1	2	1	1	2	0	0	0	0	6
Fire, flames, smoke	NA	4	0	0	0	0	0	0	0	0	0	0	4
Accidental poisoning	517	153	114	192	154	77	25	5	4	2	0	1	520
Excessive natural heat	NA	2	0	0	0	0	0	0	0	0	0	0	2
Other and unspecified nontransport accidents	NA	4	1	0	0	1	0	1	0	0	0	0	6
Intentional self-harm (suicide)	115	10	33	38	30	12	4	4	0	0	0	0	119
Assault (homicide)	1	0	0	1	0	0	0	0	0	0	0	0	1
Events of undetermined intent	61	4	15	19	20	10	3	2	0	0	0	0	64
Complications of medical and surgical care	2	0	0	1	1	0	0	0	0	0	0	0	2
Alcohol-induced deaths	NA	1	7	1	1	0	0	0	0	0	0	0	10
All other causes	NA	3	8	12	5	6	5	3	2	1	0	0	45

*Any mention of drug poisoning in up to 20 diagnostic conditions that can be reported on the death certificate.

DRUG-RELATED DEATHS, ARIZONA, 1994-2004

Technical Notes

Beginning with the 2000 data year in Arizona (1999 nationally) two major changes have occurred that affect the computation of mortality rates and analyses of mortality data over time. First, a new revision of the International Classification of Diseases (ICD), used to classify causes of death, was implemented. The Tenth Revision (ICD-10) has replaced the Ninth Revision (ICD-9), which was in effect since 1979. Second, a new population standard for the age adjustment of mortality rates has replaced the standard based on the 1940 population and used since 1943. The new set of age-adjustment weights uses the year 2000 U.S. population as a standard.

Both changes have profound effects on the comparability of mortality data and continuity in statistical trends. Age-adjusted rates can only be compared to other age-adjusted rates that use the same population standard. In this report, ALL age-adjusted mortality rates are based on the (new) 2000 standard, and they CANNOT BE compared to rates using the 1940 standard population. This is because the age structures of the 1940 and year 2000 populations differ. From 1940 to 2000 the U.S. population "aged" considerably. The age-adjusted rates based on the year 2000 standard are different because the year 2000 population standard, which has an older age structure, gives more weight than the 1940 standard to death rates at older ages where mortality is higher.

Breaks in comparability of mortality statistics effective with deaths occurring in 2000 also result from the implementation of ICD-10. ICD-10 is far more detailed than ICD-9, with about 8,000 categories compared with about 5,000 categories. Some of the coding rules and rules for selecting the underlying cause of death have been changed. The comparability ratio for drug-related deaths (a measure of comparison between ICD-9 and ICD-10) is 1.1950, and this indicates that compared to ICD-9 coding, approximately 19.5 percent more deaths would be assigned to this category when ICD-10 was used.

In addition, before data for 2000, mortality medical information was based on manual coding of an underlying death for each certificate in accordance with WHO rules, and done locally by the Office of Vital Records. Effective with the 2000 data year and the implementation of ICD-10, cause-of-death data presented in this publication were coded by the National Center for Health Statistics, using computerized procedures of SuperMICAR (Mortality Medical Indexing and Retrieval) and ACME (Automated Classification of Medical Entities) systems.

The conversion to computerized coding contributed to at least some of the breaks in comparability over time of cause-of-death statistics for drug-related deaths:

Data year	1999	2000	2001	2002	2003	2004
Drug-related deaths	543	337	583	654	652	747
Accidental poisoning/overdose	383	230	414	458	447	517
Suicide by drugs	101	58	76	100	93	115
Undetermined intent	41	21	41	43	48	61

The drug-related death statistics for 2000-2001, both numbers and rates, should be used with caution. Whenever available, the originally reported data for 2000-2001 have been supplemented with a bit more realistic statistical information from the WISQARS (Web-based Injury Statistics Query and Reporting System) site at <http://www.cdc.gov/ncipc/wisqars/> (see **Table 8-2**).

With few exceptions, the ICD-10 F-codes, X-codes and Y-codes used to identify the underlying causes of death (see **Table 8-1**) do not provide sufficient information about specific causal agents in deaths. Rather, these codes refer to broad categories of substances ranging from cannabis to heroin and opium under a single ICD-10 code (i.e., X42, X62 or Y12). However, for a given death, the underlying cause is selected from the conditions recorded by the certifier on the death certificate. All these conditions, not just the underlying cause of death, are coded, and the ACME system is used for determining the underlying cause of death from the coded conditions. The data for multiple conditions (or multiple cause-of-death data) can be used to identify the substances or classes of substances involved in poisoning deaths. ICD-10 contains specific information about drugs, medications and biologic substances in codes T36-T50. These codes are utilized in **Figure 8-2** and **Table 8-10**, identifying the substances that contributed to death. Presented on the following page is a listing of all ICD-10 codes used in this report to identify both the underlying causes of death and specific substances giving rise to poisoning.

ICD-10 codes used to identify drug-related deaths

Category	ICD-10 code
External causes of poisoning by drugs used to classify underlying causes of death	
Dug dependence and related mental or behavioral disorders due to psychoactive substance use	F11-F19
Accidental poisoning/overdose of drug	X40-X44
Purposely self-inflicted drug poisoning (suicide)	X60-X64
Assault (homicide) by drugs, medicaments and biological substances	X85
Undetermined intent of poisoning by drugs	Y10-Y14
Adverse effects of drugs, medicaments and biological substances in therapeutic use	Y40-Y59
Substances giving rise to poisoning	
Nonopioid analgesics, antipyretics, and antirheumatics	T39
Narcotics and psychodysleptics (hallucinogens)	T40
Opium	T40.0
Heroin	T40.1
Other opioids	T40.2
Methadone	T40.3
Other synthetic narcotics	T40.4
Cocaine	T40.5
Other and unspecified narcotics	T40.6
Cannabis (derivatives)	T40.7
Lysergide (LSD)	T40.8
Other and unspecified psychodysleptics (hallucinogens)	T40.9
Antiepileptic, sedative-hypnotic, and antiparkinsonism drugs	T42
Barbiturates	T42.3
Benzodiazepines	T42.4
Other antiepileptic, sedative-hypnotic and antiparkinsonism drugs	T42.0-T42.1 T42.6-T42.8
Psychotropic drugs, not elsewhere classified	T43
Tricyclic and tetracyclic antidepressants	T43.0
Other and unspecified antidepressants	T43.2
Psychostimulants with abuse potential	T43.6
Other and unspecified psychotropic drugs	T43.1, T43.3-T43.5, T43.8-T43.9
Other and unspecified drugs, medicaments, and biological substances	Remainder of T36-T50