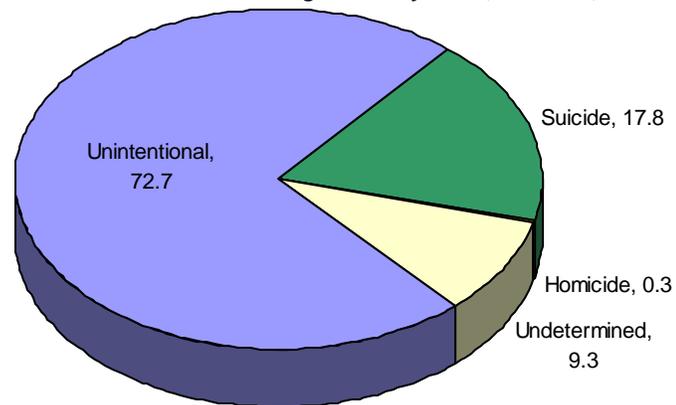


Poisoning Deaths in Delaware

Unintentional and self-inflicted poisoning deaths comprised the vast majority of poisoning mortality in 2002-2006. Poisoning deaths of undetermined intent accounted for 9.3 percent of all poisoning deaths in 2002-2006; poisonings due to homicide made up less than .3 percent.

Figure 1. Distribution of Poisoning Deaths by Intent, Delaware, 2002-2006



Source: Delaware Health Statistics Center

Though Delaware's self-inflicted poisoning mortality rates dropped 43.4 percent since 1990-1994, poisoning was the third leading cause of self-inflicted (suicide) death in 2002-2006, and accounted for 12.5 percent of the total suicide deaths. Self-inflicted poisonings were committed primarily by whites, over half were males, and 78 percent were caused by drugs.

Unintentional poisonings have become more prevalent since 1990-1994. During that time they accounted for just over half of all poisoning deaths; by 2002-2006, nearly three-fourths of Delaware poisoning deaths were unintentional. Over the same time period, the proportion of poisoning deaths that were self-inflicted (suicide) dropped from 40 to 18 percent.

In 2002-2006, poisoning was second only to motor vehicle injuries as the leading cause of unintentional injury death in Delaware. Nearly all (96 percent) unintentional poisoning deaths resulted from the misuse of narcotic and prescription drugs; the remaining poisoning deaths resulted from other types of poisoning, including gases such as carbon monoxide, noxious vapours, and alcohol. The unintentional poisoning mortality rate rose 86 percent, from 3.7 in 1990-1994 to 6.9 in 2002-2006.

At 7.4 and 6.6 deaths per 100,000, whites and blacks had similar rates of unintentional poisoning deaths in 2002-2006, though white rates have increased 144 percent since 1990-1994, while black rates decreased 11.2 percent.

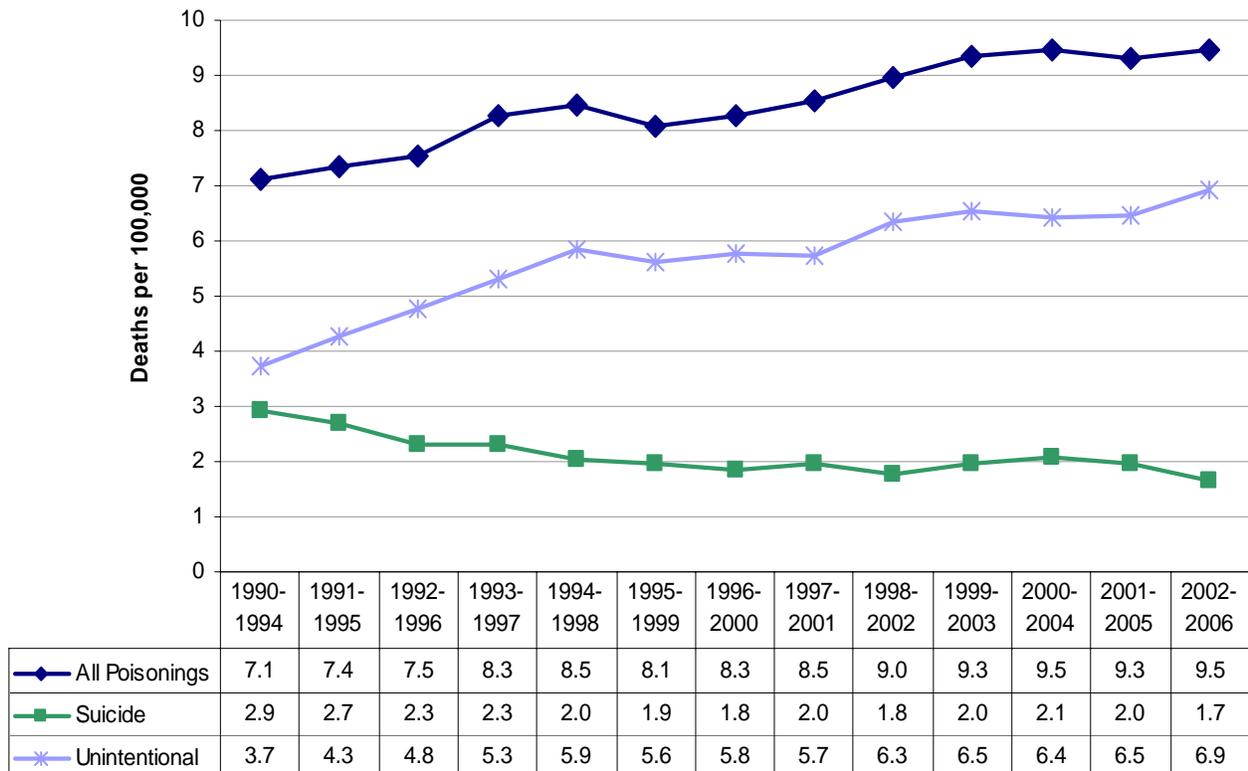
Table 1. Decedent Demographics by Poisoning Intent, Delaware, 1990-2006

1a. Self-inflicted (Suicide)					1b. Unintentional				
	2002-2006			% Change in Rate since 90-94		2002-2006			% Change in Rate since 90-94
	Number	Percent	AADR			Number	Percent	AADR	
Gender					Gender				
Male	38	55.1	1.9	-41.6	Male	205	72.7	10.4	63.2
Female	31	44.9	1.4	-45.6	Female	77	27.3	3.6	203.3
Race					Race				
White	66	95.6	2.1	-39.7	White	226	80.1	7.4	144.2
Black	3	4.4	--	NA	Black	55	19.5	6.6	-11.2
Age					Age				
<25	6	8.7	--	NA	<25	27	9.6	1.9	166.2
25-34	12	17.4	--	NA	25-34	68	24.1	13.0	64.9
35-44	17	24.6	--	NA	35-44	86	30.5	13.6	44.0
45-54	19	27.5	--	NA	45-54	76	27.0	12.9	385.1
55-64	7	10.1	--	NA	55-64	11	3.9	---	NA
65+	8	11.6	--	NA	65+	14	5.0	---	NA
Total	69	100.0	1.7	-43.4	Total	282	100.0	6.9	86.2

*AADR (Age-adjusted Death Rates) are age-adjusted per 100,000, using the 2000 U.S. standard population.
 "--" Rate does not meet standards of reliability or precision; less than 20 deaths in the numerator.

Source: Delaware Health Statistics Center

Figure 2. Five-year Age-adjusted Poisoning Mortality Rates, Delaware, 1990-2006

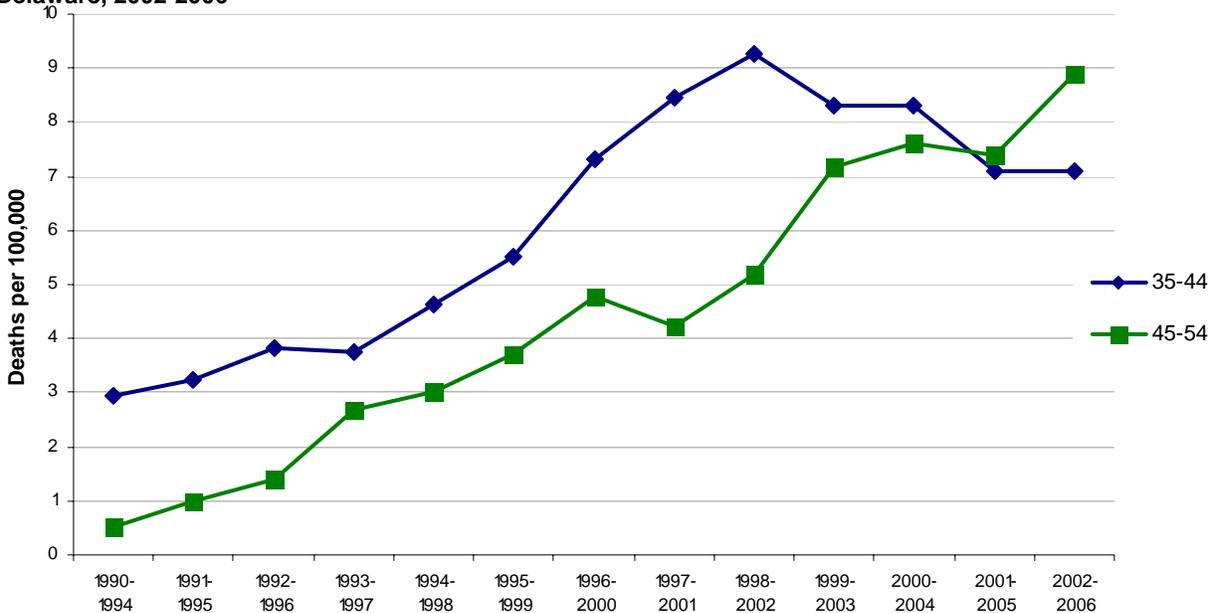


Notes: Rates are age-adjusted per 100,000, using the 2000 U.S. standard population.
 "All Poisonings" include poisoning deaths of all intents, identified by ICD-10 codes U01.6, U01.7, X40-X40, X60-X69, X85-X90, Y10-U19, and Y35.2 and ICD-9 codes 850-869, 950-952, 962.0-962.9, 980.0-982.9, and 972.
 Source: Delaware Health Statistics Center

Mortality rates for unintentional poisonings varied significantly by gender, with male rates nearly three times those of females. The number of male deaths due to unintentional poisonings spanned a broader age group than that of females, and unintentional poisoning mortality rates peaked at a younger age for men (25-34) than women (45-54).

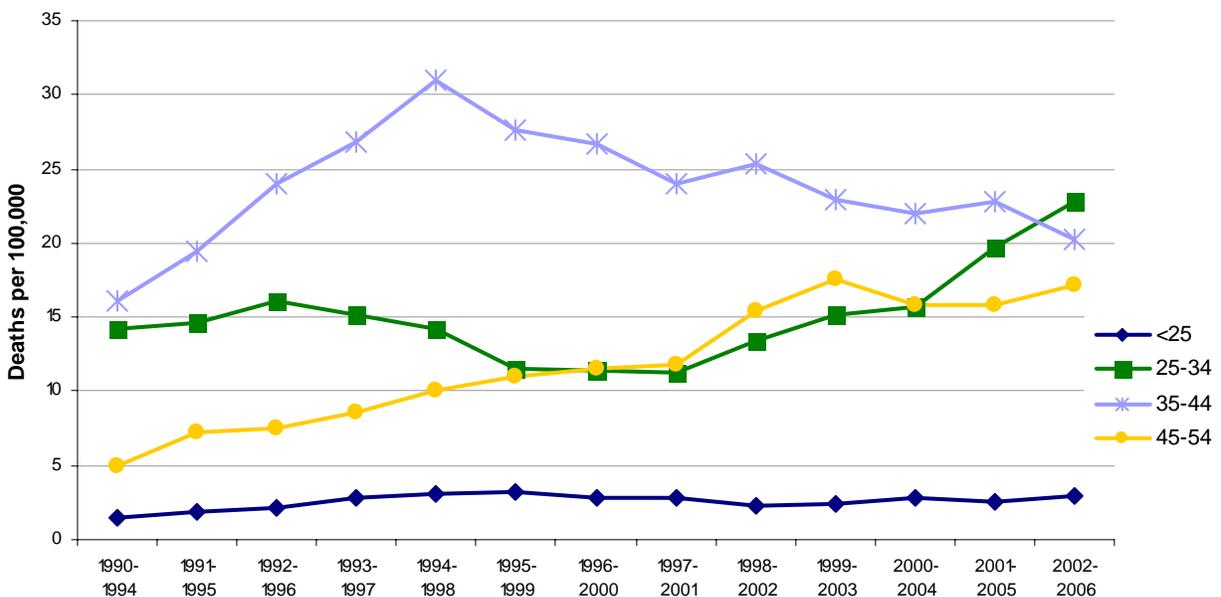
However, between 1990-1994 and 2002-2006, the 45-54 year age group showed the largest growth in unintentional poisoning mortality rates for both men and women.

Figure 3. Five-year Female Unintentional Poisoning Mortality Rates by Selected Age Group Delaware, 2002-2006



Source: Delaware Health Statistics Center

Figure 4. Five-year Male Unintentional Poisoning Mortality Rates by Selected Age Group, Delaware, 2002-2006



Source: Delaware Health Statistics Center

Narcotics, such as cocaine and opioids, were most commonly involved in unintentional poisonings. The most frequently listed non-narcotic substances were central nervous system (CNS) depressants (listed below as antiepileptic, sedative-hypnotic, and anti-parkinsonism substances), which include barbiturates and benzodiazapines, and psychotropic drugs, which include antidepressants and stimulants commonly used to treat attention-deficit disorder.

Intentional self-poisoning deaths were more likely to involve non-narcotic substances, the most common of which were psychotropic drugs, followed by CNS depressants.

Table 2. Number of Poisoning Deaths in which Specific Substances Were Mentioned, 2002-2006

<i>Substance</i>	<i>Drug-induced Deaths</i>			
	<i>Unintentional poisonings</i>	<i>Undetermined intent of poisoning</i>	<i>Intentional self-poisoning (suicide)</i>	<i>Intentional poisoning of other (homicide)</i>
Heroin	50	3	0	0
Other opioids	77	6	8	0
Methadone	51	6	4	0
Other synthetic narcotics	23	3	7	0
Cocaine	101	8	3	0
Other narcotics	14	9	1	0
Cannabis	2	0	0	0
LSD	0	0	0	0
Other and unspec psychodysleptics (hallucinogens)	1	0	0	0
Systemic antibiotics	0	0	0	0
Systemic anti-infectives and antiparasitics	0	0	0	0
Hormones and their synthetic substitutes & antagonists	0	0	1	0
Nonopioid analgesics, antipyretics, and antirheumatics	4	1	7	0
Anaesthetics and therapeutic gases	4	0	2	1
Antiepileptic, sedative-hypnotic, and anti-parkinsonism	33	6	14	0
Psychotropic drugs, not elsewhere classified	25	5	21	0
Drugs primarily affecting the autonomic nervous system	0	0	0	0
Primarily systemic and haematological agents, not elsewhere classified	5	1	2	0
Agents primarily affecting the cardiovascular system	6	0	0	0
Agents primarily affecting the digestive system	0	0	0	0
Drugs primarily affecting the smooth & skeletal muscles & respiratory system	1	0	0	0
Topical agents affecting the skin & mucous membranes; dental drugs	1	0	0	0
Other & unspec drugs, diuretics, medicaments & biological substances	59	15	31	0

Note: Substance specific data are not additive because the death certificate can have multiple drugs listed.

Source: Delaware Health Statistics Center

References:

1. [CDC. Unintentional Poisoning Deaths — United States, 1999-2004. MMWR 2007; 56\(05\);93-96.](#)
2. Web doc: Tables 1 & 2 accessed at: http://www.cdc.gov/nchs/data/hestat/methadone1999-04_tables.pdf#2
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4. NIDA. Prescription Drugs Abuse and Addiction. NIH Pub. No. 05-4881. NIDA Research Report Series, 2005.
5. CDC. Poisoning in the United States: Fact Sheet. Web doc: <http://www.cdc.gov/ncipc/factsheets/poisoning.htm>



DELAWARE HEALTH AND SOCIAL SERVICES

Division of Public Health

If you have comments, suggestions, and/or questions, please contact the Delaware Health Statistics Center at (302) 744-4541.

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