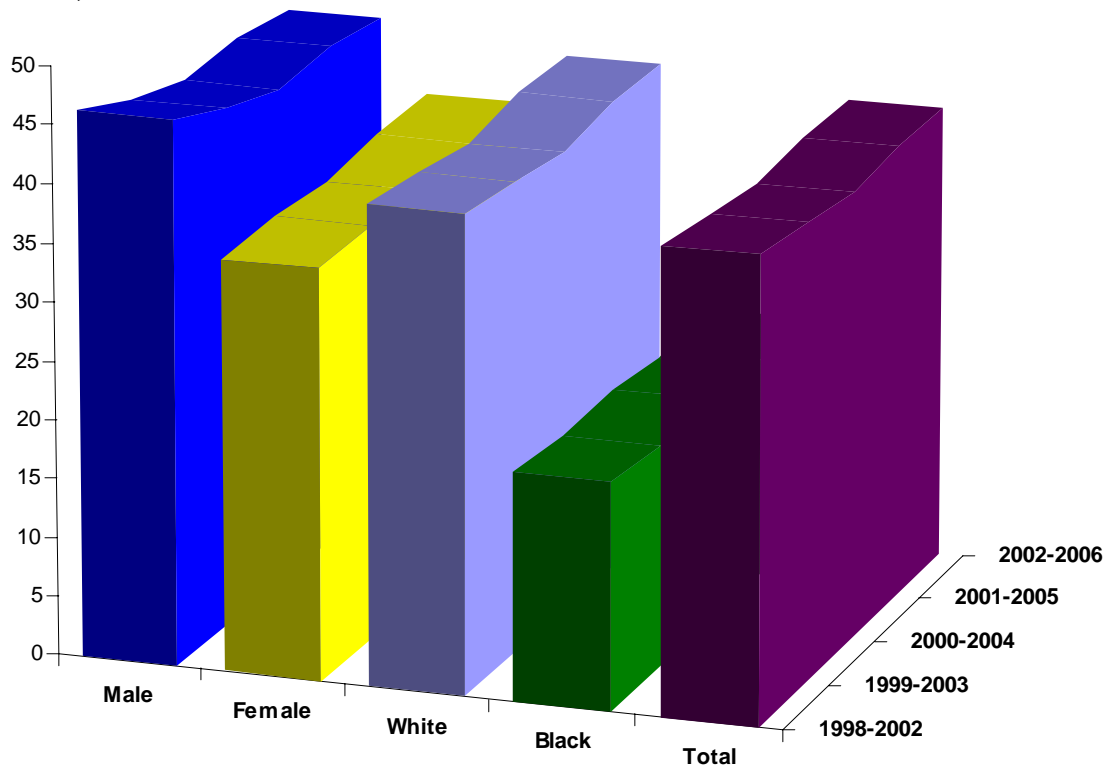


## Mortality due to Chronic Obstructive Pulmonary Disease (COPD) in Delaware

COPD is a progressive group of chronic lung diseases characterized by airflow obstruction that interferes with normal breathing. COPD is mainly comprised of two illnesses: chronic bronchitis and emphysema.

In 2002-2006, one in 20 deaths in Delaware had COPD as the underlying cause, and the age-adjusted mortality rate was 39 deaths per 100,000 population. COPD mortality rates were higher for whites, whose rate was twice that of blacks, and males, though the gap between males and females narrowed as male rates decreased and female rates increased from 1998-2002 to 2002-2006.

**Figure 1. Five-year Average COPD Mortality Rates by Sex and Race Delaware, 1998-2006**



**Notes:**

1. COPD was defined by ICD-9 codes 490-492, 496 and ICD-10 codes J40-J44.
2. Rates are per 100,000 and were age-adjusted to the 2000 U.S. standard population.

**Source:**

Delaware Health Statistics Center

*Nationally, COPD is the fourth leading cause of death in the U.S.<sup>1</sup> and a major cause of morbidity. Smoking is the primary cause of COPD, though long-term exposure to other lung irritants, such as air pollution, occupational dusts and chemicals, and second-hand smoke are thought to be linked to COPD as well.*

The majority of COPD deaths occur in those over age 44 and the number of deaths increases with age. Whites account for over 90 percent of all COPD deaths, and just over 50 percent of the deaths are females.

November is National COPD Awareness Month. For more information on COPD, visit:

<http://www.nhlbi.nih.gov/health/public/lung/copd/> or  
[http://www.nhlbi.nih.gov/health/dci/Diseases/Copd/Copd\\_WhatIs.html](http://www.nhlbi.nih.gov/health/dci/Diseases/Copd/Copd_WhatIs.html).

**Table 1. Chronic obstructive pulmonary disease (COPD) Mortality Trends by Race, Gender, and Age Delaware, 1992-2006**

CHARACTERISTIC	FIVE-YEAR INTERVAL										
	1992-1996	1993-1997	1994-1998	1995-1999	1996-2000	1997-2001	1998-2002	1999-2003	2000-2004	2001-2005	2002-2006
<b>Resident Deaths</b>											
Number	1246	1293	1344	1405	1484	1505	1558	1582	1601	1680	1731
Crude Rate	34.7	35.5	36.3	37.5	39.0	39.1	39.9	40.0	39.9	41.2	41.9
AAADR <sup>1</sup>	37.6	37.9	38.4	38.9	40.0	39.3	39.6	39.0	38.2	39.0	39.0
<b>Race</b>											
White											
Number	1139	1181	1223	1270	1341	1359	1412	1434	1449	1535	1578
Percent	91.4%	91.3%	91.0%	90.4%	90.4%	90.3%	90.6%	90.6%	90.5%	91.4%	91.2%
AAADR <sup>1</sup>	39.0	39.3	39.7	40.0	41.0	40.3	40.7	40.1	39.4	40.6	40.7
Black											
Number	107	112	121	135	143	146	146	148	152	145	153
Percent	8.6%	8.7%	9.0%	9.6%	9.6%	9.7%	9.4%	9.4%	9.5%	8.6%	8.8%
AAADR <sup>1</sup>	18.4	18.9	19.0	21.1	20.4	19.7	19.4	19.0	19.4	18.8	19.6
<b>Gender</b>											
Female											
Number	626	662	678	708	761	778	821	852	869	915	953
Percent	50.2%	51.2%	50.4%	50.2%	51.1%	51.4%	52.4%	53.6%	54.0%	54.2%	54.8%
AAADR <sup>1</sup>	31.4	32.3	32.3	32.8	34.3	34.1	35.0	35.3	35.0	35.9	36.4
Male											
Number	621	631	668	701	729	735	746	739	741	772	786
Percent	49.8%	48.8%	49.6%	49.8%	48.9%	48.6%	47.6%	46.4%	46.0%	45.8%	45.2%
AAADR <sup>1</sup>	48.0	47.5	48.7	49.2	49.0	47.4	46.4	44.1	42.6	43.2	42.7
<b>Age</b>											
<25											
Number	2	1	0	0	0	1	1	1	1	1	0
Rate <sup>2</sup>	---	---	---	---	---	---	---	---	---	---	---
25-44											
Number	8	7	6	7	5	7	8	11	14	14	12
Rate <sup>2</sup>	---	---	---	---	---	---	---	---	---	---	---
45-54											
Number	18	19	24	22	32	32	31	37	39	36	38
Rate <sup>2</sup>	---	---	5.3	4.7	6.6	6.3	5.9	6.8	7.0	6.2	6.4
55-64											
Number	142	132	127	129	145	142	149	166	166	156	147
Rate <sup>2</sup>	46.3	42.4	39.9	39.5	43.0	40.8	41.1	43.8	41.8	37.5	33.6
65-74											
Number	397	407	407	429	421	420	405	402	394	413	425
Rate <sup>2</sup>	149.1	151.0	149.3	155.9	151.1	149.0	142.3	139.8	135.4	140.5	142.8
75+											
Number	680	727	782	822	887	911	973	974	996	1067	1117
Rate <sup>2</sup>	379.1	388.2	400.5	404.0	417.7	412.4	424.2	408.8	402.9	417.3	422.1

**Notes:**

1. Age-Adjusted Death Rate per 100,000, adjusted to 2000 U.S. Standard Population.
2. Age-specific rate per 100,000 population. "----" indicates rate does not meet standards of reliability or precision; based on fewer than 20 deaths in the numerator.

**Source:**

Delaware Health Statistics Center

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1. Mannino DM, Homa DM, Akinbami L, Ford ES, Redd SC. **Chronic Obstructive Pulmonary Disease Surveillance — United States, 1971-2000.** MMWR 2002;51;1-16.
2. Brown DW, Croft JB, Greenlund KJ, Giles WH. **Deaths from Chronic Obstructive Pulmonary Disease — United States, 2000-2005.** MMWR 2008;57;1229-1232.
3. U.S. Department of Health and Human Services. National Institutes of Health. (November 13, 2008). **New Survey Suggests Growing Awareness of COPD, Nation's Fourth Leading Killer.** NIH News Release. Accessed 11/18/2008 from <http://www.nih.gov/news/health/nov2008/nhlbi-13.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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