

OHIO POPULATION NEWS: Mortality in Ohio

There are several factors which influence the size and shape of a population—the number of births, how many people move in or move out, and the number of deaths. This brief is to examine the patterns and trends of mortality in Ohio, as well as life expectancy, gender and racial differences in death rates, and the number of years of potential life lost.

The death rate for a population can be expressed as the number of deaths per 100,000 people for a given year. In 2001, there were 107,560 deaths occurring in the State of Ohio representing a crude death rate of 944.4 per 100,000 people (the age-adjusted rate was 901.8—this eliminates the affects of aging of the population). The age-adjusted death rate for the U.S. overall was lower at 848.5 per 100,000.

Heart disease is the leading cause of death in Ohio accounting for approximately 30% of all deaths in 2001, followed by cancer (23%) and stroke (6%). (Table 1) **Ohio has higher levels of deaths due to heart and respiratory diseases, cancer, and diabetes than does the nation overall.** When ranking states by rate of heart disease related deaths—Ohio ranks 39th out of 50 states. Minnesota ranked first with the lowest rate of heart disease deaths and Mississippi ranked 50th with the highest rate.

TABLE 1: Number of Deaths and Age-Adjusted Death Rate for Selected Leading Causes of Death: Ohio 2001

Cause of death	Total deaths	Age-adjusted death rate ¹	National rate ¹
Heart disease	32,453	271.0	247.8
Cancer	24,804	207.8	196.0
Stroke	6,891	57.4	57.9
Chronic lower respiratory disease	5,881	49.0	43.7
Accidents	3,857	33.3	35.7
Diabetes	3,750	31.4	25.3
Influenza/pneumonia	2,401	20.0	22.0
Alzheimer's disease	2,367	19.7	19.1
kidney diseases	1,912	16.0	14.0
Motor vehicle accidents ⁴	1,470	12.9	15.3
Suicide	1,219	10.6	10.7
Firearm injury ⁵	1,029	9.0	10.3
Chronic liver disease/cirrhosis ³	1,027	8.7	9.5
Homicide ³	524	4.7	7.1
HIV (AIDS) ³	207	1.9	5.0

¹Number of deaths per 100,000 population.

³Not ranked as one of the 10 leading causes of death for the total U.S. population, but a leading cause of death in certain demographic groups.

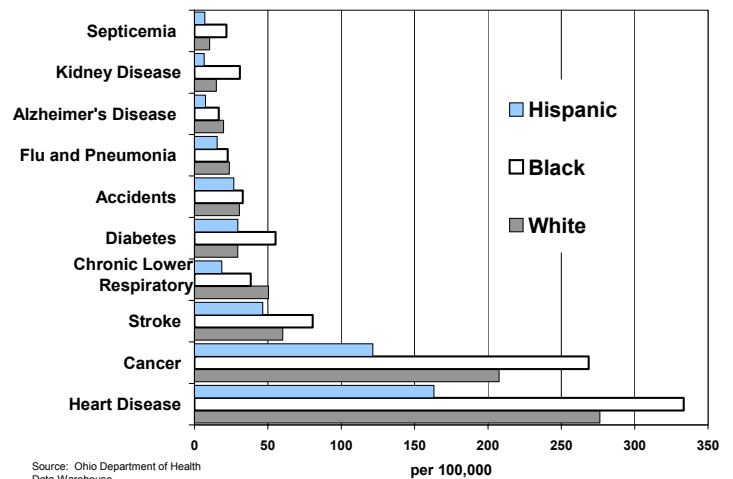
⁴Not ranked as one of the 10 leading causes of death; a subcategory of "Accidents."

⁵Not ranked as one of the 10 leading

Source: www.cdc.gov/nchs/releases/03facts/mortalitytables.htm#Ohio

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Figure 1: Age Adjusted Death Rates by Leading Cause and Race/Ethnicity, Ohio 1999-2001.



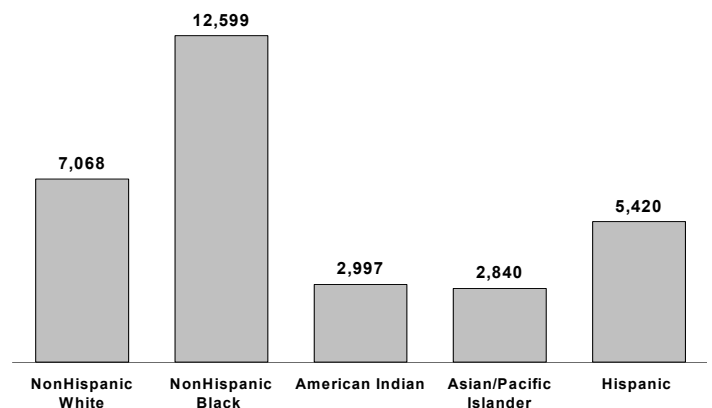
Source: Ohio Department of Health Data Warehouse

Differences between the mortality patterns of black and white populations persist. The age-adjusted death rate for black Ohioans for all causes of death was 1,379.3 per 100,000 for males and 941.4 for females. In contrast, white Ohio males had a death rate of 1,062.3 and females had a rate of 750.9. **The age-adjusted death rate for black Ohioans is 1.3 times that of whites.**

Years of Potential Life Lost

One way to compare the relative health status across populations is to examine **premature mortality**. The Years of Potential Life Lost (YPLL) measures the loss of years of productive life due to death before a specified age (usually age 75). In other words, an individual who dies at age 40 would account for 35 years of lost life. The national average of YPLL based on 2000 data is 7,578 years lost per 100,000 in population. For Ohio, the number is slightly higher—7,654 per one hundred thousand.

Figure 2: Years of Potential Life Lost After Age 75 by Race/Ethnicity, Ohio 1998-2000



Source: United Health Foundation <http://www.unitedhealthfoundation.org>

Infant and Child Mortality

Recent estimates place Ohio's Infant Mortality Rate (IMR) above the national average—7.8 compared to 6.8—that is, in Ohio, out of 1,000 live births almost 8 died before reaching their first birthday. There are distinct and persistent differences between racial groups—the **infant mortality rate for black children is over twice that of whites**—15.1 compared to 6.6. The comparable national figures for the same time period (2001) are 5.7 for whites and 14.0 for blacks respectively. The leading cause of infant death in Ohio was congenital malformations (20.0 percent). This was followed by low birth weight (16.0 percent) and sudden infant death syndrome accounting for just over eight percent of all infant deaths. **For children ages 1 to 14, the leading cause of death in Ohio (1999-2001) was accidents (63 percent),** followed by cancers (21 percent).

Health Risk Factors of Ohioans (2001)

27.6

The percentage of the Ohio population who smoke cigarettes. Ten years ago this value was less—22.9. Only 6 other states in the US have higher rates.

26.5

The percent of the adult population with high blood pressure.

32.6

The percent of the adult population with high blood cholesterol count.

7.2

The percent of the adult population with diabetes. The national average is 6.5 percent.

61.9

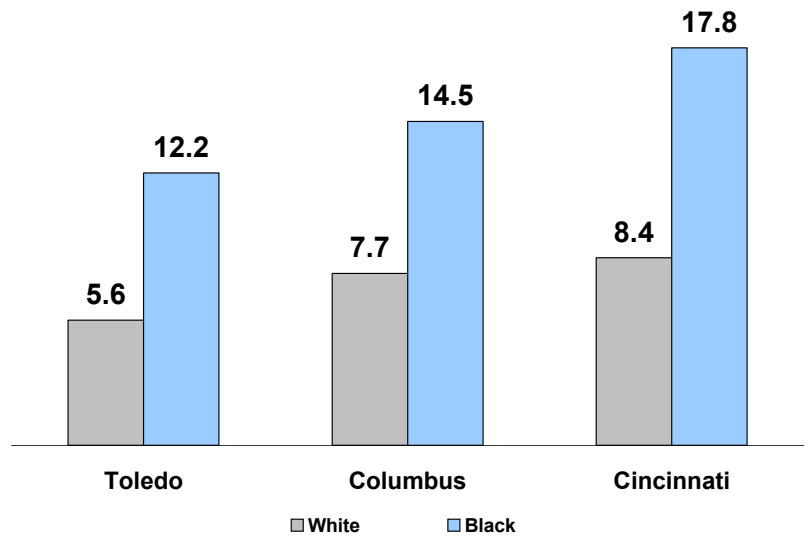
The percent of the adult population that are overweight or obese (Body Mass Index greater than or equal to 25.0)

83.0

The percentage of the population that had one or more of these factors.

Source: http://www.cdc.gov/cvh/state_program/oh.htm

Figure 3: Infant Mortality Rate* 1995-1998 for Select Ohio Cities by Race



*Number of deaths per 1,000 live births

Source: Racial and Ethnic Disparities in Infant Mortality Rates—60 Largest Cities 1995-98. MMWR 51(15):329-332, 343

While the infant mortality rate has substantially declined in the last few decades, (falling from 20.0 per thousand thirty years ago to current levels of just under 7), many of the largest cities in the U.S. continue to have high levels of infant deaths.

Life Expectancy

The concept of life expectancy is often used to measure the health of a population. Life expectancy can be thought of as the average amount of years remaining to a person at birth (or any age) based on a specific set of death rates. **The current life expectancy at birth for the US population is 77.2 years**—fifty years ago the life expectancy at birth was 68.2. There are variations across both gender and race. In 2001, white female life expectancy was 80.2 years compared to white men at 75.0, black men at 68.6 and black women at 75.5 years. When ranking the states according to life expectancy from highest to lowest, Ohio ranks 29th just below the US average. **Top three: Hawaii, Minnesota and Utah. Bottom three: Louisiana, Mississippi, and District of Columbia.**

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