Wisconsin Death Report: Heart Disease

2017

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Wisconsin Department of Health Services
Division of Public Health
Office of Health Informatics

INTRODUCTION

This report presents information about deaths that occurred in 2017 among Wisconsin residents. Information from previous years (2008 onward) is also presented to show changes over time. This report includes information on the number and rate of deaths, demographic characteristics of the decedents, such as age and race/ethnicity, characteristics of deaths by geographic location, and disposition of bodies.

Mortality data presented in this report are primarily based on the underlying cause of death, which the World Health Organization defines as "the disease or injury that initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury."[1]

County and state rates in the report are age-adjusted rates per 100,000 or 10,000 population using the 2000 U.S. standard population.

Beginning September 1, 2013, Wisconsin began collecting data using a new web-based data entry system for funeral directors, medical examiners, coroners, and certifying physicians. The new system adopted the 2003 U.S. Standard Certificate of Death. Many changes have been made to the data collection process; some information is no longer collected, new information has been added, and some data definitions have been altered. Please refer to the technical notes for a more complete description of these changes.

All data refer to Wisconsin residents unless otherwise noted. Also, the information presented is based on the place of residence, which means that events have been assigned to the area where the person lived (usually legal residence) regardless of where the events occurred.

The cancer mortality data in this report are classified differently from what appears in publications from the Wisconsin Cancer Reporting System (WCRS) (https://www.dhs.wisconsin.gov/wcrs/data-pubs.htm) and its public use interactive query systems: WISH Query on Cancer Mortality (https://wish.wisconsin.gov/cancer/mortality.htm) and Cancer-Rates.Info (https://www.cancer-rates.info/wi/). WCRS follows the National Cancer Institute's definition of mortality cancer site groupings which are defined consistently over time to facilitate reporting of long-term cancer mortality trends (https://seer.cancer.gov/codrecode/1969_d03012018/index.html). Due to this different site group classification used by WCRS, the numbers in this report may not match the numbers found in the WCRS cancer-specific query modules or publications.

Note: Due to differences in cutoff dates and out-of-state reporting, U.S. rates for 2017 were from provisional data available from the National Center for Health Statistics. Provisional rate estimates were not available separated by sex.

Office of Health Informatics
Division of Public Health
1 W. Wilson Street, Rm 118
Madison, WI 53703
Telephone: 608-266-0377
Email: dhshealthstats@dhs.wisconsin.gov

1 http://www.who.int/topics/mortality/en/

HEART DISEASE MORTALITY

In 2017, heart disease was the second leading cause of death overall, and the leading cause among the population aged 65 and older. The Wisconsin mortality rate remains lower than the U.S. rate (157.3 per 100,000 compared to 165.1). The Wisconsin age-adjusted heart disease mortality continues to decline, going down about 7 percent in the last 10 years. This is a slower decline than seen in the U.S. as a whole, which experienced a 14 percent decrease in heart disease mortality.

Figure 8. Age-adjusted rate of heart disease deaths for the United States and Wisconsin

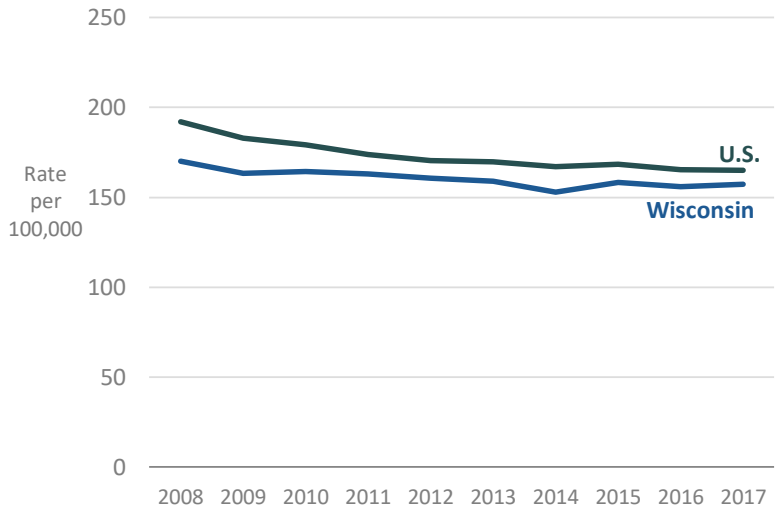


Table 3. Number of heart disease deaths and age-adjusted rates by demographics, 2017

Demographics	Total deaths	Percent of deaths	Crude rate per 100,000 population	Age-adjusted rate per 100,000 population
Age				
Less than 5	<5	-	-	N/A
5 to 17	<5	-	-	N/A
18 to 25	20	0.2%	3.6	N/A
26 to 64	1,916	16.2%	64.0	N/A
65 and older	9,872	83.6%	1,037.2	N/A
Sex				
Female	6,441	45.5%	185.0	119.6
Male	5,374	54.5%	224.1	204.5
Race/Ethnicity				
Non-Hispanic White	10,998	93.2%	231.6	156.5
Non-Hispanic African American	566	4.8%	141.7	224.1
Non-Hispanic Native American	58	0.5%	101.5	121.0
Non-Hispanic Asian/Pacific Islander	73	0.6%	41.8	87.2
Hispanic	111	0.9%	27.9	76.0
DHS Region				
Northeastern	2,726	23.1%	218.8	159.2
Northern	1,222	10.3%	250.3	162.9
Southeastern	4,245	35.9%	200.1	164.4
Southern	2,039	17.3%	179.7	144.3
Western	1,581	13.4%	200.4	152.3

HEART DISEASE MORTALITY

The leading cause of heart disease death is ischemic heart disease (blockage of coronary vessels followed by myocardial infarction) followed by hypertensive heart disease (effect of high blood pressure). Ischemic heart disease constituted 46.8 percent of all heart disease deaths for females, while it represented 62.8 percent of all heart disease deaths for males. Other types of heart disease represented 28.1 percent of all heart disease deaths in males and 39.5 percent in females (Figure 9a). The total number of hypertensive deaths continues to increase, and in the last year increased 5 percent (from 791 to 831). In the last 10 years, hypertensive deaths have increased 70 percent, increasing more sharply for men (from 200 deaths in 2008 to 393 in 2017) than for women (from 289 in 2008 to 441 in 2017).

Figure 9a. Percent of heart disease deaths by type and sex, 2017

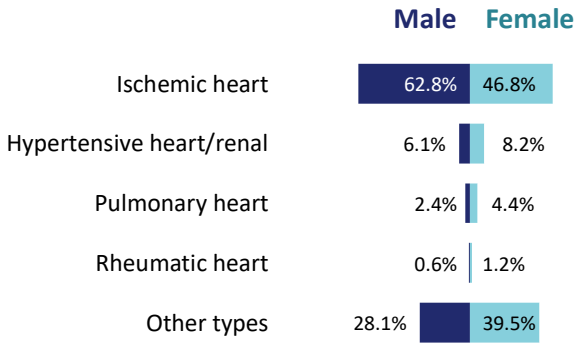
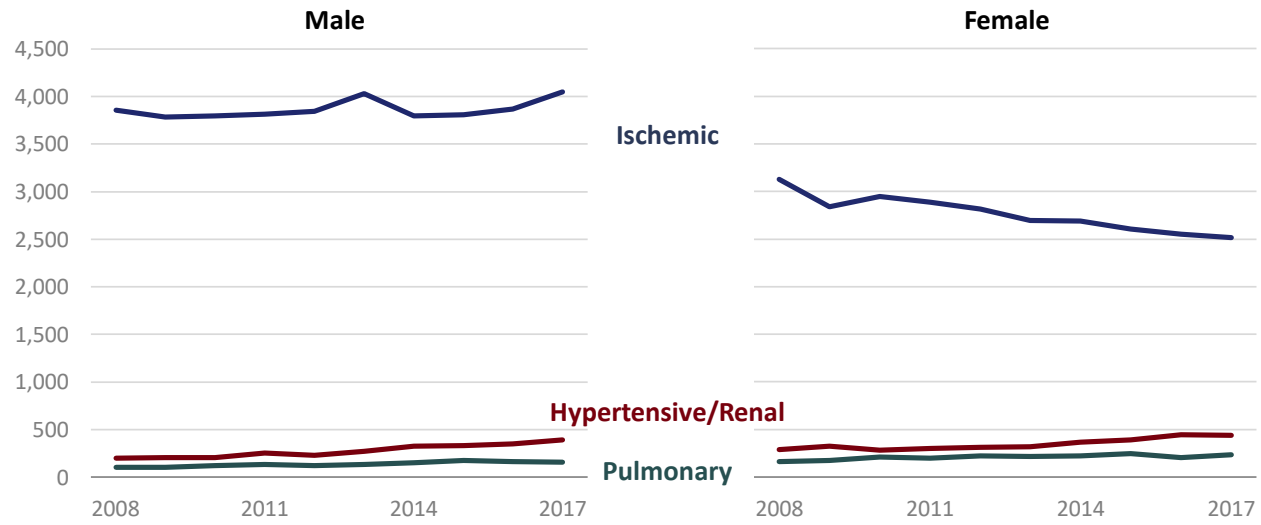


Table 4. Number of heart disease deaths and percent distribution by heart disease type and sex, 2017

Heart disease types	Male	Female	Total deaths
Ischemic heart	4,048	2,513	6,561
Hypertensive heart/renal	393	441	834
Pulmonary heart	154	236	390
Rheumatic heart	36	63	99
Other types	1,810	2,121	3,931
Total	**6,441**	**5,374**	**11,815**

Ischemic heart disease deaths in males decreased from 2003 to 2007, but have since increased, with a 7 percent increase in the last three years. Conversely, in the last 10 years, ischemic heart disease has decreased almost 20 percent for females, with a 6 percent decrease in just the last three years.

Figure 9b. Number of heart disease deaths, by type and sex



HEART DISEASE MORTALITY

The highest age-adjusted heart disease mortality rates were in Oconto (22.3 per 10,000 people), Green Lake (21.4 per 10,000 people), and Vilas (21.0 per 10,000 people) counties. The three counties with the lowest heart disease mortality rates were St. Croix, Rusk, and Kewaunee (Map 2). Overall, the southeastern region has the highest age-adjusted rate of heart disease at 16.4 per 10,000.

Map 2. Age-adjusted mortality rate (per 10,000) for heart disease by county, 2017