

Leading Causes of Death

DESCRIPTION

There are over 40,000 deaths in Minnesota each year. While death is inevitable, concerns arise when preventable causes of death increase or new causes of death emerge. There were 4,106 deaths in Ramsey County during 2016. More than half of these were due to the top five causes of death; cancer, heart disease, unintentional injury, chronic lower respiratory disease, and Alzheimer's disease.¹ The leading causes of death for young people are quite different. Birth conditions, congenital anomalies, unintentional injury, and suicide are leading causes of death for those in younger age groups.²

In 1993, researchers offered a new conceptualization of cause-of-death classification, one that acknowledged and quantified the contributions of individual behavior.³ The most prominent contributor to mortality in 1990 was tobacco, followed by diet and activity patterns. A decade later, updated findings using data from 2000 showed a growing contribution of poor diet and physical inactivity.⁴ More recently, Galea et.al. argued for a broader conceptualization of the causes of mortality and estimated the number of deaths in the U.S. attributable to low education, individual poverty, area poverty, low social support, racial segregation and income inequality. They found that deaths attributable to social factors is comparable to the number attributed to disease progression and individual behaviors.⁵

HOW WE ARE DOING

In 2016 in Minnesota, the age-adjusted mortality rate was 647.7 per 100,000 residents, totaling 43,050 deaths, of which 38.4 percent were premature (under 75 years of age).¹ For the top three leading causes of deaths to Minnesotans between 2012 and 2016, the cancer mortality rate was 152.8 per 100,000, 116.6 for heart disease and 41.5 for unintentional injury. In Ramsey County, the mortality rate for all causes of death was 677.6 per 100,000 residents, totaling 4,106 lives lost, of which 41.2 percent were premature. For the top three leading causes of death in Ramsey County between 2012 and 2016, the cancer mortality rate was 155.0 per 100,000 population, 110.8 for heart disease, and 41.8 for unintentional injury.¹

DISPARITIES

Mortality rates and leading causes of death vary greatly by age, race/ethnicity, and geography. Race disparities are evident when comparing age-adjusted death rates in Ramsey County. Death rates in Ramsey County for cancer, heart disease and unintentional injury are much higher for African-Americans.⁶

RISK FACTORS

Poor diet and physical inactivity along with tobacco use are the top individual behavior contributors to preventable deaths in the U.S.⁷ Education less than high school, poverty, low social support, income inequality and racial segregation are the social factors associated with increase in the risk of death.⁵

Information to note

- In 2016 there were 4,106 deaths in Ramsey County, a rate of 677.6 per 100,000 residents, which was higher than the State rate of 647.7.
- Death rates in Ramsey County for cancer, heart disease and unintentional injury, are much higher for African-Americans.

¹ 2017 County Health Tables. Minnesota Department of Health. <http://www.health.state.mn.us/divs/chs/genstats/countytables/profiles2017/index.html>. Accessed June 2018.

² Minnesota Center for Health Statistics. Minnesota Department of Health. <http://www.health.state.mn.us/divs/chs/>. Accessed June 2018.

³ McGinnis J, Foege W. Actual causes of death in the United States. *JAMA*. 1993;270(18):2207-2212. <https://jamanetwork.com/journals/jama/article-abstract/409171>. Accessed June 2018.

⁴ Mokdad A, Marks J, Stroup D, Gerberding J. Actual causes of death in the United States, 2000. *JAMA*. 2004;291(10):1238-1245.

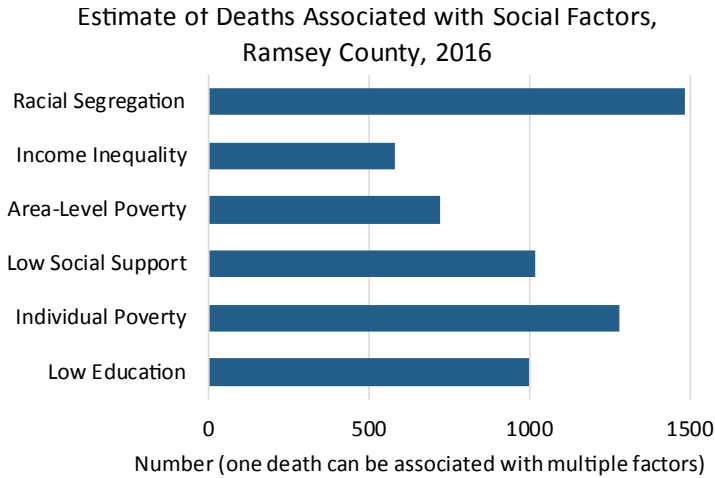
⁵ Galea S, Tracy M, Hoggatt K, DiMaggio C, Karpati A. Estimated deaths attributable to social factors in the United States. *Amer J Pub Health*. 2011;101(8):1456-1465. <https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2010.300086>. Accessed June 2018.

⁶ Vital Statistics Interactive Queries. Minnesota Department of Health. <https://mhsq.web.health.state.mn.us/frontPage.jsp>. Accessed June 2018.

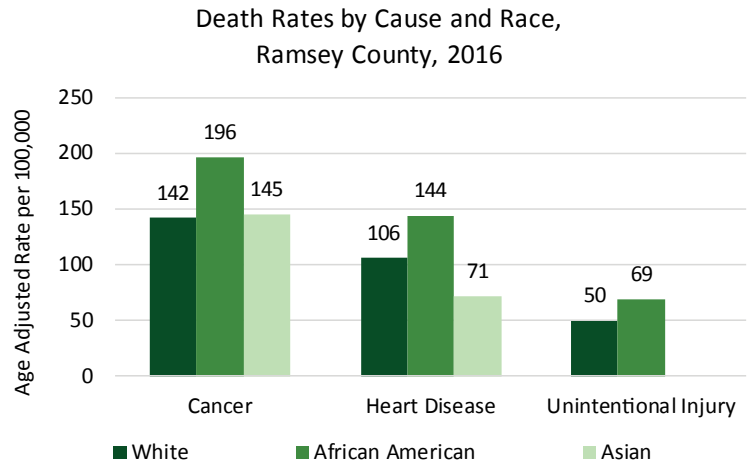
⁷ Murray, C. The State of US Health, 1990-2010. Burden of Diseases, Injuries, and Risk Factors. *JAMA*. 2013. <http://jamanetwork.com/journals/jama/fullarticle/1710486#figure-table-tab>. Published August 14, 2013. Accessed July 27, 2017.

WHAT RAMSEY COUNTY GOVERNMENT IS DOING

Ramsey County provides funding to five Ramsey County community clinics to help off-set the cost of services, including primary care, which are provided to uninsured and underinsured clients. These community clinics are located in the City of Saint Paul, serving a racially diverse population. Saint Paul – Ramsey County Public Health maintains a disease surveillance role, monitoring the leading causes of death in Ramsey County.



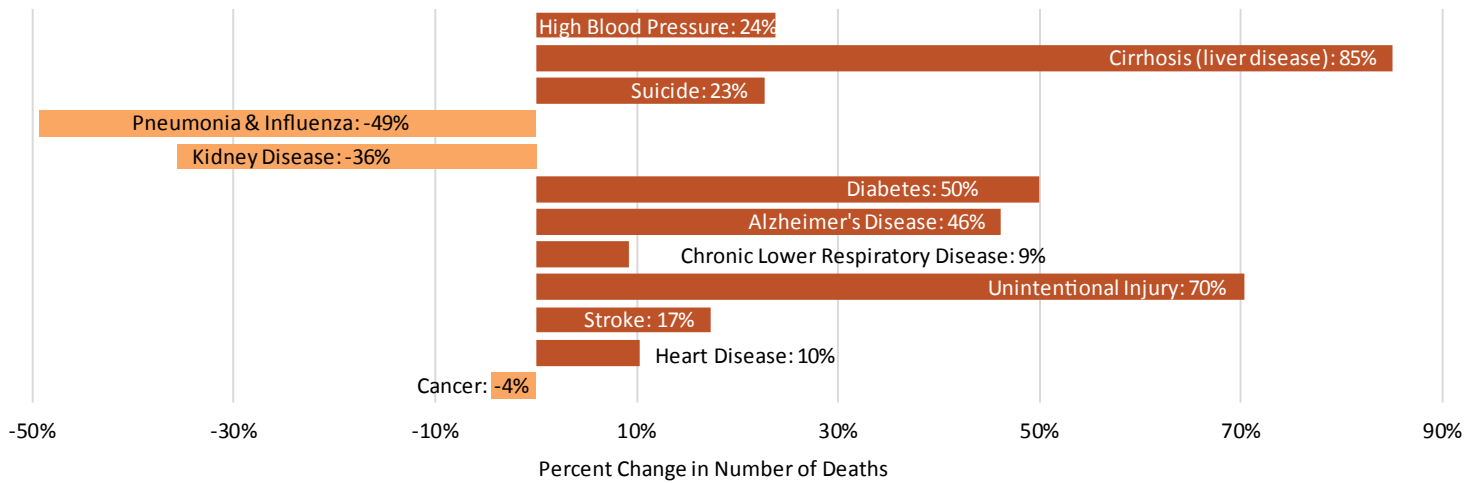
Source: Am J Public Health.⁸



*Not enough data to calculate rate.

Source: Minnesota Department of Health.⁹

Change in Causes of Death, Ramsey County, 2010-2016



Source: Minnesota Department of Health.¹⁰

⁸ Saint Paul-Ramsey County Public Health analysis based on Galea T, Hoggatt K, Dimaggio C, Karpati A. Estimated deaths attributable to social factors in the United States. Am J Public Health. 2011;101(8):1456-65.

⁹ Vital Statistics Interactive Queries. Minnesota Department of Health Website. <https://mhsq.web.health.state.mn.us/frontPage.jsp>. Accessed June 2018.

¹⁰ Minnesota Department of Health. Minnesota County Health Tables. <http://www.health.state.mn.us/divs/chs/countytables/index.htm>. Accessed April 27, 2018.