

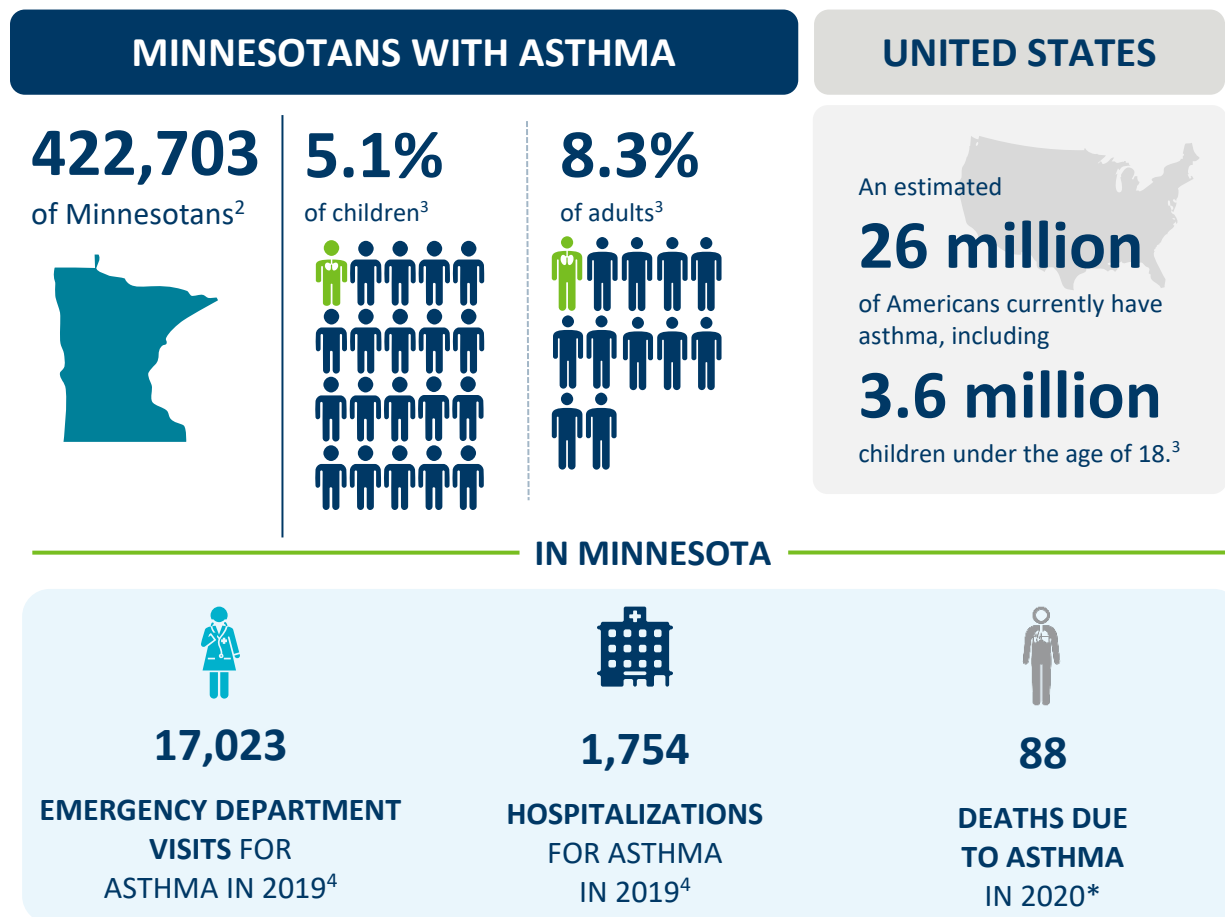
Asthma in Minnesota

Asthma is a chronic disease of the airways that makes breathing difficult. Asthma causes inflammation and a narrowing of the airways, along with over-production of mucus in the lungs. During normal breathing, air flows freely in and out of the lungs. However, during an asthma attack or asthma episode, the lining of the airways swells even more, muscles around the airways tighten, and mucus clogs the tiny airways, making it difficult to breathe.

Asthma symptoms can include wheezing, cough (especially at night), shortness of breath, and chest tightness, but not everyone experiences the same symptoms. Asthma symptoms can range from mild to life threatening. There is currently no cure for asthma, but it can be managed with appropriate medications and by avoiding asthma triggers.

Asthma Impact

Asthma is one of the most common chronic health conditions in the United States. Asthma is also costly. In 2012, Minnesotans spend an estimated \$6.7 billion on health care for asthma. Lost work days cost an additional \$54.3 million.¹



*50% of those who died were aged 65 or older. There were no deaths among residents under age 35.⁵

Asthma Disparities in Minnesota

Asthma disparities are driven by a variety of complex factors including structural, social, and political determinants of health such as racism, discrimination, education, access to healthcare, and environment.

The likelihood of having asthma differs by race/ethnicity.

African American adults are **more likely** than white adults to have asthma; however, since 2013 differences between African Americans and whites have been trending downward. In three of the four most recent years for which data are available, a higher percentage of American Indians reported having asthma than any other racial or ethnic group.⁵

Data from a Minnesota study of middle/high school students show that American Indian and African American students are **more likely** to report having been diagnosed with asthma than other students.⁶

There are significant differences in the rates of hospitalizations and emergency department (ED) visits for asthma by region of the state.

Asthma hospitalization rates for children living in the Twin Cities metropolitan area are almost **75% higher** than for children living in Greater Minnesota.⁴

Rates of ED visits for asthma for children living in the Twin Cities metropolitan area are nearly **40% higher** than for children living in Greater Minnesota.⁴

In certain ZIP codes in the city of Minneapolis, hospitalization rates for asthma are **three to five times** higher than the statewide rate.⁴

There are also disparities in rates of death due to asthma.

Rates of asthma death among Blacks are **higher** than among other racial groups. Rates among Blacks have declined in recent years, but for the period 2016-2020, were still **1.7 times** higher than among whites.⁷

Among those who were under age 65 when they died, the death rate for African Americans due to asthma was **three times** higher than it was for whites.⁷

Asthma death rates among Asians, which used to be lower than among whites, is now **higher**.⁷

References

¹ Health Economics Program. Chronic Conditions in Minnesota: New Estimates of Prevalence, Cost and Geographic Variation for Insured Minnesotans, 2012. <https://www.health.state.mn.us/data/economics/index.html>

² Minnesota State Demographic Center, 2018. <https://mn.gov/admin/demography/data-by-topic/children-families/>

³ Minnesota Behavioral Risk Factor Surveillance System, 2018. https://www.cdc.gov/asthma/most_recent_data_states.htm

⁴ Minnesota Public Health Data Access, 2019. <https://data.web.health.state.mn.us/web/mndata/asthma>

⁵Centers for Disease Control and Prevention, CDC WONDER Online Database, <https://wonder.cdc.gov/>

⁶Minnesota Student Survey, 2019. <https://education.mn.gov/mde/dse/health/mss/>

⁷ Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, CDC WONDER Online Database, Underlying cause of Health, 1999-2020, <https://wonder.cdc.gov/>

More asthma data is available on the [MN Public Health Data Access Portal](#).