DEPARTMENT OF HEALTH

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.

Common asthma symptoms can include wheezing, coughing (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 is common in Minnesota

Asthma is one of the most common chronic health conditions in the United States and is an increasing concern because of its rising incidence rates, especially in children.



*50% of those who died were aged 65 or older. There were 10 deaths among residents under age 45.5

Asthma emergency department visits and hospitalizations in Minnesota for 2021 were higher than 2020 (10,990 and 1,034 respectively).

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 health care, and environment.

The likelihood of having asthma differs by race/ethnicity.

American Indian, Black, and Pacific Islander middle/high school students are **more likely** than other students to report having been diagnosed with asthma.⁶

American Indian and Black adults are **more likely** than white adults to have asthma, but the difference between Blacks and whites appears to be decreasing.¹

For middle/high school students, differences in asthma prevalence are greater between students of the same race/ethnicity but different countries of origin than between students of different races/ ethnicities and same countries of origin.⁶

Rates of asthma-related hospitalizations and emergency department (ED) visits differ by region.

In 2021, hospitalization rates for children in the Twin Cities metro area were nearly **1.5 times higher** than for children living in Greater Minnesota and ED visit rates were 60% higher than for children in Greater Minnesota.³

During 2017-2021, asthma ED visits for Twin Cities metro children were **1.4 times higher** than the state average. Rates in eight zip codes were more than **4 times** the state average.³

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

During 2018-2021, the age-adjusted rate of death from asthma was **3 times higher** for Blacks/African Americans than for whites, and more than **3 times higher** for Asians than for whites.⁷

References

¹ <u>Minnesota Behavioral Risk Factor Surveillance System, 2021 (https://www.cdc.gov/asthma/most_recent_data_states.htm)</u>

- ² United States Federal Census Quick Facts, 2023 (https://www.census.gov/quickfacts/fact/table/US/PST045223)
- ³ Minnesota Department of Health, Environmental Impacts Analysis Unit, 2023
- 4 Minnesota Student Survey, 2022 (https://education.mn.gov/mde/dse/health/mss/)

⁵ Centers for Disease Control and Prevention, CDC WONDER Online Database, 2021 (https://wonder.cdc.gov/)

⁶ <u>Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, CDC WONDER Online Database,</u> <u>Underlying cause of Heath, 1999-2020 (https://wonder.cdc.gov/)</u>

⁷ Age-adjusted rates from the Centers for Disease Control and Prevention (CDC), National Center for Health (https:// wonder.cdc.gov/controller/datarequest/D158)

More asthma data is available on the MN Public Health Data Access Portal (https://data.web.health.state.mn.us/asthma)

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