

# 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.

## **MINNESOTANS WITH ASTHMA**

428,370

of Minnesotans<sup>2</sup>



4.2%



8.5%



# **UNITED STATES**

An estimated

25 million

of Americans currently have asthma, including

4.2 million

children under the age of 18.1

#### **IN MINNESOTA**



10,990
EMERGENCY
DEPARTMENT VISITS FOR
ASTHMA IN 2020<sup>3</sup>



1,034
HOSPITALIZATIONS
FOR ASTHMA
IN 2020<sup>3</sup>



88
DEATHS DUE
TO ASTHMA

IN 2020\*

Asthma emergency department visits and hospitalizations in Minnesota for 2020 were notably lower than 2019 (17,023 and 1,754 respectively).

<sup>\*50%</sup> of those who died were aged 65 or older. Eight of those who died were under age 35.4

# **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.

American Indian and African American middle/high school students are **more likely** than other students to have been diagnosed with asthma.<sup>5</sup>

Multi-racial adults are more likely than other adults to have been diagnosed with asthma.<sup>1</sup>

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

Rates of both asthma emergency department visits and asthma hospitalizations for children living in the Twin Cities metropolitan area are nearly **twice as high** as those for children living in Greater Minnesota.<sup>3</sup>

Emergency department visits in counties in Greater Minnesota ranged up to **two times higher** than the state average.

During the period 2015 and 2019, asthma emergency visits for children living in Minneapolis ZIP codes ranged up to nearly **10 times higher** than for the average state of Minnesota.<sup>6</sup>

### Minnesota deaths due to asthma are increasing.

Deaths from asthma have been increasing since 2017. During this period, annual deaths from asthma increased by 60%.<sup>6</sup>

Between 2016 and 2020, the age adjusted death rate for whites was 1 death per 100,000 people. The age adjusted rate for both Blacks and Asians was nearly three times higher.

# References

- <sup>1</sup> Minnesota Behavioral Risk Factor Surveillance System, 2020 (https://www.cdc.gov/asthma/most\_recent\_data\_states.htm)
- <sup>2</sup> <u>United States Federal Census Quick Facts, 2022 (https://www.census.gov/quickfacts/fact/table/US/PST045222)</u>
- <sup>3</sup> Minnesota Public Health Data Access, 2020 (https://data.web.health.state.mn.us/web/mndata/asthma)
- <sup>4</sup> Centers for Disease Control and Prevention, CDC WONDER Online Database

(https://wonder.cdc.gov/)

- <sup>5</sup> Minnesota Student Survey, 2019 (https://education.mn.gov/mde/dse/health/mss/)
- <sup>6</sup> <u>Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, CDC WONDER Online Database, Underlying cause of Heath, 1999-2020 (https://wonder.cdc.gov/)</u>

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

Updated 6/2023 - MDH Asthma Program | 651-201-5909 | health.asthma@state.mn.us | www.health.state.mn.us/asthma