

Asthma in Minnesota

What is Asthma?

Asthma is a chronic disease of the respiratory system characterized by episodes of tightening of the muscles around the airways in the lungs (bronchoconstriction) and swelling of the bronchial tubes (inflammation).

A variety of factors can trigger an asthma attack, including viral infections, allergens (like pollen and dust mites), irritants (like second-hand smoke and air pollution) and other factors (like aspirin and strong emotional expressions).

Who is Affected by Asthma?

Asthma is one of the most common chronic diseases in the United States. Twenty million Americans currently have asthma, including an estimated 6.1 million children under the age of 18.¹ Asthma disproportionately impacts women, children and the poor.

Asthma can range from relatively mild to quite severe and is the third leading cause of hospitalizations in children under 15.² Asthma is associated with missed school days, missed workdays, disrupted sleep and symptoms that interfere with physical activity. It can be fatal. In 2002, asthma accounted for nearly 500,000 hospitalizations and an estimated 2 million emergency room visits across the country.¹

For reasons that are not fully understood, rates of asthma in the United States have been rising rapidly over the past two decades, particularly in children. Between 1980 and 1996, the number of Americans reporting that they had asthma more than doubled.³



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Minnesota Statistics

- One in 10 Minnesota adults age 18 and older report that they have been diagnosed with asthma at some point in their lives.⁴
- 7% of Minnesota adults (approximately 255,000 Minnesotans) report that they currently have asthma.⁴
- A greater percentage of adults living in the Minneapolis-St. Paul metro area report that they have asthma than in Greater Minnesota.⁴
- Women are more likely than men to report that they have asthma.⁴
- Adults with asthma are more likely than those without asthma to:
 - Report their health status as fair or poor
 - Be obese
- Adults who have asthma are just as likely to smoke cigarettes as those who do not have asthma.⁴
- One in 8 students in grades 9-11 in rural Minnesota report having ever been diagnosed with asthma and 9% report that they currently have asthma.⁵
- In 2003, the statewide rate of asthma hospitalizations was 9 admissions per 10,000 residents.⁶
- Rates of hospitalizations and emergency department visits for asthma are highest in:
 - Children less than 5 years old
 - Residents of the Minneapolis-St. Paul metropolitan area.⁶
- In 2002, 91 Minnesotans died of asthma; 66% were 65 and older, 65% were women.⁷

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Costs of Asthma

In 1998, an estimated 247,000 Minnesotans were affected by asthma, at an estimated total cost of \$187 million (includes direct costs of medical care and indirect costs of time lost from work or school).⁸

Asthma Management

Control of asthma is defined as the absence of symptoms and acute episodes, no use of relief medication, no emergency department visits, normal activity level, including exercise, and normal lung function.

Control of asthma can be achieved through the implementation of an effective asthma management program, which includes the following:

- Educate patients to develop a partnership in asthma management, including use of a written asthma action plan.
- Assess and monitor severity by measuring lung function and tracking symptoms.
- Avoid or control factors that cause asthma.
- Establish medication plans for long-term management.
- Establish plans for managing asthma episodes.
- Provide regular follow-up care.

Two types of medications are used to treat asthma:

- Long-term controller medications such as anti-inflammatory agents (inhaled corticosteroids) or leukotriene receptor antagonists can help keep symptoms and episodes from starting.
- Quick relief medications (short-acting bronchodilators) work fast to treat episodes before they occur (as with exercise induced asthma) or relieve symptoms as they happen.

Addressing Asthma in Minnesota

Since 1999, MDH's Asthma Program has:

- Developed a state asthma plan to address the increasing health and economic burden of asthma in Minnesota.
- Collaborated with the American Lung Association of Minnesota to establish the Minnesota Asthma Coalition to provide support for local asthma awareness and prevention efforts throughout the state.
- Established an asthma surveillance system to better understand the scope of asthma in Minnesota.
- Created an online Asthma Action Plan for use by providers.

For More Information

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