

Frequently Asked Questions (FAQs)
Asthma
Wisconsin Environmental Public Health Tracking
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What is asthma?

Asthma is a disease that affects the airways that carry oxygen in and out of the lungs. For people with asthma, the inside of the airways can become irritated and inflamed. Asthma symptoms can come and go quickly, and often occur in response to exposure to specific triggers. Exposure to irritants like tobacco smoke and outdoor air pollutants, or to allergens, can trigger asthma attacks.

What is an asthma attack?

An asthma attack is a health event that makes breathing very difficult. When someone has an asthma attack, it is hard to get enough air into and out of the lungs. Their chest feels tight and they may cough or wheeze. Things in the environment such as house dust mites and tobacco smoke that have this effect are called asthma triggers.

What is the relationship between asthma and the environment?

There are a number of environmental pollutants that can act as asthma triggers. These may be present in indoor and outdoor environments. House dust mites, pet dander, and tobacco smoke are asthma triggers that are commonly found indoors. Common triggers found outdoors include seasonal allergens such as pollen, and pollutants such as ozone and particulate matter.

Ozone is a pollutant that forms in the air as a result of the presence of other pollutants. Ozone pollution is often worst on hot summer days, especially in the afternoons and early evenings. Particulate matter exposure can be high any time of year, even in winter. It can be especially bad when the weather is calm, allowing air pollution to build up. Particulate matter levels can also be high near busy roads or industrial plants, or when there is smoke in the air from wood stoves, fireplaces, or burning vegetation.

What are the symptoms?

Symptoms of asthma include coughing a lot, especially at night, and breathing problems that are worse after physical activity or during a particular time of year. Other symptoms are chest tightness, wheezing, and colds that last more than 10 days.

What are the causes of asthma?

While the root causes of asthma are hard to define, specific exposures are known to cause breathing problems for people with asthma. Besides exposure to triggers such as allergens and irritants, exercise can bring about asthma symptoms. Getting a cold and being stressed can also make asthma symptoms worse..

How is asthma treated?

The best way to avoid asthma attacks is to make sure that people with asthma have their condition under control. Asthma can best be controlled by taking getting proper medications and taking them exactly as your health care provider recommends, and by avoiding triggers that can cause an attack.

Not everyone with asthma should take the same medicines. Some medicines can be inhaled and some can be taken as a pill. Asthma medicines come in two types—quick-relief and long-term control. Quick-relief medicines control the symptoms of an asthma attack. Long-term control medicines help you have fewer and milder attacks, but are not designed to provide relief during an asthma attack.

A health care provider can help make an asthma management plan, which provides a blueprint for how to manage asthma based on symptoms.

How can you prevent asthma?

While the root causes of asthma are hard to define, specific exposures are known to cause breathing problems for people with asthma. Having an asthma management plan and following it closely can help prevent asthma attacks that could lead to visits to the emergency room or the hospital.

Who is at greatest risk for asthma?

People can get asthma at any age. Asthma affects all races, ages and genders. More boys have asthma than girls, but in adulthood, more women have asthma than men.

Although asthma affects people of all ages, it often starts in childhood and is more common in children than adults.

How does WI EPHT measure asthma?

The WI EPHT website includes the following information about asthma:

- Annual number of asthma hospitalizations and emergency department visits, by age, gender, race/ethnicity, and geography
- Monthly average, maximum, and minimum daily number of asthma hospital admissions and emergency department visits
- Daily number of asthma hospital admissions and emergency department visits
- Annual unadjusted (crude) rate for asthma hospitalizations and emergency department visits, for all ages, by gender, race/ethnicity, and geography
- Annual age-specific rates of asthma hospitalizations and emergency department visits by gender, race/ethnicity, and geography
- Annual age-adjusted rate for asthma hospitalizations and emergency department visits for all ages, by gender, race/ethnicity, and geography)

Why are data about hospitalizations and emergency department visits important for tracking asthma?

The WI EPHT website uses these data to calculate asthma-related public health indicators. There are important limitations to these data that should be considered when they are interpreted; these are described below.

What are the benefits of tracking asthma?

By tracking asthma hospitalizations and emergency department visits, several questions can be better answered:

- How many hospitalizations and emergency department visits for asthma occur in every month?
- Is there a seasonal or temporal trend of asthma hospitalizations and emergency department visits?
- What is the distribution of asthma hospitalizations and emergency department visits by place of residence?
- How do hospitalizations and emergency department visits for asthma differ between geographic areas (for example, zip code, county, state, region)?
- Are there disparities in asthma hospitalizations and emergency department utilization by factors such as age, race/ethnicity, gender, education, and/or income?
- Which populations are in need of targeted interventions?

- When asthma data are linked with environmental variables, do the linked measures identify environmental relationships warranting further investigation or environmental public health action?

Are there limitations on interpreting hospitalization and emergency department data?

Below are the limitations to consider when interpreting the hospitalization and emergency department data on asthma on the website.

- Because these data are based on hospital admissions and emergency department visits, some people who experience heart attack symptoms are not included, including those who do not receive medical care, those whose care does not result in hospitalization, and heart attack victims who die in settings such as ambulances, nursing homes, or at home.
- These data do not include hospitalizations and emergency department visits among residents of Wisconsin in facilities in other states (such as those that border Wisconsin).
- These data do not include inpatient admissions or emergency department visits at hospitals owned by the federal government, such as Veterans Administration hospitals.
- Differences in rates by time or area may reflect differences or changes in diagnostic techniques and criteria and in the coding of asthma.
- Reporting rates at the state and/or county level will not show the true asthma burden at a more local level (i.e. neighborhood).
- Differences in rates by area may be due to different sociodemographic characteristics and associated behaviors.
- When comparing rates across geographic areas, a variety of non-environmental factors, such as access to medical care and diet, can impact the likelihood of persons hospitalized for asthma.

How can tracking asthma improve public health?

The development of standardized analytic methods for asthma hospital admissions and emergency department visits among residents in each state will inform multiple users at the national, state, and local levels. These measures will allow the monitoring of trends over time, identify high risk groups, inform prevention, evaluation and program planning efforts.

Where can I find out more about asthma?

Additional information about asthma can be found at the following websites:

<http://dhs.wisconsin.gov/eh/asthma>

<http://www.chawisconsin.org/asthma.htm>

<http://www.cdc.gov/asthma/>

<http://www.epa.gov/iaq/asthma/about.html>

<http://www.nhlbi.nih.gov/>

<http://www.lungusa.org/>