DEPARTMENT OF HEALTH

Blastomycosis in Minnesota

What is blastomycosis?

Blastomycosis is a rare fungal infection that affects human and animals, and is caused by *Blastomyces dermatitidis* or *B. gilchristii*. These fungi can be found in moist soils, particularly in wooded areas and along waterways. In North America, blastomycosis occurs primarily in areas surrounding the Great Lakes, the Mississippi and Ohio River valleys, and the St. Lawrence River. In Minnesota, blastomycosis is most common in northern and northeastern counties and along the St. Croix River, but can occur throughout the state.

Who can get blastomycosis?

People and animals such as dogs and cats can get blastomycosis. From 2014 to 2018, an average of 41 people and 127 pets each year were diagnosed with blastomycosis in Minnesota.

How does a blastomycosis infection occur?

Blastomycosis is usually caused by breathing in airborne fungal spores from soil where the fungus in growing. When spores are inhaled, they settle in the lungs causing an infection, which can sometimes spread to other parts of the body.

Very rarely, a localized skin infection can occur if the fungus gets into a cut or puncture wound.

Blastomycosis is not spread person-toperson or animal-to-person.

What are the symptoms?

In people, common symptoms include:

- Cough, or cough with blood
- Fever
- Shortness of breath
- Chills and/or night sweats
- Fatigue
- Weight loss and poor appetite

Less common symptoms may include chest, back, joint or bone pain and skin sores that don't heal. Many patients are first diagnosed with bacterial pneumonia because the symptoms are similar.

In animals, common symptoms include:

- Fever
- Cough
- Difficulty breathing
- Weight loss
- Skin lesions

Animals are more likely than people to have an infection in the eyes.

What should I do if a family member or pet has these symptoms?

See your health care provider or veterinarian as soon as symptoms appear. Let them know if you have been to an area where blastomycosis is common. Severe infections can usually be prevented through early diagnosis and treatment. Human and Animal Blastomycosis Cases in Minnesota Counties, 1999–2018



This map shows where humans and animals were most likely exposed to the fungus. Exposures are most common in north and northeastern counties, but can occur statewide.

How is blastomycosis diagnosed?

Blastomycosis can be diagnosed with a number of different tests, including culture of the fungus, finding the fungus in body fluids or tissues with a microscope, or with blood and urine tests. Sometimes multiple tests are needed to confirm blastomycosis.

How is blastomycosis treated?

Blastomycosis is treated with anti-fungal medications, such as itraconazole. Treatment is often continued for 6 months or more. Antibiotics for bacterial infections will not treat blastomycosis.

Are some people at greater risk?

Anyone can get blastomycosis, but severe or fatal infections are more common in people with weakened immune systems.

Are there any risky activities?

No one particular outdoor activity is more common to blastomycosis cases than other activities. And some people or animals who get sick do not participate in outdoor recreation.

How can I prevent blastomycosis?

Unfortunately, there are no known practical ways to prevent blastomycosis because it is found naturally in the environment. Awareness of the disease by both the public and health care providers is the key to early diagnosis and appropriate treatment.

Can I test the soil at my home or cabin?

There are currently no methods to test soil for the presence of *Blastomyces* species.

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