

# Blastomycosis

Porcupine Health Unit, Community Health Inspection Services, Control of Infectious Diseases

## What is blastomycosis?

Blastomycosis is an uncommon infection of humans, dogs, cats and other animals caused by the fungus *Blastomyces dermatitidis* found in soil. It is not a new condition and has been known for many years. Recently, however, some people have become quite sick with blastomycosis. The infection affects the lungs and skin sometimes resulting in pneumonia or crusted, ulcerated pimples. The symptoms often do not appear until weeks or months **after** exposure.

## How can you get blastomycosis?

You get blastomycosis by breathing in the fungus or getting it on a scrape or cut. The fungus is found in acidic moist soil in parts of Northern Ontario, Manitoba, Saskatchewan, Quebec and in other areas around the Great Lakes and Mississippi rivers. Since this fungus is in the soil, construction, digging or gardening may cause the fungal spores to be carried into the air and inhaled. You can only get blastomycosis from the fungus that is in the soil or the fungus spores in the air. You cannot get it from another person or an animal.

## Who is at risk?

Blastomycosis can affect anyone, but **the risk of getting this infection is very low**. Most healthy people are resistant to it. The body's natural defenses fight the fungus and prevent illness. The risk of infection may be higher for farmers, construction workers, hunters, campers and anyone else who is often exposed to moist soil that contains a lot of rotting leaves and wood. This condition can be more severe in persons who have a weakened immune system. Organ

transplant recipients, those on chemotherapy or steroids and those with HIV/AIDS may wish to avoid contact with soil or dust in areas of risk.

## What are the symptoms of blastomycosis?

Blastomycosis may seem like the "Flu" with cough, muscle aches, joint pain, tiredness, chills and fever. These symptoms may develop suddenly, days to weeks **after** exposure to the fungus. In some people the symptoms can go away naturally but others may develop a persistent cough with yellow or green spit. This may be the first sign of pneumonia. A blastomycosis infection usually starts in the lungs but sometimes it can cause a skin infection. This will look like red pimples, which can develop crusts or ulcers, on the face or other exposed skin.

## What should you do if you think you may have blastomycosis?

If you are experiencing a persistent cough, muscle aches, joint pain, tiredness, chills, low grade fever, skin sores or unexplained weight loss, tell your doctor that you may have been exposed to the fungus that causes blastomycosis. The doctor will want to know if you have been in a high-risk area and in contact with soil or dust. Often the first symptoms of the disease are missed because it seems like other illnesses. Without treatment, blastomycosis can become a serious illness. The diagnosis can be made from a sample of spit, pus, urine or the skin lesions, depending on your symptoms. After diagnosis, prompt treatment is very important and may be required for several months.

## How can I avoid blastomycosis?

Even if you work, live or vacation in the areas where the fungus lives, it is important to remember that blastomycosis is a rare condition and the risk of getting it is very low. Testing soil for the presence of this fungus is very difficult and not very reliable. If you do come in contact with the fungus it does not mean you will get an infection. Therefore, it is not necessary for people to avoid any specific areas. Little is known about the actual fungal locations at any particular time or the conditions that cause the fungus to grow or die out in the soil. If your immune system is weakened, you may wish to avoid activities that require working in the soil. There is no vaccine for blastomycosis.

Wearing work gloves, proper footwear, long pants, long-sleeved shirt and a disposable NIOSH N100 approved HEPA filter dust mask when working in moist soil areas where the fungus may grow, such as under the house, cottage, porch or shed, **may** help to prevent blastomycosis.

*Adapted from Northwestern Health Unit, March 10, 2006*

**For more information,  
contact your local  
health inspector  
or call 1-800-461-1818.**

