



Health Care Provider Advisory - Blastomycosis

Please be reminded of the possibility of Blastomycosis infection in the region. Blastomycosis has been a reportable disease under the Health Protection and Promotion Act in Ontario since 2018. Northwestern Health Unit's catchment area has had annual rates ranging from 15-43 cases per 100,000 between 2018 and 2021, while the rest of Ontario's health unit jurisdictions ranged from 0-6 cases per 100,000, except for one large cluster in Northeastern Ontario in 2021. The annual rate in Canada is 0.62 cases per 100,000 and in the United States, 1-2 per 100,000. Health care providers who are newer to Northwestern Health Unit's catchment area may be unfamiliar with Blastomycosis because it is so uncommon elsewhere.

What is Blastomycosis?

Blastomyces dermatitidis is a dimorphic fungus that can cause Blastomycosis. The fungus is most common in Northwestern Ontario, Manitoba, along the Great Lakes and St. Lawrence Seaway, and in parts of U.S.A., and rare in other areas. It is most common in acidic, moist soil such as areas with rotting organic material such as fallen trees, and old wooden structuresResources for Health Care Providers.

How is it acquired?

Blastomycosis is typically acquired through inhalation of airborne spores. Primary cutaneous blastomycosis is uncommon but can result from traumatic puncture of the skin. Blastomycosis is NOT transmitted from person to person or from infected animals to people. There is no way to test soil or an environment for B. dermatitidis and no way to eradicate the fungus from the environment. Not all who are exposed to B. dermatitidis even in the same location or at the same event will become infected.

Symptoms and testing

Illness ranges from self-limiting, subclinical infection to acute or chronic pneumonia or disseminated infection, and untreated infection can cause death. Incubation ranges from weeks to months after exposure to the fungus, with a median of 45 days. Blastomycosis can mimic other respiratory and disseminated infections and diseases and will not be identified through viral or bacterial testing; specific fungal testing is required for diagnosis.

Blastomycosis symptoms can seem to improve and then worsen. That means other treatments may seem to work temporarily, which can delay treatment and increase the risk of negative outcomes.



Early diagnosis and appropriate antifungal treatment is the most important mechanism for preventing morbidity and mortality related to Blastomycosis.

For more information, visit Health Canada's page on <u>Blastomycosis for health professionals</u>.

Dr. Kit Young HoonMedical Officer of Health
Northwestern Health Unit