

Increase in Blastomycosis and Pertussis in Neighbouring Health Units

Attention: Physicians, Emergency Departments, Infection Control Practitioners, Walk-In Clinics/Urgent Care Clinics, Nurse Practitioners, NSM LHIN, Central LHIN

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Blastomycosis Cases in the Manitoulin District

The Sudbury & District Health Unit has recently confirmed three cases and one suspect case of blastomycosis in pediatric residents of the Manitoulin district; a popular tourist area in the summer months.

- **Diagnosis** is by culture and microscopy of samples from sputum, tracheal aspirates, cerebrospinal fluid, urine and cutaneous lesions. Please refer to Public Health Ontario's test director for specific submission information (<http://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/Specimen-Collection.aspx>).
- **Treatment** with oral itraconazole or fluconazole is recommended for cases with mild or moderate blastomycosis infections. Amphotericin B is indicated in severe or disseminated infection. For more detailed treatment guidelines, please refer to: http://www.idsociety.org/uploadedFiles/IDSA/Guidelines-Patient_Care/PDF_Library/Blastomycosis.pdf.

What is blastomycosis and how might my patients be exposed?

Blastomycosis is caused by *Blastomyces dermatitidis*, a fungus found in warm, moist soil, especially in wooded areas along waterways such as lakes or rivers.

Exposure occurs by inhalation of airborne spores during activities such as camping, forestry work, farming, and hunting in endemic areas.

What are the signs and symptoms?

Up to 50% of cases may be asymptomatic, however, anyone is susceptible to the infection and immunocompromised individuals are more likely to suffer severe illness. Symptoms can appear between 3 to 15 weeks after initial exposure. In Ontario, exposure most often occurs in the summer and fall months as the activities that would expose an individual usually occur during that time of year. Clinical presentation is therefore most common in the fall and early winter, but can occur at any time of the year.

Clinical manifestations include pulmonary, cutaneous, and disseminated disease (skin, bones, joints, genitourinary tract). Untreated disseminated or chronic pulmonary blastomycosis can be fatal. Pulmonary blastomycosis can present with generalized symptoms that can be mistaken for other illnesses such as the "flu" or pneumonia. Chest X-ray can reveal pulmonary infiltrates that can cavitate. Resolution occurs spontaneously in one to three weeks; however extrapulmonary manifestations may be present in the absence of respiratory symptoms.

Cutaneous involvement is common and presents with erythematous papules progressing to wart-like, crusted or ulcerated lesions affecting the face and distal extremities.

Consider blastomycosis in the differential diagnosis of febrile patients presenting with respiratory or "flu like" symptoms and risk behaviours for exposure.



Pertussis Outbreak in North Bay Parry Sound Area

The North Bay Parry Sound District Health Unit has declared an outbreak of pertussis with onsets of symptoms starting in late August 2017.

SMDHU recommends clinicians maintain a high index of suspicion for clients presenting with clinically compatible signs and symptoms of pertussis with a history of travel to this area.

Specimen collection requirements and test ordering

- Acceptable specimens include nasopharyngeal swabs, throat swabs, tracheal aspirates etc., in *Bordetella* transport medium.
- The *Bordetella* PCR test may be ordered using the Public Health Laboratory General Test Requisition, and entering *Bordetella* under the test description.

Please report any suspect or confirmed cases of pertussis to the Communicable Diseases Program at (705) 721-7520 or 1-877-721-7520 extension 8809 during business hours or after hours to 1-888-225-7851.

Note: SMDHU has launched its **new interactive Reportable Disease Toolkit** which provides easier access to disease specific testing, treatment recommendations and patient and clinician resources. Available at: <http://www.smdhu.org/reportablediseaselist>