Public Health
Seattle & King County

FACT SHEET

Cryptococcus gattii: Information for Health Care Providers

❑ WHAT IS IT?

- ✓ *C. gattii* is a fungus closely related to *C. neoformans* that can infect the pulmonary and central nervous systems of both animals and humans.
- ✓ Until recently, *C. gattii* was only found in certain subtropical and tropical environments. In 1999 it emerged on Vancouver Island, British Columbia (BC), Canada. Between 1999 and 2006, 176 cases were reported in BC. *C. gattii* has been isolated from native tree species on Vancouver Island and from the surrounding soil and air, primarily from the east coast of Vancouver Island. Cases have also occurred on the lower BC mainland. The exact geographic distribution of the fungus is not known, and may be expanding.
- ✓ In Washington State, *C. gattii* was first identified in cats near the Canadian border in 2005; dogs and pet birds have also been infected. A small number of human cases have been reported from western Washington.

❑ CLINICAL FEATURES

- ✓ The incubation period is long and variable. Illness onset can be two to twelve months after exposure, with a median of six to seven months.
- ✓ Cases may have pulmonary infiltrates, nodules, or cavitary lesions; approximately twenty percent develop meningitis. A wide spectrum of illness from asymptomatic infection to respiratory failure is possible. Symptoms are nonspecific and include:

- Fever and chills
- Night sweats
- Weight loss
- Cough
- Shortness of breath
- Headache
- Chest pain
- Sensitivity to light
- Decreased alertness
- Neck pain/stiffness

- ✓ Most cases respond to antifungal medications – consult with an infectious disease specialist for treatment recommendations. The case-fatality rate is under 5%.

❑ WHO IS AT RISK?

- ✓ Unlike *C. neoformans* which is primarily affects immunocompromised persons, *C. gattii* usually causes disease in immunocompetent persons.
- ✓ Persons over sixty years of age and persons with underlying medical conditions, including lung disease or immune system compromise due to disease or medications may be at some increased risk. Pediatric cases have been rare.
- ✓ Because the risk is low even for people living in endemic areas, there are no special precautions or travel restrictions recommended.

❑ HOW IS IT DIAGNOSED?

- ✓ Suspect *C. gattii* in individuals with atypical pneumonia or fungal meningitis who live or travel in areas where *C. gattii* is found.
- ✓ Cryptococcal infections may be diagnosed by microscopic examination or culture of tissue or body fluids such as blood, CSF, or sputum. Rapid antigen tests can be performed on blood and CSF.
- ✓ When cryptococcus is identified in a respiratory specimen or cerebrospinal fluid, do not assume that it is *C. neoformans* - additional testing is required for speciation.
- ✓ To differentiate *C. gattii* from the more common *C. neoformans*, culture the isolate on canavanine-glycine-bromothymol (CGB) agar.
- ✓ If your laboratory does not currently use CGB agar for all cryptococcus isolates, consider adding this to your laboratory's protocol. Another option is to send isolates to the University of Washington Clinical Microbiology Laboratory for speciation.
- ✓ After consultation with Public Health, isolates identified as *C. gattii* should be submitted to the Washington Department of Health Laboratory for genotyping.

❑ RESOURCES AND FUTHER INFORMATION

- ✓ British Columbia Cryptococcal Work Group http://www.cryptococcusgattii.ca/
- ✓ Cryptococcal disease in Washington State: http://www.doh.wa.gov/notify/nc/cryptococcus.htm

C. gattii is reportable in Washington State as a rare disease of public health significance.

Report all King County cases to Public Health by calling (206) 296-4774.

Veterinarians report cases in animals to the Public Health Veterinarian at 206-263-8454.

Available in alternate formats.

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