

Cryptococcal Disease

What is cryptococcal disease?

Cryptococcus is a tiny (microscopic) yeast-like fungus. A variety of this fungus, called *Cryptococcus gattii*, has been living on trees on the east coast of Vancouver Island since at least 1999. More recently it has also been found in the Vancouver Coastal and Fraser Health Regions.

Cryptococcal disease is a very rare disease caused by the *Cryptococcus* fungus. People and animals exposed to this fungus can become sick with cryptococcal disease. The infection is caused by breathing in the spores of the *Cryptococcus* fungus. It is not spread from person to person or from animal to person. A person with cryptococcal disease is not contagious.

Cryptococcal disease initially infects the lungs (pneumonia) and then can spread through the blood to the nervous system causing meningitis, which is inflammation of the lining of the brain. In rare cases, this disease can be fatal.

What are the symptoms?

Most people living in areas where *Cryptococcus* grows on the environment will be exposed to the fungus sometime during their life but most will not get sick. In people who become ill, symptoms appear many months after exposure. Symptoms of cryptococcal disease include:

- A cough lasting weeks or months
- Sharp chest pain
- Unexplained shortness of breath
- Severe headache
- Fever
- Night sweats
- Weight loss

People are advised to see their doctor if they experience these symptoms. Doctors can request tests for patients who show symptoms. Tests are not performed on people without symptoms just to see if they have been exposed.

What is the risk of this infection?

Each year in B.C., about 25 people become sick from *Cryptococcus*. Each year, about 1 person dies from cryptococcal disease. People over 60 years of age and those who take medications that suppress their immune system are at a slightly higher risk of cryptococcal disease.

Is there a treatment available?

In almost all cases the disease can be treated successfully with antifungal medication. There is no vaccine to prevent cryptococcal disease.

Is there anything I can do to prevent this disease?

The fungus is present in the environment. There are no particular precautions that can be taken to avoid exposure to *Cryptococcus*.

You can, however, be alert for long lasting or severe symptoms and consult a doctor (or veterinarian for animals) for early diagnosis and treatment.

Where is this fungus found?

Varieties of the *Cryptococcus* fungus are found naturally in the environment in B.C., and in other places around the world in tropical and subtropical climates in countries such as Brazil and Australia. The *gattii* variety of the fungus lives on trees and in the soil on the east coast of Vancouver Island. Due to recent human and animal cases in the Vancouver Coastal and Fraser Health Regions, it is now suspected to be found in these areas as well.

Can I tell which trees contain the fungus?

No, you cannot tell which trees contain the fungus by looking at them. The fungus is tiny and cannot be seen with the naked eye. The trees that have the fungus growing on them do not look diseased. The fungus can only be identified by testing tree samples in a laboratory.

Should trees in my neighbourhood be tested?

Testing of trees and soil is being done in a number of areas on Vancouver Island and in the Vancouver Coastal and Fraser Health Regions to help determine the general distribution of the fungus. It is not possible or even useful to test trees in specific neighbourhoods. The fungus could be present in an area even if some trees from that area test negative.

Is there anything I can do to protect my trees from the fungus?

No. There are no fungicides or other chemicals that can be applied to trees to protect them. Cutting down trees on private property is not recommended because it will not prevent exposure to the fungus.

Is it safe to live and travel on Vancouver Island and in the Vancouver Coastal and Fraser Health Regions?

Yes. The risk of contracting the disease is very low and in almost all cases the disease can be treated. The benefits of outdoor exercise far outweigh the risks of cryptococcal disease. All areas where the fungus has been found remain open to the public.



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