



## Histoplasmosis (his-toh-plaz-MOH-sis)

### Frequently Asked Questions

#### What is histoplasmosis?

Histoplasmosis is a disease caused by the fungus (yeast) *Histoplasma capsulatum* that affects primarily the lungs.

#### What are the symptoms of histoplasmosis? What does histoplasmosis cause?

Histoplasmosis is a mild, flu-like respiratory illness. Its symptoms can include malaise (a general ill feeling), fever, chest pain, dry cough, headache, loss of appetite, shortness of breath, joint and muscle pains, chills, and hoarseness. Most infected people experience no symptoms, or have symptoms so mild that they do not seek medical attention. Symptoms appear within 5 to 18 days after infection, usually around 10 days.

Some persons fail to control the infection that may then progress over the course of a few weeks or more. These patients develop either a long-lasting lung infection, called **chronic pulmonary histoplasmosis**, or infections in many parts of the body, called **disseminated histoplasmosis**. The symptoms of chronic pulmonary histoplasmosis resemble tuberculosis (which may include coughing up blood). The symptoms of disseminated histoplasmosis may include fever, headache, neck stiffness, skin lesions, and mouth sores.

#### How common is histoplasmosis?

Histoplasmosis is regularly found in the central and eastern regions of the U.S.A. About 80% of people living in these areas test positive for the histoplasmosis skin test, which means that they have been exposed and infected at some time.

#### How do people get histoplasmosis?

*Histoplasma capsulatum* grows in soil and materials contaminated with bat or bird droppings. Dropping accumulations inside or outside buildings can harbor the fungus.

Infection occurs when fungal spores are inhaled. Fungal spores become airborne when contaminated soil or materials are disturbed. Once airborne, spores can be carried easily by wind currents over long distances. The largest recorded outbreaks in the U.S. were due to contaminated airborne dusts generated during construction, excavation, or demolition.

## **Histoplasmosis - Frequently Asked Questions (cont.)**

### **Who should be especially careful about histoplasmosis?**

Anyone working at a job or present near activities where *H. capsulatum* becomes airborne can develop histoplasmosis if enough spores are inhaled. People identified as being at risk for exposure include bridge inspectors, chimney cleaners, construction workers, demolition workers, farmers, gardeners, laboratory workers, and cave explorers.

Infants, young children, and older persons, especially those with chronic lung disease (such as emphysema), are at increased risk for severe disease. Also persons with weakened immune systems are at the greatest risk for developing severe histoplasmosis. Included in this high-risk group are persons with acquired immunodeficiency syndrome (AIDS) or cancer and persons receiving cancer chemotherapy.

### **How do I protect myself from histoplasmosis?**

The fungus often grows around old chicken houses, in caves, and other areas where bats live, and around starling and blackbird roosts. If at all possible, avoid areas where the fungus might be growing, especially areas with accumulations of bird or bat droppings.

### **How do I protect others from histoplasmosis?**

Work practices and dust control measures that eliminate or reduce dust generation during the removal of bat or bird droppings will reduce the risk of infection. For example, carefully wetting dry, dusty material with a water spray can reduce the amount of dust released into the air during an activity. The use of an industrial vacuum cleaner with a high-efficiency filter is an option for the removal of large accumulations of bat or bird manure.

### **What do I do if I think I have histoplasmosis?**

There are many other illnesses that may have similar symptoms. Notify your medical provider if you live in an area where histoplasmosis is prevalent and you develop flu-like symptoms, chest pain, cough, and shortness of breath. If you are at higher risk for exposure to fungal spores because of your occupation or hobby, be sure to mention that to your medical care provider.

### **How are histoplasmosis infections diagnosed?**

Diagnosis of histoplasmosis often requires laboratory examinations, which identify *Histoplasma capsulatum* in sputum or lung biopsy. Blood tests, and x-rays may be performed. A skin test is available but it is useful only for outbreak investigations, not for diagnosis.

## **Histoplasmosis - Frequently Asked Questions (cont.)**

### **How are histoplasmosis infections treated?**

Mild disease usually resolves without treatment. Some persons may only require supportive treatment that relieves the symptoms of the disease. Antifungal medications are prescribed for severe and disseminated infections. No effective vaccine against histoplasmosis is currently available.

### **Should I worry about histoplasmosis when I travel?**

Histoplasmosis is endemic in parts of the central and eastern U.S.A. along the Ohio, St. Lawrence, and Mississippi river valleys. It can also be found in limited areas of Central and South America, Africa, India, and Southeast Asia. Take the usual precautions when engaging in dust-producing activities. While in caves or mines, spending time close to the ground or kicking up dirt infested with bat droppings containing *H. capsulatum* can increase the risk of infection.