FACT SHEET
Veterinary

HISTOPLASMOSIS

What is histoplasmosis?
Histoplasma capsulatum is a mycotic organism that exists in two distinct forms. The mold form is found in the soil, often in areas where bird and bat feces are located. The excrement is found to enhance growth of the fungus. The yeast form is located in infected living tissue. In the U.S., most cases are found along the Ohio, Missouri, and Mississippi River valleys and usually involve the immunocompromised population including children, the elderly or HIV-infected humans.

What are the symptoms of histoplasmosis?
Most infected persons have no apparent ill effects. Respiratory symptoms, a general ill feeling, fever, chest pains, and a dry or nonproductive cough characterize the acute respiratory disease, otherwise indistinguishable from other common respiratory infections. Distinct patterns may be seen on a chest x-ray. Chronic lung disease resembles tuberculosis and can worsen over months or years. The disseminated form is fatal unless treated.

Five disease forms are recognized
1. An "asymptomatic form," where no illness occurs, but people may have an altered laboratory test.
2. An "acute benign respiratory form", with flu-like symptoms that varies from a mild respiratory illness to a short term illness with general tiredness, fever, chills, headache, muscle aches, chest pains and non-productive cough.
3. An "acute disseminated (scattered throughout) form" with fever, vomiting or diarrhea, and enlarged lymph nodes and or spleen. Without treatment this form may be fatal.
4. A "chronic disseminated form," with fever (which may come and go), weight loss, weakness, enlarged liver and spleen and mild blood abnormalities. Other areas of the body may be affected including the heart, and the covering of the brain or spinal cord. Ulcers of the mouth, larynx, stomach or bowel may also occur. This form usually develops over 10-11 months and is usually fatal unless treated.
5. A "chronic pulmonary form", which resembles tuberculosis of the lungs both in symptoms and on x-ray. The symptoms may include night sweats, loss of weight, loss of appetite and a chronic cough lasting longer than three weeks. This form occurs most often in middle-aged and elderly men with other lung diseases.

How soon do symptoms appear?
Symptoms usually occur within 3-17 days after exposure. Many infections are overlooked; since they either have no symptoms or cause such a minor, brief respiratory illness that the person does not seek medical care. If you have questions regarding any of the above symptoms contact your health-care provider or the Iowa Department of Public Health at (800) 362-2736.

How is histoplasmosis spread?
The spores of the fungus are found in the soil and transmitted through the air. Spores inhaled by susceptible individuals will then germinate and produce disease. The infective form of the organism cannot be transmitted from an infected person to another.

Who gets histoplasmosis?
Anyone can be infected.

For how long is a person infectious?
The disease cannot be transmitted from one person to another.

What is the treatment for this illness?
Histoplasma capsulatum is sensitive to many antifungals including amphotericin B, itraconazole, ketoconazole, and fluconazole. Treatment is long term requiring several months up to a year.

Do infected people need to be excluded from school, work, or child care?
No, the disease cannot be transmitted from one person to another.

What can be done to help prevent the spread of this fungus?
The disease in relatively rare and is often associated with soil contaminated with bird or bat droppings. Minimize exposure to dust in a known or potentially contaminated environment. Spray with water or oil to reduce dust. Workers cleaning up possible contaminated sites should wear masks or respirators. In certain settings decontamination with 5% formaldehyde solution may be necessary. Immunocompromised individuals like HIV infected people or the elderly should be made aware of the risks of mycotic pneumonia and avoid high risk situations