

HISTOPLASMA (Histoplasmosis)

Fact Sheet

Environmental Information

Where is *Histoplasma* found?

Histoplasma grows in soils throughout the world. In the United States, the fungus is endemic (more prevalent) and the proportion of people infected by *Histoplasma* is higher in central and eastern states, especially along the Ohio and Mississippi River valleys. It is also considered to be endemic in Iowa.

The fungus seems to grow best in soils having a high nitrogen content, especially soil enriched with bat droppings or bird manure, including areas below bird roosts. Disturbances of contaminated soil or material cause small *Histoplasma* spores to become airborne or aerosolized. Once airborne, spores can easily be carried by wind currents or air flow over long distances.

How long do the *Histoplasma* spores live?

The *Histoplasma* spores are extremely hardy under a range of environmental conditions. It is not known how long they can live in the ground. However, studies have shown that even after roost sites have been cleared, spores can be detected after as many as 10 years. Spores can survive cold and freezing weather and may become airborne at any time of the year if disturbed.

How can someone know if soil or droppings are contaminated with *Histoplasma*?

The safest approach is to assume soil in endemic regions, including Iowa, and any accumulations of bat droppings or bird manure are contaminated with *Histoplasma* and take appropriate exposure precautions.

Do we need to be concerned with cleaning up new bird droppings off of sidewalks, equipment, or other hard surfaces?

No. The major concern is with aged accumulations of bird droppings. Fresh bird droppings on surfaces such as sidewalks, windowsills, and equipment have not been shown to present a health risk for histoplasmosis. Work involving the disturbance of droppings that have accumulated over time may increase someone's risk of exposure.

Would a build-up of one month of bird droppings be considered dangerous?

No. Typically, growth of *Histoplasma* spores are associated with accumulations of bird droppings that have occurred over a period of numerous months to years.

Do birds carry histoplasmosis?

It is possible that birds act as physical carriers of *Histoplasma* spores. It has not been shown that they become infected with histoplasmosis and excrete the organism in their droppings.

Dead birds are not a risk with histoplasmosis; they do not become infected and die from the disease. Proper and prompt removal of bird carcasses is recommended.

Since histoplasmosis is endemic in Iowa, what do I need to do to minimize my risk of exposure?

The best way to prevent exposures to *Histoplasma* spores is to limit your exposure to soil and dust from areas that may be contaminated (areas with bird or bat droppings). If working in these areas is necessary, use protective masks and spray the areas with water to reduce dust. Also, avoid bringing contaminated soil indoors on clothing and/or shoes from potentially contaminated areas.

For some activities, such as removing an accumulation of bat or bird droppings or working with soil that may be contaminated, workers may need to use a respirator mask and other items of personal protective equipment (PPE). Only persons trained in the proper selection and use of PPE should work where this equipment is needed.