

Bird and Bat Guano = Histoplasmosis Risk

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Two recent outbreaks of histoplasmosis in people in Kentucky serve as a reminder of a health risk to wildlife biologists associated with accumulations of bird or bat guano (feces). Histoplasmosis is an infection resulting from inhalation of microscopic spores of the fungus *Histoplasma capsulatum*. This fungus is endemic, but not limited to, the Mississippi, Missouri, and Ohio River valleys. The wildlife connection is due to the fact that *H. capsulatum* grows well in soils enriched by bird or bat guano. People become infected when contaminated areas are disturbed and large numbers of spores are inhaled. Many cases of infection with *H. capsulatum* are without symptoms or appear as a fever and a mild case of flu. However, some infections proceed to pneumonia or, rarely, disseminate throughout the body and become life-threatening, especially in immunocompromised persons.

Both outbreaks in Kentucky were associated with buildings that contained accumulations of bat or bird droppings which had built up over an extended period. Extensive human exposure to *H. capsulatum* spores apparently occurred when the droppings were disturbed during demolition or repairs. Bird roosts (especially blackbirds), bat caves, and old poultry houses are other frequent sources of histoplasmosis. Fresh bird droppings are less likely to contain *H. capsulatum* than manure that has aged 2 years or more because the fungus needs time to proliferate and produce spores. Bat guano requires far less time to become infectious because infected bats can shed the organism and inoculate the manure. Wildlife biologists who study bats, work in bird roosts, or provide assistance with urban wildlife problems could receive high levels of exposure to *H. capsulatum* and should take precautions to avoid infection. Aerosolization can be reduced by gently wetting the guano. Special clothing and personal protective equipment (respirators or masks) also are advisable.

Additional information about prevention and control of histoplasmosis can be obtained from the Centers for Disease Control and Prevention, Division of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, 1600 Clifton Road, N.E., Atlanta, GA 30333 (404-639-3158).