

# P-21 Histoplasmosis



# I. Purpose

The purpose of the Pennsylvania Department of General Services (DGS) Histoplasmosis Program is to reduce the risk of histoplasmosis infection for all employees that have the potential to come in contact with bat or bird feces.

# II. References

# Center for Disease Control and Prevention:

www.cdc.gov/nczved/dfbmd/disease\_listing/histoplasmosis\_gi.html National Institute for Occupational Safety and Health: www.cdc.gov/niosh/docs/2005-109/2005-109b.html#a

# **III. Definitions**

**Histoplasmosis**: is a disease caused by the fungus *Histoplasma capsulatum*. Its symptoms vary greatly, but the disease primarily affects the lungs. Occasionally, other organs are affected. This form of the disease is called disseminated histoplasmosis, and it can be fatal if untreated.

**Accumulated bird or bat droppings**: For the purpose of this safety program; Accumulated bird or bat droppings will be defined as an amount of dropping that can easily be scooped up with a standard square point shovel.

# IV. Responsibilities

## Safety Coordinator:

- 1. Will provided guidelines and information to the Manager/Shop Supervisors when they or their employees are confronted with potential exposures to histoplasmosis.
- 2. The Safety Coordinator will evaluate any questionable situation and will provide direction to the Manager/Shop Supervisor.

## Manager/Shop Supervisor

1. Inspect work area(s) to ensure that employees are not exposed to accumulated bird or bat droppings.



- 2. Ensure that employees follow the proper guidelines when exposed to accumulated bird or bat droppings.
- 3. If applicable, ensure employees are using the correct PPE and/or Respirator equipment to clean accumulated bird or bat droppings.

## **Employees**

- 1. Notify their supervisor of any accumulated bird or bat droppings that they discover.
- 2. Follow the guidelines and procedures relating the exposure to accumulated bird or bat droppings.
- 3. Wear proper PPE and Respirator equipment as instructed.

# V. Safe Operating Procedures

## Upon the discovery of bird or bat droppings

- 1. Determine if the definition of Accumulated bird or bat droppings has been met.
  - 1.1. Upon the discovery of Accumulated bird or bat droppings
    - In the event that an employees' task would expose them to Accumulated bird or bat droppings the Manager/ Shop Supervisor should contact the DGS Fire Safety and Environmental Section for direction.
    - If possible, once the droppings are cleaned up all reasonable efforts should be taken to exclude birds or bats from the area.
- 2. If there is no "accumulation" but there are dropping that must be cleaned up:
  - 2.1. Don Personal Protective Equipment(see PPE and Respirator safety programs)
  - 2.2. Make sure that the droppings are carefully wetted with normal water (if possible try to spray dropping down a drain using a garden hose.)
  - 2.3. Scoop material with a shovel or trowel or wipe with disposable cloths and place droppings into a standard plastic bag.
  - 2.4. It is important to prevent the material from becoming particulates and airborne, so it is always important to wet the droppings before any clean up operation.
  - 2.5. Dispose of the dropping and any contaminated disposable rags in a normal trash bag and place the trash bag in a trash receptacle outside of the building.
  - 2.6. Clean all non disposable tools.



3. If any employees are/were exposed the manager/shop supervisor should instruct the employees to be aware of the symptoms of Histoplasmosis and report these symptoms to their supervisor as soon as they begin.

# VI. Training

Training will consist of shop discussions and the applicable trades will receive an information sheet consisting of the highlights histoplasmosis exposure (Appendix A).



## What is histoplasmosis?

Histoplasmosis is a disease caused by the fungus *Histoplasma capsulatum*. Its symptoms vary greatly, but the disease primarily affect the lungs. Occasionally, other organs are affected. This form of the disease is called disseminated histoplasmosis, and it can be fatal if untreated.

## Can anyone get histoplasmosis?

Yes. Positive histoplasmin skin tests occur in as many as 80% of the people living in areas where *H. capsulatum* is common, such as the eastern and central United States. Infants, young children, and older persons, in particular those with chronic lung disease are at increased risk for severe disease. Disseminated disease is more frequently seen in people with cancer, AIDS or other forms of immunosuppression.

#### How is someone infected with H. capsulatum?

*H. capsulatum* grows in soil and material contaminated with bat or bird droppings. Spores become airborne when contaminated soil is disturbed. Breathing the spores causes infection. The disease is not transmitted from an infected person to someone else.

#### What are the symptoms of histoplasmosis?

Most infected persons have no apparent ill effects. The acute respiratory disease is characterized by respiratory symptoms, a general ill feeling, fever, chest pains, and a dry or nonproductive cough. 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.

#### When do symptoms start?

If symptoms occur, they will start within 3 to 17 days after exposure; the average is 10 days.

#### Is histoplasmosis treatable?

Yes. Antifungal medications are used to treat severe cases of acute histoplasmosis and all cases of chronic and disseminated disease. Mild disease usually resolves without treatment. Past infection results in partial protection against ill effects if reinfected.

### Where is H. capsulatum found?

*H. capsulatum* is found throughout the world and is endemic in certain areas of the United States. The fungus has been found in poultry house litter, caves, areas harboring bats, and in bird roosts.

### What can be done to prevent histoplasmosis?

It is not practical to test or decontaminate most sites that may be contaminated with *H. capsulatum*, but the following precautions can be taken to reduce a person's risk of exposure:

- Avoid areas that may harbor the fungus, e.g., accumulations of bird or bat droppings.
- Before starting a job or activity having a risk for exposure to H. capsulatum, consult the departmental Safety Coordinator

