

Working around bird and bat droppings

During a work project to demolish an old city hall, a colony of bats was seen nearby and a buildup of bat guano or droppings was found. Workers did not use personal protective equipment. Within three weeks, a total of nineteen people had been diagnosed with *histoplasmosis* and developed severe breathing problems that required hospitalization. Some of these people worked on the demolition, while others only visited the site or lived or worked nearby.

Explain dangers

When working around areas contaminated with bird and bat droppings, workers can be exposed to fungi that can cause serious infections called *histoplasmosis* or *cryptococcosis*.

While fresh bird droppings are not expected to contain the fungi, fresh bat droppings may be contaminated.

Disturbing the droppings or contaminated soil may release tiny particles into the air called “spores.” The spores can be inhaled and infect a worker’s lungs.

Most people who become infected with the fungi experience no symptoms, but some may experience mild flu-like symptoms.

For some people, especially those with weakened immune systems, the disease can be life-threatening because it can spread to other areas of the body, become severe, and eventually cause death.

Identify controls

Always assume droppings are contaminated. Take the following precautions to reduce your risk of infection:

- If you have a weakened immune system, you should consult your doctor before working in the area.

- When removing large amounts of droppings, use the following types of personal protective equipment (PPE):
 - Rubber boots
 - Disposable gloves under work gloves
 - Disposable coveralls
 - Respiratory protection
- Respirators should always be worn when working around bird or bat droppings. Appropriate respirators could range from an N95 filtering facepiece for low-risk tasks to a full facepiece air-purifying respirator or powered air-purifying respirator for high-risk tasks.

Follow these additional procedures to minimize the risk of infection:

- Eliminate the roost (nest) if the building is not going to be demolished and seal entry points if possible.
- Avoid disturbing material that could be contaminated to prevent the generation of dust and inhalation of spores.
- Never dry-sweep or dry-shovel material. Soak the material with water or a wetting agent to keep dust and spores down.
- Use a HEPA vacuum to clean up the contaminated material (if available).
- Dispose of the waste in 6-ml disposal bags and follow the disposal procedures outlined in your company’s health and safety policy.
- For larger contamination, a disinfectant may be used. For these applications, consult the manufacturer’s directions.

Demonstrate

Review the PPE requirements for the job with workers. Ensure they understand how to use each piece of equipment correctly.

Make sure respirators have been fit tested, and show workers how to do a seal check. Refer to Chapter 10 of IHSA’s **Construction health and safety manual (M029)** on PPE.