

Fact Sheet on Bird and Bat Waste: Hazards and Cleanup Procedures

What Are the Hazards?

There are several diseases associated with bird and bat droppings, including *cryptococcosis* and *histoplasmosis* (fungi) and *psittacosis* (bacteria). The *cryptococcosis* and *histoplasmosis* fungi occur naturally in soil, and therefore usually develop in bird droppings associated with soil. The *psittacosis* bacteria are found only in bird droppings and secretions and are not associated with bats or soil. The risk from avian influenza is much less than from these diseases which in themselves are also extremely rare.

How Does Exposure Occur?

The simple act of clean-up can cause contaminants to become airborne. Exposure to these diseases occurs when the spores are inhaled. Therefore, individuals who work in or cleanup areas heavily contaminated with droppings may become exposed when the material is disturbed or dust is created. Although these diseases are very rare, they can occur, especially in the young, elderly, and immuno-compromised individuals. However, **they do not pose a significant health risk to HKU employees or students** provided the following simple precautions are observed.

Precautions to Prevent Exposure

Precautions should always be taken when droppings are encountered. Only wet cleaning methods are recommended when cleaning contaminated areas. Never sweep, vacuum, or disturb droppings. Full disinfection is probably not possible but a wise precaution is to use a standard disinfectant for example diluted bleach. If bleach is used handle carefully with appropriate hand and eye protection, especially concentrated solutions, as this can cause serious chemical burns. Clothing can also be damaged if bleach is accidentally splashed or spilt on it.

If there are a small amount of droppings in a localized area:

1. Wear latex or non-latex type rubber gloves (Latex sensitive individuals should wear rubber gloves).
2. Mix a disinfectant solution of 1 part bleach to 10 parts water (or use a different appropriate disinfectant).
3. Soak the droppings with the disinfectant solution.
4. After the droppings are thoroughly wet, clean them up with a mop, sponge, or rag that also has been soaked in the disinfectant solution.

5. After cleaning wash the mop, sponge or rag in the disinfectant solution and rinse in hot water
6. Place any contaminated material in a plastic bag and seal. Dispose of in the regular rubbish.
7. Disinfect or throw away the gloves that were used.
8. Wash hands thoroughly with soap and warm water.

If there are a very large amount of droppings in a confined area please contact the Safety Office so that the area can be inspected and a thorough cleanup and bird/bat control procedures can be recommended.

For reference:

Symptoms of Diseases

Cryptococcosis is most common in individuals with compromised immune systems, and the symptoms include meningitis, severe headache, mental disturbances, fever, blurred vision, and cough. Although the majority of individuals who acquire histoplasmosis have no symptoms, when symptoms do occur, they vary widely depending on the form of the disease. The acute disease is characterized by respiratory symptoms, general malaise, fever, chest pains, and a dry, non-productive cough. The chronic form for the disease resembles pulmonary tuberculosis and progresses over months or years.

Symptoms of *psittacosis* may include a low-grade fever that often becomes worse as the disease progresses, anorexia, sore throat, light sensitivity, and a severe headache.

Version 1. Issued November 2005.

The above information and procedures are modified from a Washington State University Fact Sheet