## Removal and Cleanup of Bird and Bat droppings

The best way to prevent exposure to health risks from bird or bat droppings is to avoid situations where material that might be contaminated can become aerosolized and subsequently inhaled. Therefore, work practices and dust control measures that eliminate or reduce dust generation during the removal of bat or bird manure from a building will also reduce health risks. For example, before shoveling or sweeping dry, dusty material, it should be misted with a low-pressure water spray to reduce the amount of dust aerosolized during the activity. Liquid detergent can be added to the water as a wetting agent. Once the material is wetted, it can be collected in double, heavy-duty plastic bags, a 55-gallon drum, or some other secure container for immediate disposal. An alternative method is to use an industrial vacuum cleaner with a high-efficiency (HEPA) filter to bag contaminated material. Truck-mounted or trailer-mounted vacuum systems are recommended for buildings with large accumulations of bat or bird manure. This advantage eliminates the risk of dust exposure that can happen when bags tear accidentally or containers break during their transfer to the ground.

Air sampling, surface sampling, or the use of any other method intended to confirm that no infectious agents remain following removal of bat or bird manure is unnecessary in most cases. However, before a removal activity is considered finished, the cleaned area should be visually inspected to ensure that no residual dust or debris remains.

If there is a small accumulation of droppings from a few birds or bats, it can be cleaned up with soap and water. If large quantities of bird or bat droppings are present, contact EH&S or an environmental engineering consultant for advice.

Workers should follow certain precautions to minimize risk from disease organisms during clean-up of bird, bat or rodent droppings and removal of small numbers of bird, squirrel, and rodent carcasses:

- If possible, schedule the removal for weekends or other periods of minimum building use.
- Only authorized cleanup personnel should be present.
- The cleanup should be conducted by healthy individuals with no allergies to dust or birds.
- No smoking, eating, or drinking is allowed in the work area.
- During the cleanup, seal heating and cooling air vents and shut the system down if possible.
- Wear an appropriate NIOSH-approved respirator that can filter particles as small as 0.3 microns; personnel must be medically cleared and fit-tested in order to wear respiratory protection.
- Wear disposable protective gloves, eye protection, hat, coveralls and boots.
- Moisten the droppings with a light mist of water to keep dust and spores from becoming airborne.
- Put droppings into doubled plastic garbage bags, seal the bags, and place them in a dumpster for disposal as normal trash.
- Use a 10% bleach solution to disinfect the area after the droppings have been removed.
- When finished and while still wearing a respirator, remove protective clothing and place it in a plastic bag; dispose of the bag as normal trash.
- Wash or shower at the work site after clean-up.
- Modify the structure to prevent birds or bats from re-establishing the roost.