material. However, their numbers can be reduced by blocking their access to indoor roosts and breeding places.

Therefore, after cleanup of droppings, the birds or bats in the area should be excluded. This can be accomplished by screening or plugging their entryways in enclosed areas, or if roosting in open areas, with the use of "spike" wire, netting, or other acceptable devices. Avoid any measures that might unnecessarily harm or kill birds or bats and contact EH&S.

Cleanup and Control Responsibilities

The department utilizing/controlling an area is responsible for all required cleanup and bird/bat control measures.

Maintenance staff who need to enter areas where a large amount of droppings are present are not required to perform cleanup or control unless their department utilizes the area. The department assigned the space is responsible for cleanup and control measures prior to maintenance personnel entering the area.

Getting Assistance

Departments and maintenance personnel not desiring to perform cleanup or control measures themselves may make arrangements with the University's cleanup and pest control contractors in Whitman County. Outside Whitman County, contact local contractors for pest control and/or cleanup. See the Safety Policies and Procedures Manual (SPPM) S70.20 for more information.

Individual departments are responsible for paying for all contractor inspections, pest control, and cleanup charges related to work conducted in their areas. Contact EH&S or Purchasing for the name and telephone number of the current contractors.
What are the hazards?

Several diseases are associated with bird and bat* droppings, including crypto-
coccosis and histoplasmosis (fungi) and psittacosis (bacteria). Cryptococcosis is most com-
mon in individuals with compromised immune systems, and symptoms include fever, cough, severe headache, blurred vision, meningitis, and mental disturbances.

The majority of individuals who acquire histoplasmosis have no symptoms, but when they do occur, they vary widely de-
dpending on the form of the disease. The acute disease is character-
ized by respiratory symp-
toms, general malaise, fever, chest pains, and dry cough. The chronic form for the dis-
ease resembles pulmonary tuberculosis and develops over months or years.

Symptoms of psittacosis may include a low-grade fever that often becomes worse as the disease progresses, as well as ano-
rexia, sore throat, light sensitivity, and severe headache. Although these diseases are rare, they can occur, especially in the young, elderly, and immunocompromised.

How does exposure occur?

The simple act of clean-up can cause many contaminate to become airborne. Exposure to these diseases occurs when the pathogens are inhaled. Therefore, indi-
viduals who work in or cleanup areas heav-
ily contaminated with droppings may be-
come exposed when the material is dis-
turbed or dust is created. However, they do not pose a significant health risk to WSU employees PROVIDED the following pre-
cautions are used.

Precautions to Prevent Exposure

Proper disinfection of a site is extremely important to kill all disease agents so they no longer pose a danger. Precautions should always be taken when droppings are encountered. Never sweep, vacuum, or disturb droppings, and if possible, avoid these areas entirely. Only wet cleaning methods are recommended when cleaning contaminated areas.

If there is a small amount of droppings in a localized area:
1. Wear non-latex type rubber gloves.
2. Mix a disinfectant solution of 1 part bleach to 10 parts water.
3. Using a spray bottle or a clean pesticide application sprayer, thoroughly 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. Place the contaminated material in a plastic bag, seal, and dispose of the regular trash.
6. Disinfect or throw away the gloves that were used.
7. Wash hands thoroughly with soap and warm water.

If there are a large amount of droppings in a large area:
1. Prior to entering the contami-
nated area, wear a NIOSH-
approved respirator** with HEPA filter cartridges, non-latex rubber gloves, eye protection, disposable coveralls and shoe coverings or washable clothing with rubber boots.
2. Follow steps 2 through 6 above.
3. Dispose of one-time use personal protective equipment and clean and disinfect the respirator and rubber boots accord-
ing to established procedures.
4. Wash hands and/or shower with soap and warm water.

For areas with large amounts of drop-
pings, please contact your campus EH&S office so that the area can be inspected and proper cleanup and bird/bat control proce-
dures recommended.

Ongoing Bird and Bat Control

Birds often roost in protected areas, such as entryways where their droppings become an unsightly problem. If a colony of bats or a flock of birds is allowed to live in a building, their droppings will accumulate and create a health risk for anyone who enters the roosting area and disturbs the

*In areas where bats are present, rabies exposure is also a concern. Contact Environmental Health and Safety (EH&S) before entering areas with

**Fit testing and training is required prior to respira-
tor use. Contact EH&S to schedule fit testing and training.