

**University of Washington
Environmental Health and Safety**

Zoonotic Diseases

Zoonotic disease is a term used to describe an illness spread from animals to humans. Workers who handle infected animals, clean up after them, or work in areas harboring wild animals may catch diseases from the animals or the contaminated soil in the area. The following are just a few diseases that are spread from animals and birds to humans:

Histoplasmosis	Psittacosis	Toxoplasmosis	Rabies
Hantaviruses	Lyme Disease	Plague	

None is common in Western Washington; however, it is still wise to take precautions when working in areas contaminated by animal feces or waste.

What is the problem?

Psittacosis is usually caught while working directly with pet and farm birds such as parrots, parakeets, pigeons, and turkeys. It can also be caught from exposure to contaminated dust at bird roosts, construction sites, and enclosed areas such as attics and basements. Disturbing the dirt under and around these areas can cause infection since it may have been contaminated with droppings. Toxoplasmosis is spread by direct contact with cat feces and is of greatest hazard to pregnant women. Plague is spread from rats and other animals to humans via a flea bite. Lyme Disease is caused by tiny ticks which get the bacterium from wild mammals. Hantavirus Pulmonary Syndrome is spread by disturbing dirt in areas inhabited by field mice. Rabies is spread via a scratch or bite from a rabid animal or bat. Airborne spread of rabies is rare but has occurred in caves where millions of bats roost.

All these diseases have flu-like symptoms such as headache, fever, muscle aches, and cough. Most are more dangerous to a person who is receiving chemotherapy, is HIV infected, or is otherwise immunocompromised. Toxoplasmosis during pregnancy can lead to death or brain damage of the fetus.

How to prevent exposure?

- Minimize contact with droppings and contaminated soil
- Wear rubber gloves
- Wash hands after removing gloves, before eating, drinking or smoking, and before and after using the restroom. Never eat or smoke while wearing protective clothing.
- Bird and rodent droppings or soil contaminated with them should be wetted down before disturbing it, using a solution of one part bleach to nine parts water.
- Wear a high efficiency particulate respirator (purple cartridge) when wetting down the material in enclosed areas or any other time you are creating a dust. Avoid stirring up the dust during the wetting procedure by not spraying water directly on the material being wetted.

- Pestproof buildings and crawl spaces under buildings. Prevent rodents and cats from gaining access in and under buildings by enclosing crawl spaces tightly and sealing or screening all openings to the exterior.
- If you are working inside, use fans to blow contaminated air outside. Place them so they don't blow directly on the dirt or droppings. Ventilate crawl spaces for about 30 minutes before beginning work.
- As with other biohazards, these infectious agents are killed by 20 minutes of contact with a 10% bleach solution (one part bleach to nine parts water). Use this solution to clean tools. Rinse tools with water to prevent corrosion.
- Report flea, tick, spider, cockroach, and animal infestations (including droppings) to Environmental Health and Safety at 543-9510.
- Avoid all contact with bats.

Resources

For more information, contact environmental Health & Safety:

- Evaluation of worksites 543-7388
- Biohazards 543-9510
- Pest Control 543-9510