



Wild Rodents and Rabbits

The Occupational Health Program is designed to inform individuals who work with animals about potential zoonoses (diseases transmitted to humans from animals), personal hygiene and other potential hazards associated with animal exposure. This information sheet is directed toward those involved in the care and use of wild rodents and rabbits.

Potential Injury and Zoonotic Diseases

Wild rodents and rabbits may inflict injury such as a bite or scratch. Employees need to receive training on the correct way to capture and handle any wild animals. While rodents may carry organisms that may be potentially infectious to humans, the major health risk to individuals working with these rodents is the development of an allergy. The development of disease in the human host often requires a preexisting state that has compromised the immune system. If you have an immune compromising medical condition or you are taking medications that impair your immune system (steroids, immunosuppressive drugs, or chemotherapy) you are at higher risk of contracting a rabbit disease and should consult your physician or Occupational Health physician.

The zoonotic diseases associated with handling wild rodents and rabbits include the following:

Rabies: Rabies is a fatal infectious disease of people and other mammals caused by a virus. Rabies affects the nervous system. Infection is primarily acquired from the bite of an infected mammal. The virus is present in the saliva of the rabid animal. People can also get infected when saliva gets directly into the eyes, nose, mouth or a wound. It is important to recognize that domestic animals can get infected and transmit the disease. Rabies is a fatal disease and the primary goal is to prevent infection. Symptoms usually develop 10 days to 7 months after exposure, and can result in death 2-12 days later. Behavioral changes and unexplained paralysis are most indicative of rabies. Signs include anorexia, apprehension, nervousness, irritability, hyper-excitability, ataxia, change in voice, uncharacteristic aggressiveness, seeking solitude. In the **furious** form the animal becomes very aggressive and vicious whereas the **paralytic** form is associated with profuse salivation and inability to swallow due to muscle paralysis. Wild animals will often display abnormal behaviors and loose fear of people and other animals.

[Click here for more information.](#)

Lymphocytic choriomeningitis: Lymphocytic choriomeningitis (LCMV) is carried by rodents and can be passed to humans. Not all people who are exposed to the virus will

become ill. Sign and symptoms of LCMV infection are similar to those for influenza and include fever, stiff neck, malaise, anorexia (loss of appetite), muscle aches, headache, nausea, and vomiting. Symptoms occur 1-2 weeks after exposure.

[Click here for more information.](#)

Leptospirosis: Leptospirosis is caused by the bacteria *Leptospira*. Human infections occur by exposure to water contaminated with urine of infected animals. Many different animals can carry the bacteria without having symptoms. Symptoms of Leptospirosis may include high fever, severe headaches, chills, muscle aches, and vomiting. More severe infection may cause jaundice, red eyes, abdominal pain, diarrhea or rash. If untreated the person may develop kidney damage, meningitis, liver failure and respiratory distress leading to death. Leptospirosis can be treated with antibiotics.

[Click here for more information.](#)

Campylobacter: Campylobacteriosis is a bacterial disease caused by *Campylobacter jejuni* or *C. coli*. Campylobacter usually causes a mild to severe infection of the gastrointestinal system, including watery or bloody diarrhea, fever, abdominal cramps, nausea, and vomiting. A rare complication of *Campylobacter* infection is Guillian-Barre syndrome, a nervous system disease that occurs approximately 2 weeks after the initial illness develops. Animals can have *Campylobacter* in their feces, if people touch contaminated feces, they can get sick. Animals do not have to be ill to pass the bacterium to humans. [Click here for more information.](#)

Hantavirus: Hantavirus pulmonary syndrome is a rare disease caused by a virus. The first symptoms of hantavirus pulmonary syndrome are fever, muscle pain, and being tired. This happens 1 to 3 weeks after a person is exposed to hantavirus. Some people also get headaches, dizziness, vomiting or diarrhea. After about 4 to 10 days, people who are sick with hantavirus infection begin to cough and have shortness of breath. If someone is sick with hantavirus pulmonary syndrome and does not get help quickly, he or she may die. People can get hantavirus when they touch rodent urine, droppings or places where these animals have nested. Dried droppings or urine can be stirred up in dust and breathed in by people. [Click here for more information.](#)

Other diseases: Other diseases that can be spread through working with rodents are [Yersinia pestis \(plague\)](#) and [Francisella tularensis](#).

Allergic Reactions

By far the greatest occupational risk to working with wild rodents and rabbits is allergic reaction or developing allergies. Those workers that have other allergies are at greater risk. Animal or animal products such as dander, hair, scales, fur, saliva and body waste, urine in particular, contain powerful allergens that can cause both skin disorders and respiratory symptoms. The primary symptom of an allergic reaction are nasal or eye symptoms, skin disorders, and asthma.

How to Protect Yourself

- Wear gloves and wash your hands.
- Wear respiratory protection. If respiratory protection is worn, it is mandatory that individuals enroll in the Respiratory Protection Program through the Safety Office.
- Wear protective clothing. Avoid wearing street clothes when working with animals.
- Seek medical attention if you are injured. Contact your supervisor and Occupational Health and Safety to be instructed as to where to go to seek medical attention.
- Enroll in the Occupational Health and Safety Program. Update your information on an annual basis to ensure proper medical surveillance.