



# Fowl: Chickens, Ducks, Turkeys and Pigeons

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 fowl.

## Potential Injury and Zoonotic Diseases

Fowl, like other avian, can carry organisms that may be potentially infectious to humans. Avian colonies in the laboratory setting are normally closely managed to produce high quality, healthy animal models. The likelihood of a person contracting a disease from fowl in a controlled setting is very low. However, there is always a risk of an outbreak occurring within a colony, either from a new bird being introduced into an established colony or from individuals inadvertently contaminating a colony by wearing shoes or clothing that has been in contact with asymptomatic disease-carrying fowl. A disease such as *psittacosis*, is infectious both to other birds and to people. Therefore, an outbreak within a colony could significantly increase the risk of human exposure

The zoonotic diseases associated with care and handling fowl include the following:

**Psittacosis (Ornithosis, Chlamydiosis):** Psittacosis is a disease caused by the bacteria, *Chlamydia psittaci*. Psittacosis is common in wild birds of all types and can occur in laboratory bird colonies as well. The reservoir/source of infection to people is infected birds, especially ones displaying symptoms (diarrhea, respiratory signs, conjunctivitis and nasal discharge). They are highly contagious to other birds as well. Transmission may be through direct contact or from aerosolization with exudative materials (pus), secretions or feces. Direct contact with the fowl is not necessary. The disease in people occurs 7-14 days after exposure. An infected human may develop a respiratory illness of varying severity from flu-like symptoms in mild cases to pneumonia in more significant infections. Serious cases can result in extensive interstitial pneumonia and rarely hepatitis, myocarditis, thrombophlebitis, and encephalitis. It is responsive to antibiotic therapy. Relapses occur in untreated infections.

[Click here for more information.](#)

**Salmonella:** Salmonellosis is a bacterial disease caused by the bacterium *Salmonella*. Many different kinds of *Salmonella* can make people sick. Most people have diarrhea, fever, and stomach pain that start 1 to 3 days after they get infected. These symptoms usually go away after 1 week. Sometimes, people have to see a doctor or go to the hospital because the diarrhea is severe or the infection has affected their organs. Animals

can carry *Salmonella* and pass it in their feces. People get salmonellosis if they do not wash their hands after touching the feces of animals.

[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.](#)

**Newcastle Disease:** Newcastle disease is a serious and fatal viral disease in avian species. Affected birds may demonstrate neurological signs that progress to death. Definitive diagnosis is through viral isolation of the organism. The disease is quite contagious among birds, and has zoonotic potential that often may go unrecognized. A clinical symptom in humans is most commonly a mild conjunctivitis, which is self-limiting.

[Click here for more information.](#)

## Allergic Reactions

Various bird proteins have been identified as sources of antigens involved in both allergic reactions and hypersensitivity pneumonitis. Hypersensitivity pneumonitis is a lung condition with symptoms that mimic pneumonia. Symptoms develop after repeated exposure to a specific antigen found in birds. Signs of allergic reaction after exposure to birds are rhinitis and asthma symptoms (wheezing and dry cough). Signs and symptoms of both allergic reaction and hypersensitivity pneumonitis usually occur several hours after exposure.

## 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 EHS.
- 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.