

## Occupational Health - Zoonotic Disease Fact Sheet

### PSITTACOSIS

#### **KEY FACTS:**

- Psittacosis is also known as parrot fever and is a zoonotic infectious disease in humans caused by a bacterium called *Chlamydophila psittaci*.
- Individuals have been to contact the disease from infected parrots, such as macaws, cockatiels, and budgerigars, and pigeons, sparrows, ducks, hens, gulls and many other species of birds.
- Psittacosis was first reported in Europe in 1879.

**SPECIES:** Primarily avian species, but mice, guinea pigs, rabbits, cats, frogs, ruminants, and humans can also become infected.

**CAUSATIVE AGENT:** *Chlamydia psittaci* is a gram negative, obligate, intracellular organism bacterium.

**TRANSMISSION:** Primarily through the inhalation route. Dry avian feces produce highly infective aerosols and bacteria in the environment may survive for several months.

**DISEASE IN ANIMALS:** There are many strains of *Chlamydia psittaci* which produce a diverse disease spectrum in animals. Symptoms may include conjunctivitis, air sacculitis, pericarditis, hepatitis, meningoencephalitis, enteritis, urethritis, arthritis, and endometritis with abortion. G.I. infection results in enteric shedding of the organism. In clinically healthy birds, stress can precipitate clinical signs and shedding of the organism.

**DISEASE IN HUMANS:** Psittacosis is rarely deadly but can cause a wide range of flu-like symptoms, including fever, chills, a dry cough, headache, and muscle aches. Rare cases may result in pneumonia, endocarditis, hepatitis, or inflammation of the nervous system or brain that may require treatment or hospitalization. Some individuals, especially pregnant women and those with impaired immunity, are more susceptible than others.

**DIAGNOSIS:** Diagnosis of psittacosis can be difficult. Laboratories use several methods to detect *Chlamydia psittaci* infection, including serological (ELISA, IFA) and molecular (PCR) testing. *Please review current literature before prescribing diagnostic testing as recommendations may have changed.*

**TREATMENT:** Treatments with tetracycline or erythromycin have been successful. *Please consult your physician for treatment options as recommendations may have changed.*

**PREVENTION/CONTROL:** No vaccine is currently available for humans or animals, but antibiotic treatment after infection is effective in controlling the disease. To prevent and control unintended infections, use uninfected animals for research, and isolate any animals used in

clinical trials. Additionally, only conduct projects in laboratories with proper engineering controls and train staff members in the proper use of required personal protective equipment when they are in spaces containing live agent.

More information on psittacosis can be found on the Centers for Disease Control and Prevention website at: <https://www.cdc.gov/pneumonia/atypical/psittacosis/>