

# Chlamydiosis in Birds

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Text adapted from "Chlamydiosis in Birds" brochure, provided by the Association of Avian Veterinarians (AAV). Please contact AAV for copies at: AAV Publications Office Phone: 817-428-7900, Fax: 817-485-4800, Email: [aavpublication@aav.org](mailto:aavpublication@aav.org)

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**Chlamydiosis**, formerly called ornithosis, and most commonly known to physicians as psittacosis, or (lay terminology) parrot fever, is an infrequent disease of many bird species and is caused by the organism *Chlamydophila psittaci*. Owners should be fully informed of the implications for their pet birds and the potential for transmission to humans.

## TRANSMISSION

Transmission of the organism between birds is primarily through inhalation of contaminated fecal or feather dust. Risk of infection is increased by close contact with infected birds that are shedding the organism. For this reason, birds that are stressed through shipping, overcrowding, reproductive activity, or malnutrition have a greater tendency to shed the organism. Infected birds may shed the organism even if no clinical signs of disease are observed.

## CLINICAL SIGNS

The most common visible clinical signs of avian chlamydiosis involve the respiratory or gastrointestinal systems of birds. Lime-green diarrhea is a common clinical manifestation and is associated with liver disease caused by the *C. psittaci* infection. Some birds may show general signs of illness: lack of appetite, weight loss, depression, diarrhea, conjunctivitis, discharge from the eyes or nares, or even death. However, these signs are not unique to chlamydiosis and may represent a number of other diseases. Some birds that are actively infected with *Chlamydophila psittaci* may be mildly affected or show no signs of illness. Immunosuppression in most cases results in more severe clinical disease. Breeding birds can pass the organism to their young. Baby birds are more susceptible to severe infection than adult birds and may die in the nest or soon after weaning.

## DIAGNOSIS

A confirmed diagnosis of chlamydiosis in a live bird is sometimes difficult and depends on the species of bird, length of time since exposure, and general condition of the bird. The most commonly used diagnostic tests include the polymerase chain reaction (PCR) assay, serology, and culture of the organism. A positive test indicates the presence of the infection, even in birds with no clinical signs of illness. A negative test does not guarantee that a bird is not infected – birds may shed the organism intermittently so a negative test may need to be repeated especially in cases of obvious clinical disease consistent with avian chlamydiosis infection. Current recommendations are that a suspect bird be given more than one type of test and that these results be considered, along with the bird's condition and history, to achieve a diagnosis. Some veterinarians recommend treatment of all suspected clinical cases with or without a positive laboratory test result. The biggest problem with treatment is the lack of compliance by the bird owner in completing the recommended course of medication which may last 45 days.

## TREATMENT

If chlamydiosis has been diagnosed, or if treatment has been recommended by your veterinarian, all exposed birds in the household should be treated at the same time to reduce the spread or recurrence of the disease. It is imperative that infected birds be isolated during treatment and that certain sanitary measures be employed to prevent spread of the disease or reinfection. The success of treatment depends on all of the medication being given in the recommended dosage and time frame. Antibiotic dosage and treatment should be directed by your veterinarian to ensure the appropriate course of therapy is undertaken and followed. There are several ways to administer medication to the birds: mouth (oral), injection, mixture of the antibiotic in soft foods or drinking water, or through commercially available medicated pellets. Depending on the condition of the patient, other supportive treatment may also be recommended. Your veterinarian will discuss the most appropriate treatment for your bird. Antibiotic treatment must be continued for a minimum of 45 days to be effective.

During treatment the owner must:

- clean the premises with an appropriate disinfectant;
- use caution when handling droppings and cage debris, take care not to aerosolize dust while cleaning, keep dust and feather circulation to a minimum to avoid potential exposure to humans or other birds;
- separate/isolate and seek medical care for other birds showing signs of disease;
- avoid contact with the birds by elderly, pregnant, sick or very young children and people that are immunosuppressed or on anti-rejection drugs;
- remove all mineral supplements containing calcium as calcium interferes with the effectiveness of the recommended medication;
- reduce stress in the bird's environment as much as possible; and
- follow all treatment instructions as prescribed by your veterinarian.

## TRANSMISSION TO HUMANS

*Chlamydomphila psittaci* can be transmitted from birds to humans, although human infection is rare considering the comparative incidence in birds. If anyone in the household with an infected bird develops persistent flu-like symptoms, respiratory distress, fever, chills, headache, weakness, or fatigue, that person should consult their physician and provide details concerning bird exposure. Treatment is simple and most often successful in humans, but neglect of the symptoms or delayed diagnosis may result in serious illness, especially in people that are immunocompromised or those with other underlying medical conditions. *Chlamydomphila psittaci* is not the same organism that causes genital chlamydia infection in humans.

## PREVENTIVE MEASURES

The following recommendations can help reduce the incidence of avian chlamydiosis in flocks or companion birds:

- immediately after purchase, take all newly-acquired birds to an avian veterinarian for *C. psittaci* screening tests;
- buy birds from suppliers who routinely screen their birds for the presence of *C. psittaci* or who are willing to stand behind the health of their birds in some manner (health guarantee);
- isolate and quarantine all newly acquired birds for a minimum of six weeks;
- maintain appropriate preventive health management as recommended by your avian veterinarian.