

## Bird Diseases: Psittacosis

**Psittacosis: Find out if you or your pet birds are at risk for this zoonotic disease.**

*By Rebecca Sweat*

The only way to know for sure what's going on with your bird is to take it to an avian veterinarian.

Chances are, if you just have a parrot or two, and they never come in contact with other birds, your birds will never become infected with *C. psittaci* and neither will you. Still, because it is a zoonotic disease and can be fatal in birds and people, psittacosis is something every bird owner should be knowledgeable about.

"If this disease stayed in birds, we wouldn't worry as much about it as we do," said Keven Flammer, DVM, Dip. ABVP-Avian. But because it can be transmitted to people, that carries both a legitimate human risk and also the chance that breeders and pet store owners can be sued if they sell a bird with psittacosis."

On the other hand, if you take the zoonotic potential out of the picture, *C. psittaci* is not as "bad" as a lot of other avian pathogens, according to Branson Ritchie, DVM, Dip. ABVP-Avian. "Chlamydia (*psittacosis*) is actually an easily treatable bacterial infection, unlike a lot of other bacterial infections," he said. "You just have to know what it is, and treat it with the right drug." Psittacosis can certainly be fatal, he added, but that's usually if the infected bird or person is immunocompromised or in poor health, or if the disease is left untreated. With early diagnosis and proper treatment, most patients fully recover from *C. psittaci* infections.

### What Is It?

In birds, *C. psittaci* infection is referred to as avian chlamydia. In the past, it was referred to as parrot fever and chlamydia, and while chlamydia is the technically correct term, many people continue to refer to it as chlamydia. It is found not only in pet birds, but also in wild birds, chickens and turkeys. Chlamydia is not a reportable disease in some states (depending on local laws). For this reason, it is impossible to know exactly how many birds get sick from psittacosis each year. However, based on the cases seen in their practices, avian veterinarians generally believe the incidence of the disease has gone down in the last 10 to 15 years.

Most avian veterinarians still see at least a few confirmed cases of chlamydia every year. California avian veterinarian Brian Speer, DVM, Dip. ABVP-Avian, usually sees two to three confirmed cases annually in his practice. Nationwide, there are usually about 10 to 15 outbreaks a year, where several birds in one location test positive for chlamydia.

### A Problem For People?

*C. psittaci* is passed from bird-to-bird and bird-to-people via inhaled contaminated fecal dust or contaminated fecal matter that is ingested. Sometimes birds transmit the bacteria orally to other birds when they preen another bird's feathers. A person can get the bacteria via a bird bite that punctures his or her skin or if the bird's beak comes in contact with the person's mouth. The bacteria can also be spread through discharges from a bird's eyes and nose, which can become airborne or ingested.

Most commonly, the bacteria becomes airborne and is inhaled. "The infected bird sheds the organism in droppings," Flammer explained. "When those droppings dry out, they become aerosolized into the air. When people and other birds breathe the air, they inhale the organisms." Once outside the bird's body, the organism can remain infective for several months.

There are no documented cases of human-to-human spread, although it is possible. This would require the infected person to cough very forcefully — filling the air with aerosolized droplets — and then another person breathing in those droplets.

"The species of *Chlamydia* that causes psittacosis, *C. psittaci*, does not appear to readily transfer from birds to other pets," Flammer said. He places it in the "possible, but unlikely" category.

### Symptoms In Pet Birds

The time between exposure to *C. psittaci* and the onset of illness in pet birds ranges from three days to several weeks. The clinical symptoms can be variable, depending on the species infected, the virulence of the agent, the route of exposure and concurrent stresses. In general, birds with chlamydia exhibit a lack of appetite, weight loss, lethargy, diarrhea, nasal discharges, shivering and breathing difficulties. *C. psittaci* can attack some or all of a bird's organ systems,

but most commonly its liver, spleen, respiratory tract and digestive tract.

“The most common presenting sign that we see in the larger species of birds and sometimes in cockatiels is a bird that looks very depressed, it’s not grooming, it’s not preening, and has yellow or lime-green urates,” noted David Phalen, DVM, Dip. ABVP-Avian. Lime-green and yellow urates are a strong indicator that the bird has hepatitis, a condition that often accompanies chlamydiosis.

Of course, many of the above-mentioned symptoms mimic a lot of other avian diseases. The signs of avian tuberculosis and aspergillosis, for instance, are very similar to chlamydiosis. The only way to know for sure what’s going on with your bird is to take it to an avian veterinarian for a thorough examination including bloodwork.

There are multiple types of diagnostic tests available to veterinarians. One is a blood test called the Elementary Body Agglutination (EBA) test, which tests for the presence of antibodies to the organism. Another is the PCR (gene probe) test and that’s done on a swab of the oral cavity and the vent. Keep in mind that no one specific test is going to be accurate in every clinical situation.

Birds can also be asymptomatic carriers of the disease. “These birds appear healthy and do not show any symptoms, yet they can shed the organism and spread it to other birds and people,” Hicks said. Some birds carry the bacteria with no outward signs themselves, for as long as 10 years. The entire time, though, they may be transmitting the bacteria to others. Page 2