

## Animal Surveillance Case Definition

### *Chlamydophila psittaci* infection (Avian Chlamydiosis)

#### Clinical description

A communicable disease of birds and people caused by Gram negative bacteria. The reservoir animal is mainly birds, particularly pet birds such as cockatiels and parrots. The usual interval between exposure to *Chlamydophila psittaci* and onset of illness ranges from 3 days to several weeks. However, active disease can appear with no identifiable exposure, particularly after stress, if the bird has been harboring the organism.

Signs of avian chlamydiosis can range from sudden death to no clinical signs and can be non-specific, including lethargy, anorexia, and ruffled feathers. Other signs include serous or mucopurulent ocular or nasal discharge, diarrhea, and excretion of green to yellow-green urates. Severely affected birds may become anorectic and produce sparse, dark green droppings, followed by emaciation, dehydration, and death. Whether the bird has acute or chronic signs of illness or dies depends on the species of bird, virulence of the strain, infectious dose, stress factors, age, and extent of treatment or prophylaxis. Birds that recover from illness may become carriers and shed the organism when under stress, if they are not treated to eliminate the organism.

*Chlamydophila psittaci* is a CDC bioterrorist Class B agent. Bioterrorism pathogens may have atypical routes of transmission and clinical manifestations. Veterinary practitioners suspecting a bioterrorist event involving avian chlamydiosis in domestic companion animals should immediately notify their local health department or the NJDHSS at 609-826-4872 during working hours and on an emergency basis at 609-392-2020 on nights, weekends and holidays.

#### Case classification

##### Confirmed

+/- compatible clinical signs **and**

- isolation of *C. psittaci* from a clinical specimen by culture (**NOTE:** hazard to laboratory workers); **or**
- identification of *C. psittaci* antigen by use of immunofluorescence (fluorescent antibody or IFA) in tissues; **or**
- four fold or greater change in serologic antibody titer in 2 specimens obtained at least 2 weeks apart and assayed simultaneously at the same laboratory; **or**
- identification of *C. psittaci* within macrophages in smears or tissues stained with Gimenez or Macchiavello stain.

##### Probable

A clinically compatible case **and**

- a single elevated serologic titer in one or more specimens obtained after the onset of signs; **or**
- detection of *C. psittaci* nucleic acids in a clinical specimen via amplification of a specific target by polymerase chain reaction (PCR) assay; **or**
- *Chlamydiaceae* antigen (identified by use of ELISA or fluorescent antibody) in feces, a cloacal swab specimen, or respiratory tract or ocular exudates.

Suspect

- A clinically compatible illness that is not laboratory confirmed but is epidemiologically linked to a confirmed case in a human or bird; **or**
- an asymptomatic bird with a single high serologic titer or detection of chlamydial antigen; **or**
- a clinically compatible illness with positive results from a new investigational test; **or**
- a clinically compatible illness that is responsive to appropriate therapy.

For additional information on laboratory criteria for diagnosis, please consult Appendix 1 of the most recent Compendium of Measures to Control *Chlamydophila psittaci* Infection Among Humans (Psittacosis) and Pet Birds (Avian Chlamydiosis), copy available here:

<http://www.nasphv.org/documentsCompendiaPsittacosis.html> .