


Merlin disease code: 07390 Psittacosis (Ornithosis)

[Paper case report form](#) required

 Whole blood (purple top tube) and unstained whole blood smear from confirmed cases must be sent to the Bureau of Public Health Laboratories

No Merlin extended data

**This condition has been identified as a potential bioterrorism agent by the CDC.**

## Clinical criteria for case classification

An illness characterized by fever, chills, headache, photophobia, cough, and myalgia.

## Laboratory criteria for case classification

### Confirmatory:

Either of the following:

- Isolation of *Chlamydia psittaci* from respiratory secretions
- **Or** fourfold or greater increase in antibody against *C. psittaci* by complement fixation (CF) or microimmunofluorescence (MIF) to a reciprocal titer of  $\geq 32$  between paired acute and convalescent phase serum specimens obtained at least 2-4 weeks apart.

### Supportive:

Either of the following:

- Presence of IgM antibody against *C. psittaci* by MIF greater or equal 1:32 in at least one serum specimen obtained after onset of symptoms
- **Or** detection of *C. psittaci* DNA in a respiratory specimen (e.g. sputum, pleural fluid or tissue) via amplification of a specific target by polymerase chain reaction (PCR).

## Epidemiological criteria for case classification

Epidemiologic risk factors include exposure to a *C. psittaci* confirmed infected bird's feces or secretions, exposure to same dried bird feces or secretions as a confirmed case, and bird owners, pet shop employees, veterinarians, poultry plant workers and others exposed to birds and their secretions. Cultures of *C. psittaci* pose an aerosol exposure risk to laboratory workers. Follow up should be conducted with the laboratory to identify any potential lab exposures.

## Case classification

### Confirmed:

A clinically compatible illness in a person with confirmatory laboratory criteria.

### Probable:

Either of the following:

- A clinically compatible illness in a person with supportive laboratory criteria
- **Or** a clinically compatible illness in a person who is epidemiologically linked to a confirmed case.

### Suspect:

Clinically compatible illness in a person with history of close contact with a *C. psittaci* positive bird or its feces or secretions within 2 weeks of symptom onset and no alternative agreed upon diagnosis.

## Criteria to distinguish a new case from previous reports

Not applicable.

## Comments

The serologic findings by CF also may occur as a result of infection with *Chlamydia pneumoniae* or *Chlamydia trachomatis*. Results from MIF and CF should be interpreted with caution due to possible cross reactivity with *C. pneumoniae* and *C. trachomatis*. To increase the reliability of test results, acute- and convalescent-phase serum specimens should be analyzed at the same time in the same laboratory. A real-time polymerase chain reaction (PCR) has been developed and validated in avian specimens but has not yet been validated for use in humans.

Mitchell SL, BJ Wolff, WL Thacker, PG Ciembor, CR Gregory, KDE Everett, BW Ritchie, JM Winchell 2008. Genotyping of *Chlamydophila psittaci* by real-time PCR and high resolution melt analysis. J. Clin. Microbiol. 47:175-181.