## Tularemia (Francisella tularensis)





Merlin disease code: 02190 Tularemia (Francisella tularensis) Isolates or specimens for all cases must be sent to the Bureau of Public <u>Paper case report form</u> required

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 several distinct forms, including the following:

- Ulceroglandular: Cutaneous ulcer with regional lymphadenopathy.
- Glandular: Regional lymphadenopathy with no ulcer.
- Oculoglandular: Conjunctivitis with preauricular lymphadenopathy.
- Oropharyngeal: Stomatitis or pharyngitis or tonsillitis and cervical lymphadenopathy.
- Pneumonic: Primary pulmonary disease.
- Typhoidal: Febrile illness without early localizing signs and symptoms.

## Laboratory criteria for case classification

#### **Confirmatory:**

Either of the following:

**Health Laboratories** 

- Isolation of *Francisella tularensis* from a clinical or autopsy specimen
- **Or** fourfold or greater change in serum IgM or IgG titer to *F. tularensis* antigen (e.g., direct fluorescent antibody [DFA], enzyme immunoassay [EIA]) between acute and convalescent specimens.

#### **Presumptive:**

One or more of the following:

- Detection of *F. tularensis* in a clinical or autopsy specimen by immunofluorescence (IF) assay,
- **Or** detection of *F. tularensis* in a clinical or autopsy specimen by a polymerase chain reaction (PCR),
- Or both of the following:
  - o Elevated serum IgM or IgG titer to *F. tularensis* antigen (e.g., DFA, EIA)
  - o **And** no history of tularemia vaccination.

## Epidemiological criteria for case classification

Not applicable.

## Case classification

#### **Confirmed:**

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

#### Probable:

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

# Tularemia (*Francisella tularensis*) (Continued)

## Criteria to distinguish a new case from previous reports

Serial or subsequent cases of tularemia experienced by one individual should only be counted if there is an additional epidemiologically compatible exposure and new onset of symptoms. Because the duration of antibodies to *F. tularensis* is not known, mere presence of antibodies without a clinically compatible illness **and** an epidemiologically compatible exposure within 12 months of onset may not indicate a new infection, especially among persons who live in endemic areas.

### **Comments**

Follow up with laboratory staff to identify any possible exposures. Clinical diagnosis is supported by evidence or history of a tick or deerfly bite, exposure to tissues of a mammalian host of *F. tularensis* (e.g., rodent, rabbit, hare), exposure to potentially contaminated water, laboratory exposure, or residence in or recent travel to a *F. tularensis* endemic area. Tularemia cases are most commonly reported in the midwest, western, and northeastern U.S. states. *F. tulare*nsis infections acquired in Florida are uncommon.