TULAREMIA **IMMEDIATE NOTIFICATION** **EPIDEMIOLOGY PROGRAM**

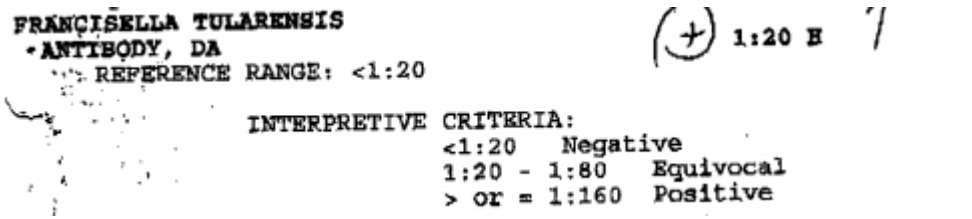
Event Name:	TUL
Event Time Period:	Lifelong immunity
Clinical Description (CSTE 2025):	In the absence of another more likely etiology, a person with any of the following clinical manifestations, often accompanied by fever: • Regional lymphadenopathy in absence of cutaneous ulcer (**glandular tularemia**), **OR** • Regional lymphadenopathy with cutaneous ulcer (**ulceroglandular tularemia**), **OR** • Conjunctivitis **AND** lymphadenopathy in the head or neck (**oculoglandular tularemia**), **OR** • Cervical lymphadenopathy **AND** pharyngitis, tonsilitis, or stomatitis (**oropharyngeal tularemia), OR** • Pulmonary disease such as pleural effusion, hilar adenopathy, pulmonary nodule, or pneumonia (**pneumonic tularemia**), **OR** • Acute illness lacking localized signs and symptoms, characterized by fever (subjective or objective) **AND** one or more non-specific symptoms such as headache, myalgia, fatigue/malaise, or gastrointestinal illness (**typhoidal tularemia**), **OR** • Other rare clinical manifestation(s) known to be associated with tularemia such as meningitis, septic arthritis, or endocarditis
Epidemiologic Linkage Criteria (CSTE 2025):	Within 21 days of illness onset or, when clinical information is not available, within 21 days of specimen collection: *Tier 1* • Known contact (including potential aerosol exposure) with an animal with direct laboratory detection or isolation of *F. tularensis* **OR** • Known handling of an *F. tularensis* isolate in a laboratory setting *Tier 2* • History of a known or suspected tick or deerfly bite, **OR** • Contact with an animal suspected to have tularemia (e.g., hunting or veterinary care), **OR** • Activities with potential for aerosol-generating exposure (e.g., landscaping, mowing, or high-pressure spraying), **OR** • Consumption of material potentially contaminated with *F. tularensis*, **OR** • Shared exposure with another confirmed or probable tularemia case (i.e., part of a cluster), **OR** • Other activities in occupational or recreational settings that could be linked to *F. tularensis* exposure
Vital Records Criteria (CSTE 2025):	A person whose death certificate lists tularemia as a cause of death or a significant condition contributing to death.

CSTE Event Classification (2025):	*Confirmed*	Meets confirmatory laboratory evidence **AND** meets clinical criteria, **OR** Meets confirmatory laboratory evidence **AND** meets Tier 1 or Tier 2 epidemiologic linkage criteria: • Culture and identification of *F. tularensis* confirmed by a Laboratory Response Network (LRN) laboratory, **OR** • Fourfold or greater change in serum antibody titer between acute and convalescent specimens, **OR** • Change from a negative IgG **AND** a negative IgM serologic test result to *F. tularensis* antigen on an acute specimen to either a positive IgG, a positive IgM, or both on a convalescent specimen
	Probable	Meets presumptive laboratory evidence **AND** meets the clinical criteria, **OR** Meets presumptive laboratory evidence **AND** meets Tier 1 or Tier 2 epidemiologic linkage criteria, **OR** Meets supportive laboratory evidence **AND** meets clinical criteria **AND** meets Tier 2 epidemiologic linkage criteria, **OR** Meets supportive laboratory evidence **AND** meets Tier 1 epidemiologic linkage criteria, **OR** Meets clinical criteria **AND** meets Tier 1 epidemiologic linkage criteria. • Detection of *F. tularensis* DNA directly from a clinical or autopsy specimen by molecular testing (e.g., PCR or sequencing assay), **OR** • Demonstration of *F. tularensis* antigen in tissue (e.g., by immunohistochemical staining)
	Suspect	Meets confirmatory laboratory evidence **OR** presumptive laboratory evidence **OR** supportive laboratory evidence, **OR** meets clinical criteria **AND** meets Tier 2 epidemiologic linkage evidence, **OR** meets vital records criteria. • Positive IgG and/or IgM serologic test detecting antibodies to *F. tularensis* antigen (without documented fourfold or greater change or without prior negative result) in a patient with no history of tularemia vaccination.
Massachusetts Event Classification:	*Follows CDC event classification*	

TULAREMIA (continued)

Report Type	Test Type	Source	Result	New event or beyond report period?	Data Entry
Laboratory report	Culture	Clinical specimen	*Francisella tularensis*	Yes	New event SUSPECT
				No	Same event
Select:	Microorganism: PrId: Pt: xxx:Nom:Culture				
Laboratory report	Microagglutination (MA) Tube Agglutination Direct Agglutination (DA)	Serum	Positive (e.g. ≥ 1:128) **See note on page 3 **	Yes	New event SUSPECT
				No	Same event
Select:	Francisella tularensis Ab: Titr: Pt: Ser: Qn: Aggl				
Laboratory report	EIA	Serum	Positive	Yes	New event SUSPECT
				No	Same event
Select:	Francisella tularensis Ab: ACnc: Pt: Ser: Ord: EIA				
Laboratory report	Direct fluorescent antibody (DFA)	Clinical specimen	Positive	Yes	New event SUSPECT
				No	Same Event
Select:	Francisella tularensis Ag: ACnc: Pt: xxx: Ord: IF				
Laboratory report	Complement fixation (CF)	Clinical specimen	Positive	Yes	New event SUSPECT
				No	Same Event
Select:	Francisella tularensis Ab: Titr: Pt: Ser: Qn: CF				
Laboratory report	PCR	Clinical specimen	Positive	Yes	New event SUSPECT
				No	Same Event
Select:	Francisella tularensis DNA: ACnc: Pt: xxx: Ord: Probe.Amp.Tar				
Laboratory report	Indirect fluorescent antibody (IFA) IgG or IgM	Clinical specimen	Positive	Yes	New event SUSPECT
				No	Same Event
Select (IgG specific):	Francisella tularensis Ab.IgG: ACnc : Pt : Ser : Ord : IF				
Select (IgM specific):	Francisella tularensis Ab.IgM: ACnc : Pt : Ser : Ord : IF				

** **Data entry note:** Quest Diagnostics/Focus Labs may send agglutination tests with a result of 1:20 with no interpretation. These are considered equivocal and tularmia events should not be created from an equivocal result. See example below along with the lab's interpretive criteria.



FRANCISELLA TULARENSIS
•ANTIBODY, DA (+) 1:20 H
REFERENCE RANGE: <1:20

INTERPRETIVE CRITERIA:
<1:20 Negative
1:20 - 1:80 Equivocal
> or = 1:160 Positive