

California Department of Public Health  
 Center for Infectious Diseases  
 Division of Communicable Disease Control  
 Infectious Diseases Branch  
 Surveillance and Statistics Section  
 MS 7306, P.O. Box 997377  
 Sacramento, CA 95899-7377

## LEGIONELLOSIS CASE REPORT

PATIENT INFORMATION					
Last Name	First Name	Middle Name	Suffix	Primary Language	
Social Security Number (9 digits)		DOB (mm/dd/yyyy)	Age	<input type="checkbox"/> English <input type="checkbox"/> Spanish <input type="checkbox"/> Other: _____	
Address Number & Street – Residence		Apartment / Unit Number		Ethnicity (check one)	
City / Town		State	Zip Code	<input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Non-Hispanic/Non-Latino <input type="checkbox"/> Unknown	
Census Tract	County of Residence		Country of Residence		
Country of Birth		If not U.S. Born - Date of Arrival in U.S. (mm/dd/yyyy)			
Home Telephone		Cellular Phone / Pager		Work / School Telephone	
E-mail Address		Other Electronic Contact Information			
Work / School Location		Work / School Contact			
Gender <input type="checkbox"/> Female <input type="checkbox"/> Trans female / transwoman <input type="checkbox"/> Genderqueer or non-binary <input type="checkbox"/> Unknown <input type="checkbox"/> Male <input type="checkbox"/> Trans male / transman <input type="checkbox"/> Identity not listed <input type="checkbox"/> Declined to answer					
Pregnant?		If Yes, Est. Delivery Date (mm/dd/yyyy)			
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown					
Medical Record Number		Patient's Parent/Guardian Name			
Occupation Setting (see list on page 11)		Other Describe/Specify			
Occupation (see list on page 11)		Other Describe/Specify			
Race(s) (check all that apply, race descriptions on page 10) The response to this item should be based on the patient's self-identity or self-reporting. Therefore, patients should be offered the option of selecting more than one racial designation.					
<input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Asian (check all that apply, see list on page 10)					
<input type="checkbox"/> Asian Indian <input type="checkbox"/> Korean <input type="checkbox"/> Bangladeshi <input type="checkbox"/> Laotian <input type="checkbox"/> Cambodian <input type="checkbox"/> Malaysian <input type="checkbox"/> Chinese <input type="checkbox"/> Pakistani <input type="checkbox"/> Filipino <input type="checkbox"/> Sri Lankan <input type="checkbox"/> Hmong <input type="checkbox"/> Taiwanese <input type="checkbox"/> Indonesian <input type="checkbox"/> Thai <input type="checkbox"/> Japanese <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other: _____					
<input type="checkbox"/> Black or African-American <input type="checkbox"/> Native Hawaiian or Other Pacific Islander (check all that apply, see list on page 10)					
<input type="checkbox"/> Native Hawaiian <input type="checkbox"/> Samoan <input type="checkbox"/> Fijian <input type="checkbox"/> Tongan <input type="checkbox"/> Guamanian <input type="checkbox"/> Other: _____					
<input type="checkbox"/> White <input type="checkbox"/> Other: _____ <input type="checkbox"/> Unknown					
ADDITIONAL PATIENT DEMOGRAPHICS					
Sex Assigned at Birth		Sexual Orientation			
<input type="checkbox"/> Female <input type="checkbox"/> Unknown <input type="checkbox"/> Male <input type="checkbox"/> Declined to answer		<input type="checkbox"/> Heterosexual or straight <input type="checkbox"/> Questioning, unsure, or patient doesn't know <input type="checkbox"/> Declined to answer <input type="checkbox"/> Gay, lesbian, or same-gender loving <input type="checkbox"/> Orientation not listed <input type="checkbox"/> Unknown <input type="checkbox"/> Bisexual			

First three letters of  
patient's last name:

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<b>CLINICAL INFORMATION</b>					
<b>SIGNS AND SYMPTOMS</b>					
Symptomatic? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Onset Date (mm/dd/yyyy)	Date First Sought Medical Care (mm/dd/yyyy)			
Symptoms (check all that apply)					
<input type="checkbox"/> Cough <input type="checkbox"/> Shortness of breath <input type="checkbox"/> Fever <input type="checkbox"/> Myalgia <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Headache <input type="checkbox"/> Diarrhea <input type="checkbox"/> Nausea <input type="checkbox"/> Confusion					
<b>UNDERLYING CAUSES OR PRIOR ILLNESS</b>					
Condition	Yes	No	Unk	Comments	
Asthma					
Chronic heart disease (i.e., coronary artery disease or heart failure, but not hypertension)					
Chronic liver disease					
Chronic kidney disease					
Chronic obstructive pulmonary disease (COPD)					
Current cancer (solid or hematologic)					
Diabetes mellitus					
Immunosuppression due to disease (e.g., rheumatologic, transplant, etc.)				<i>Please do NOT disclose or specify HIV/AIDS information on this form.</i>	
Immunosuppression due to medication					
Neurologic disease (e.g., dementia, stroke, etc.)					
Current smoking					
Current vaping					
Drink alcohol				<i>How many servings of alcohol in a typical week?</i>	
Other				<i>Specify</i>	
<b>*** THE HOSPITALIZATION INFORMATION REQUESTED BELOW SHOULD REFLECT HEALTH CARE RECEIVED DUE TO LEGIONELLOSIS. ***</b>					
<b>HOSPITALIZATION</b>					
Did patient visit emergency room for illness? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Was patient hospitalized? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			If Yes, how many total hospital nights?	
<i>If there were any ER visits or hospital stays related to this illness, specify details below.</i>					
<b>HOSPITALIZATION – DETAILS</b>					
Hospital Name 1	Street Address			Admit Date (mm/dd/yyyy)	
	City			Discharge / Transfer Date (mm/dd/yyyy)	
	State	Zip Code	Telephone Number	Medical Record Number	Discharge Diagnosis
Hospital Name 2	Street Address			Admit Date (mm/dd/yyyy)	
	City			Discharge / Transfer Date (mm/dd/yyyy)	
	State	Zip Code	Telephone Number	Medical Record Number	Discharge Diagnosis

First three letters of patient's last name:

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**HOSPITAL COURSE**

Was patient admitted to the intensive care unit (ICU)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Was patient placed on invasive mechanical ventilation (i.e., intubated)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
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**OUTCOME**

Outcome? <input type="checkbox"/> Survived <input type="checkbox"/> Died <input type="checkbox"/> Unknown	If Survived, Survived as of _____ (mm/dd/yyyy)	Date of Death (mm/dd/yyyy)
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**LABORATORY INFORMATION**

**CLINICAL LABORATORY RESULTS SUMMARY**

Specimen Type 1 <input type="checkbox"/> Urine <input type="checkbox"/> Respiratory (lower respiratory samples, e.g., sputum, bronchoalveolar lavage, lung tissue, or pleural fluid) <input type="checkbox"/> Blood <input type="checkbox"/> Serum (acute) <input type="checkbox"/> Other (specify): _____  <i>NOTE: Serology tests for legionella are only confirmatory if a fourfold or greater rise in antibody titer is measured between acute and convalescent specimens. Investigators are not expected to follow up on single acute serology results.</i>	Collection Date (mm/dd/yyyy)  Type of Test <input type="checkbox"/> Antigen <input type="checkbox"/> Culture <input type="checkbox"/> PCR <input type="checkbox"/> DFA <input type="checkbox"/> IFA <input type="checkbox"/> IHC <input type="checkbox"/> Other (specify): _____  Result  Interpretation <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Equivocal  Legionella Species <input type="checkbox"/> Legionella pneumophila <input type="checkbox"/> Legionella longbeachae <input type="checkbox"/> Legionella micdadei <input type="checkbox"/> Legionella bozemanii <input type="checkbox"/> Other (specify): _____  <table border="1" style="width: 100%;"> <tr> <td style="width: 33%;">Serogroup</td> <td style="width: 33%;">Laboratory Name</td> <td style="width: 33%;">Telephone</td> </tr> </table>	Serogroup	Laboratory Name	Telephone
Serogroup	Laboratory Name	Telephone		

Specimen Type 2 <input type="checkbox"/> Urine <input type="checkbox"/> Respiratory (lower respiratory samples, e.g., sputum, bronchoalveolar lavage, lung tissue, or pleural fluid) <input type="checkbox"/> Blood <input type="checkbox"/> Serum (acute) <input type="checkbox"/> Serum (convalescent) <input type="checkbox"/> Other (specify): _____  <i>NOTE: Serology tests for legionella are only confirmatory if a fourfold or greater rise in antibody titer is measured between acute and convalescent specimens. Investigators are not expected to follow up on single acute serology results.</i>	Collection Date (mm/dd/yyyy)  Type of Test <input type="checkbox"/> Antigen <input type="checkbox"/> Culture <input type="checkbox"/> PCR <input type="checkbox"/> DFA <input type="checkbox"/> IFA <input type="checkbox"/> IHC <input type="checkbox"/> Other (specify): _____  Result  Interpretation <input type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> Equivocal  Legionella Species <input type="checkbox"/> Legionella pneumophila <input type="checkbox"/> Legionella longbeachae <input type="checkbox"/> Legionella micdadei <input type="checkbox"/> Legionella bozemanii <input type="checkbox"/> Other (specify): _____  <table border="1" style="width: 100%;"> <tr> <td style="width: 33%;">Serogroup</td> <td style="width: 33%;">Laboratory Name</td> <td style="width: 33%;">Telephone</td> </tr> </table>	Serogroup	Laboratory Name	Telephone
Serogroup	Laboratory Name	Telephone		

**IMAGING SUMMARY**

Imaging 1	Type of Imaging <input type="checkbox"/> Chest x-ray <input type="checkbox"/> Chest CT <input type="checkbox"/> Other (specify): _____	Imaging Date (mm/dd/yyyy)
	Findings	
	Impression	
	Hospital or Clinic Name	Telephone

Imaging 2	Type of Imaging <input type="checkbox"/> Chest x-ray <input type="checkbox"/> Chest CT <input type="checkbox"/> Other (specify): _____	Imaging Date (mm/dd/yyyy)
	Findings	
	Impression	
	Hospital or Clinic Name	Telephone



First three letters of patient's last name:

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**TRAVEL ACCOMMODATIONS**

Did patient spend any nights away from home (excluding healthcare settings) during the incubation period? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	If Yes, specify all locations and dates below.
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**TRAVEL ACCOMMODATIONS – DETAILS**

Accommodation Name 1 (e.g., hotel, cruise ship, Airbnb/VRBO, friend's house, motorhome/trailer, etc.)	Street Address		City	State	Zip Code
	Country	Room Number	Arrival Date (mm/dd/yyyy)	Departure Date (mm/dd/yyyy)	
	Accommodation Notes (e.g., name and contact information for private property owner, details regarding water exposures, etc.)				

Accommodation Name 2 (e.g., hotel, cruise ship, Airbnb/VRBO, friend's house, motorhome/trailer, etc.)	Street Address		City	State	Zip Code
	Country	Room Number	Arrival Date (mm/dd/yyyy)	Departure Date (mm/dd/yyyy)	
	Accommodation Notes (e.g., name and contact information for private property owner, details regarding water exposures, etc.)				

**RESIDENTIAL EXPOSURES / RISK FACTORS**

In what type of residence does the patient live? <input type="checkbox"/> Single-family residence (e.g., house, mobile home, etc.) <input type="checkbox"/> Multi-family residence (e.g., apartment, condominium, dormitories, other group living, etc.) <input type="checkbox"/> Assisted living facility <input type="checkbox"/> Senior living facility <input type="checkbox"/> Correctional facility <input type="checkbox"/> Homeless (e.g., shelter, in car/vehicle, unsheltered, couch surfing, other, etc.) <input type="checkbox"/> Unknown <input type="checkbox"/> Other (specify): _____	If assisted living, senior living, correctional facility, or homeless shelter, specify below.		
Name of Facility			
Start Date (mm/dd/yyyy)		End Date (mm/dd/yyyy)	
Street Address			
City		State	Zip Code

**OCCUPATIONAL EXPOSURES / RISK FACTORS**

Did the patient work during the incubation period? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	If Yes, specify location below.		
Occupation/Job Description		Company Name	
Street Address			
City		State	Zip Code
Notes			

**COMMUNITY EXPOSURES / RISK FACTORS**

Did the patient spend any time at a location other than home or work during the incubation period? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	If Yes, specify location below.		
Name of Facility or Place			
Street Address			
City		State	Zip Code
Notes			

First three letters of patient's last name:

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DID THE PATIENT VISIT ANY OF THE FOLLOWING DURING THE INCUBATION PERIOD?							
Community Exposure	Yes	No	Unk	If Yes, specify			
Amusement park				Name			
				Street Address	City	State	Zip Code
				Notes			
Casino				Name			
				Street Address	City	State	Zip Code
				Notes			
Conference or convention				Name			
				Street Address	City	State	Zip Code
				Notes			
Day spa or resort				Name			
				Street Address	City	State	Zip Code
				Notes			
Gym				Name			
				Street Address	City	State	Zip Code
				Notes			
Golf course				Name			
				Street Address	City	State	Zip Code
				Notes			
Grocery store				Name			
				Street Address	City	State	Zip Code
				Notes			

First three letters of patient's last name:

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**WATER EXPOSURES / RISK FACTORS**

**DID THE PATIENT USE OR GO NEAR ANY OF THE FOLLOWING DURING THE INCUBATION PERIOD?**

Water Exposure	Yes	No	Unk	If Yes, specify			
Spa/Hot tub/Whirlpool				Street Address	City	State	Zip Code
				Notes			
Misters (e.g., outdoor patio or grocery produce area, etc.)				Street Address	City	State	Zip Code
				Notes			
Decorative fountains				Street Address	City	State	Zip Code
				Notes			
Room humidifiers				Street Address	City	State	Zip Code
				Notes			
Other water-related exposure (e.g., steam rooms, sprinklers, swamp coolers, car washes, handheld showers, ice machines, etc.)				Street Address	City	State	Zip Code
				Notes			
Did the patient use any respiratory therapy equipment (e.g., nebulizer, CPAP, BIPAP, etc.) during the incubation period? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown				If Yes, specify below.			
				Does the device use a humidifier?			
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If the device uses a humidifier, what type of water is used in the device? <input type="checkbox"/> Sterile <input type="checkbox"/> Distilled <input type="checkbox"/> Bottled <input type="checkbox"/> Tap <input type="checkbox"/> Unknown <input type="checkbox"/> Other (specify): _____			

Did the patient garden or use any potting soil during the incubation period?

Yes  No  Unknown

**CONTACTS/OTHER ILL PERSONS**

Any contacts with similar illness?

Yes  No  Unknown

If Yes, specify details below.

**ILL CONTACTS - DETAILS**

Name 1	Age	Gender	Telephone Number	Type of Contact / Relationship	Illness Onset Date (mm/dd/yyyy)
	Street Address			Exposure Dates Shared with Index Case (mm/dd/yyyy)	
	City	State	Zip Code	Date First Reported to Public Health (mm/dd/yyyy)	
Name 2	Age	Gender	Telephone Number	Type of Contact / Relationship	Illness Onset Date (mm/dd/yyyy)
	Street Address			Exposure Dates Shared with Index Case (mm/dd/yyyy)	
	City	State	Zip Code	Date First Reported to Public Health (mm/dd/yyyy)	

First three letters of patient's last name:

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**NOTES / REMARKS**

**REPORTING AGENCY**

Investigator Name	Local Health Jurisdiction	Telephone Number	Date Form Completed (mm/dd/yyyy)
First Reported By <input type="checkbox"/> Clinician <input type="checkbox"/> Laboratory <input type="checkbox"/> Other (specify): _____		Health education provided? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Patient restriction / clearance needed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown

**EPIDEMIOLOGICAL LINKAGE**

Epi-linked to known case? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Contact Name / Case Number
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**DISEASE CASE CLASSIFICATION**

Disease Type

Legionnaires' disease (illness with pneumonia)       Extrapulmonary legionellosis (*Legionella* infection present at site outside of the lungs)

Pontiac fever (illness without pneumonia)

**OUTBREAK**

Part of known outbreak? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	If Yes, extent of outbreak: <input type="checkbox"/> One CA jurisdiction <input type="checkbox"/> Multiple CA jurisdictions <input type="checkbox"/> Multistate <input type="checkbox"/> International <input type="checkbox"/> Unknown <input type="checkbox"/> Other: _____		
Mode of Transmission <input type="checkbox"/> Point source <input type="checkbox"/> Person-to-person <input type="checkbox"/> Unknown <input type="checkbox"/> Other: _____	Vehicle of Outbreak	Pattern 1 ID number	Pattern 2 ID number

**ENVIRONMENTAL ASSESSMENT (OPTIONAL)**

Were environmental assessment or other follow-up activities performed at any of patient's exposure sites?  
 Yes  No  Unknown

If Yes, specify name and location of facility, and check all boxes that apply.

Name of Facility	Date of Visit (mm/dd/yyyy)		
Street Address	City	State	Zip Code

*Environmental Assessment and Follow-Up Activities*

Conducted retrospective/prospective surveillance for additional cases

Completed CDC *Legionella* Environmental Assessment Form (LEAF)

Collected/sent water samples for *Legionella* testing

Collected water samples for general chemistry testing

Performed disinfection of water system(s) (e.g., hyperchlorination, superheating, etc.)

Performed flushing of water system(s)

Installed devices to mitigate water aerosolization

Installed supplemental disinfection system

Implemented restrictions on water use

Reviewed and/or developed water management plan (WMP)

Disseminated provider alerts and/or public notifications

Sent environmental isolates to public health laboratory for sequencing

Other (specify): \_\_\_\_\_

*Environmental Assessment Notes*

First three letters of patient's last name:

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<b>STATE USE ONLY</b>			
<i>State Case Classification (see case definition on page 9)</i> <input type="checkbox"/> Confirmed <input type="checkbox"/> Probable <input type="checkbox"/> Suspect <input type="checkbox"/> Not a case <input type="checkbox"/> Need additional information		<i>Exposure Classification</i> <input type="checkbox"/> Community-Associated <input type="checkbox"/> Healthcare-Associated <input type="checkbox"/> Travel-Associated <input type="checkbox"/> Sporadic	
<i>CDPH HAI Program Case Classification</i> <input type="checkbox"/> Presumptive healthcare-associated <input type="checkbox"/> Not healthcare-associated <input type="checkbox"/> Possible healthcare-associated <input type="checkbox"/> Other (specify): _____		<i>If case was Travel-Associated, was case reported to CDC at <a href="mailto:travellegionella@cdc.gov">travellegionella@cdc.gov</a> or to California local health jurisdiction(s)?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
<b>CDPH MICROBIAL DISEASES LABORATORY (MDL) OR OTHER REFERENCE PUBLIC HEALTH LABORATORY (PHL) RESULTS (OPTIONAL)</b>			
<i>Was whole genome sequencing (WGS) completed on clinical or environmental isolates?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		<i>If Yes, specify results for each separate isolate below and upload to electronic filing cabinet.</i>	
<b>CDPH MICROBIAL DISEASES LABORATORY (MDL) OR OTHER REFERENCE PUBLIC HEALTH LABORATORY (PHL) RESULTS – DETAILS (OPTIONAL)</b>			
<i>Accession Number or Specimen ID 1</i>		<i>Clinical or environmental isolate?</i> <input type="checkbox"/> Clinical <input type="checkbox"/> Environmental	
<i>Submitting Laboratory</i>		<i>Testing Laboratory</i>	
<i>Sequence Type (MLST)</i>	<i>Serogroup</i>	<i>Was sequence data uploaded to a public database (e.g., NCBI)?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<i>Did isolate cluster with other clinical or environmental isolate(s)?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
<i>Accession Number or Specimen ID 2</i>		<i>Clinical or environmental isolate?</i> <input type="checkbox"/> Clinical <input type="checkbox"/> Environmental	
<i>Submitting Laboratory</i>		<i>Testing Laboratory</i>	
<i>Sequence Type (MLST)</i>	<i>Serogroup</i>	<i>Was sequence data uploaded to a public database (e.g., NCBI)?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<i>Did isolate cluster with other clinical or environmental isolate(s)?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown

## CASE DEFINITION

### LEGIONELLOSIS (2020)

#### CLINICAL CRITERIA

Legionellosis is associated with three clinically and epidemiologically distinct illnesses: Legionnaires' disease, Pontiac fever, or extrapulmonary legionellosis.

- **Legionnaires' disease (LD):** LD presents as pneumonia, diagnosed clinically and/or radiographically. Evidence of clinically compatible disease can be determined several ways: a) a clinical or radiographic diagnosis of pneumonia in the medical record OR b) if "pneumonia" is not recorded explicitly, a description of clinical symptoms that are consistent with a diagnosis of pneumonia.
- **Pontiac fever (PF):** PF is a milder illness. While symptoms of PF could appear similar to those described for LD, there are distinguishing clinical features. PF does not present as pneumonia. It is less severe than LD, rarely requiring hospitalization. PF is self-limited, meaning it resolves without antibiotic treatment.
- **Extrapulmonary legionellosis (XPL):** *Legionella* can cause disease at sites outside the lungs (for example, associated with endocarditis, wound infection, joint infection, graft infection). A diagnosis of extrapulmonary legionellosis is made when there is clinical evidence of disease at an extrapulmonary site and diagnostic testing indicates evidence of *Legionella* at that site.

#### LABORATORY CRITERIA

##### Confirmatory laboratory evidence:

- Isolation of any *Legionella* organism from lower respiratory secretions, lung tissue, pleural fluid, or extrapulmonary site.
- Detection of any *Legionella* species from lower respiratory secretions, lung tissue, pleural fluid, or extrapulmonary site by a validated nucleic acid amplification test.
- Detection of *Legionella pneumophila* serogroup 1 antigen in urine using validated reagents.
- Fourfold or greater rise in specific serum antibody titer to *Legionella pneumophila* serogroup 1 using validated reagents.

**Presumptive laboratory evidence:** None required for case classification.

##### Supportive laboratory evidence:

- Fourfold or greater rise in antibody titer to specific species or serogroups of *Legionella* other than *L. pneumophila* serogroup 1 (e.g., *L. micdadei*, *L. pneumophila* serogroup 6).
- Fourfold or greater rise in antibody titer to multiple species of *Legionella* using pooled antigens.
- Detection of specific *Legionella* antigen or staining of the organism in lower respiratory secretions, lung tissue, pleural fluid, or extrapulmonary site associated with clinical disease by direct fluorescent antibody (DFA) staining, immunohistochemistry (IHC), or other similar method, using validated reagents.

#### EPIDEMIOLOGIC LINKAGE

- 1) Epidemiologic link to a setting with a confirmed source of *Legionella* (e.g., positive environmental sampling result associated with a cruise ship, public accommodation, cooling tower, etc.); OR
- 2) Epidemiologic link to a setting with a suspected source of *Legionella* that is associated with at least one confirmed case.

#### CASE CLASSIFICATIONS

- **Confirmed Legionnaires' disease (LD):** A clinically compatible case of LD with confirmatory laboratory evidence for *Legionella*.
- **Probable Legionnaires' disease (LD):** A clinically compatible case with an epidemiologic link during the 14 days before onset of symptoms.
- **Suspect Legionnaires' disease (LD):** A clinically compatible case of LD with supportive laboratory evidence for *Legionella*.
- **Confirmed Pontiac fever (PF):** A clinically compatible case of PF with confirmatory laboratory evidence for *Legionella*.
- **Probable Pontiac fever (PF):** A clinically compatible case with an epidemiologic link during the 3 days before onset of symptoms.
- **Suspect Pontiac fever (PF):** A clinically compatible case of PF with supportive laboratory evidence for *Legionella*.
- **Confirmed Extrapulmonary legionellosis (XPL):** A clinically compatible case of XPL with confirmatory laboratory evidence of *Legionella* at an extrapulmonary site.
- **Suspect Extrapulmonary legionellosis (XPL):** A clinically compatible case of XPL with supportive laboratory evidence of *Legionella* at an extrapulmonary site.

#### HEALTHCARE-ASSOCIATED CASE DEFINITIONS

- **Presumptive healthcare-associated Legionnaires' disease:** A case with  $\geq 10$  days of continuous stay at a healthcare facility during the 14 days before onset of symptoms.
- **Possible healthcare-associated Legionnaires' disease:** A case that spent a portion of the 14 days before date of symptom onset in one or more healthcare facilities, but does not meet the criteria for presumptive HA-LD.

#### TRAVEL-ASSOCIATED CASE DEFINITIONS

- **Travel-associated Legionnaires' disease:** A case of Legionnaires' disease in a patient who has a history of spending at least one night away from home (excluding healthcare settings) in the 14 days before onset of illness.
- **Travel-associated Pontiac fever:** A case of Pontiac fever in a patient who has a history of spending at least one night away from home (excluding healthcare settings) in the 3 days before onset of illness.

<b>RACE DESCRIPTIONS</b>	
<b>Race</b>	<b>Description</b>
American Indian or Alaska Native	Patient has origins in <b>any</b> of the original peoples of North and South America (including Central America).
Asian	Patient has origins in <b>any</b> of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent (e.g., including Bangladesh, Cambodia, China, India, Indonesia, Japan, Korea, Malaysia, Nepal, Pakistan, the Philippine Islands, Thailand, and Vietnam).
Black or African American	Patient has origins in <b>any</b> of the black racial groups of Africa.
Native Hawaiian or Other Pacific Islander	Patient has origins in <b>any</b> of the original peoples of Hawaii, Guam, American Samoa, or other Pacific Islands.
White	Patient has origins in <b>any</b> of the original peoples of Europe, the Middle East, or North Africa.
<b>ASIAN GROUPS</b>	
<ul style="list-style-type: none"> <li>• Bangladeshi</li> <li>• Bhutanese</li> <li>• Burmese</li> <li>• Cambodian</li> <li>• Chinese</li> </ul>	<ul style="list-style-type: none"> <li>• Filipino</li> <li>• Hmong</li> <li>• Indian</li> <li>• Indonesian</li> <li>• Iwo Jiman</li> </ul>
<ul style="list-style-type: none"> <li>• Japanese</li> <li>• Korean</li> <li>• Laotian</li> <li>• Madagascar</li> <li>• Malaysian</li> </ul>	<ul style="list-style-type: none"> <li>• Maldivian</li> <li>• Nepalese</li> <li>• Okinawan</li> <li>• Pakistani</li> <li>• Singaporean</li> </ul>
<ul style="list-style-type: none"> <li>• Sri Lankan</li> <li>• Taiwanese</li> <li>• Thai</li> <li>• Vietnamese</li> </ul>	
<b>NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER GROUPS</b>	
<ul style="list-style-type: none"> <li>• Carolinian</li> <li>• Chamorro</li> <li>• Chuukese</li> <li>• Fijian</li> <li>• Guamanian</li> </ul>	<ul style="list-style-type: none"> <li>• Kiribati</li> <li>• Kosraean</li> <li>• Mariana Islander</li> <li>• Marshallese</li> <li>• Melanesian</li> </ul>
<ul style="list-style-type: none"> <li>• Micronesian</li> <li>• Native Hawaiian</li> <li>• New Hebrides</li> <li>• Palauan</li> <li>• Papua New Guinean</li> </ul>	<ul style="list-style-type: none"> <li>• Pohnpeian</li> <li>• Polynesian</li> <li>• Saipanese</li> <li>• Samoan</li> <li>• Solomon Islander</li> </ul>
<ul style="list-style-type: none"> <li>• Tahitian</li> <li>• Tokelauan</li> <li>• Tongan</li> <li>• Yapese</li> </ul>	

<b>OCCUPATION SETTING</b>	
<ul style="list-style-type: none"> <li>• Childcare/Preschool</li> <li>• Correctional Facility</li> <li>• Drug Treatment Center</li> <li>• Food Service</li> <li>• Health Care - Acute Care Facility</li> <li>• Health Care - Long Term Care Facility</li> <li>• Health Care - Other</li> </ul>	<ul style="list-style-type: none"> <li>• Homeless Shelter</li> <li>• Laboratory</li> <li>• Military Facility</li> <li>• Other Residential Facility</li> <li>• Place of Worship</li> <li>• School</li> <li>• Other</li> </ul>
<b>OCCUPATION</b>	
<ul style="list-style-type: none"> <li>• Adult film actor/actress</li> <li>• Agriculture - farmworker or laborer (crop, nursery, or greenhouse)</li> <li>• Agriculture - field worker</li> <li>• Agriculture - migratory/seasonal worker</li> <li>• Agriculture - other/unknown</li> <li>• Animal - animal control worker</li> <li>• Animal - farm worker or laborer (farm or ranch animals)</li> <li>• Animal - veterinarian or other animal health practitioner</li> <li>• Animal - other/unknown</li> <li>• Clerical, office, or sales worker</li> <li>• Correctional facility - employee</li> <li>• Correctional facility - inmate</li> <li>• Craftsman, foreman, or operative</li> <li>• Daycare or child care attendee</li> <li>• Daycare or child care worker</li> <li>• Dentist or other dental health worker</li> <li>• Drug dealer</li> <li>• Fire fighting or prevention worker</li> <li>• Flight attendant</li> <li>• Food service - cook or food preparation worker</li> <li>• Food service - host or hostess</li> <li>• Food service - server</li> <li>• Food service - other/unknown</li> <li>• Homemaker</li> <li>• Laboratory technologist or technician</li> <li>• Laborer - private household or unskilled worker</li> <li>• Manager, official, or proprietor</li> <li>• Manicurist or pedicurist</li> <li>• Medical - emergency medical technician or paramedic</li> <li>• Medical - health care worker</li> </ul>	<ul style="list-style-type: none"> <li>• Medical - medical assistant</li> <li>• Medical - pharmacist</li> <li>• Medical - physician assistant or nurse practitioner</li> <li>• Medical - physician or surgeon</li> <li>• Medical - nurse</li> <li>• Medical - other/unknown</li> <li>• Military</li> <li>• Police officer</li> <li>• Professional, technical, or related profession</li> <li>• Retired</li> <li>• Sex worker</li> <li>• Stay at home parent/guardian</li> <li>• Student - preschool or kindergarten</li> <li>• Student - elementary or middle school</li> <li>• Student - high school</li> <li>• Student - college or university</li> <li>• Student - other/unknown</li> <li>• Teacher/employee - preschool or kindergarten</li> <li>• Teacher/employee - elementary or middle school</li> <li>• Teacher/employee - high school</li> <li>• Teacher/instructor/employee - college or university</li> <li>• Teacher/instructor/employee - other/unknown</li> <li>• Unemployed - seeking employment</li> <li>• Unemployed - not seeking employment</li> <li>• Unemployed - other/unknown</li> <li>• Volunteer</li> <li>• Other</li> <li>• Refused</li> <li>• Unknown</li> </ul>