

Legionella Surveillance Worksheet

GENERIC MMG

RIBD_V1.0_MMG_F_201901003

NAME _____ **ADDRESS (Street and No.)** _____ **Phone** _____ **Hospital Record No.** _____
 (last) (first)

This information will not be sent to CDC

REPORTING SOURCE TYPE 48766-0 **NAME** _____ **SUBJECT ADDRESS CITY** PID-11.3 _____
 physician PH clinic **ADDRESS** _____ **SUBJECT ADDRESS STATE** PID-11.4 _____
 nurse laboratory **ZIP CODE** 52831-5 _____ **SUBJECT ADDRESS COUNTY** PID-11.9 _____
 hospital other clinic **PHONE (____)** _____ **SUBJECT ADDRESS ZIP CODE** PID-11.5 _____
 other source type _____ **LOCAL SUBJECT ID** PID-3 _____

CASE INFORMATION

Date of Birth PID-7 _____ **Country of Birth** 78746-5 _____ **Other Birth Place** 21842-0 _____ **Country of Usual Residence** 77983-5 _____
 month day year

Ethnic Group PID-22 H=Hispanic/Latino N=Not Hispanic/Latino O=Other _____ U=Unknown **Sex** PID-8 M=male F=female U=unknown

Race PID-10 American/Alaskan Native Asian Black/African American Native Hawaiian/Pacific Islander White Not asked Refused to answer Other 32624-9 Unknown

Age at Case Investigation 77998-3 _____ **Age Unit*** OBX-6 for 77998-3 _____ **Reporting County** 77967-8 _____ **Reporting State** 77966-0 _____

Date Reported 77995-9 _____ **Date First Reported to PHD** 77970-2 _____ **National Reporting Jurisdiction** 77968-6 _____
 month day year month day year

Earliest Date Reported to County 77972-8 _____ **Earliest Date Reported to State** 77973-6 _____ **Pregnancy Status** Y=yes N=no U=unknown 77996-7 _____
 month day year month day year *UNITS a=year d=day mo=month w=week OTH=other UNK=unknown

CASE CLASS STATUS 77990-0 Suspect Probable Confirmed Not a case Unknown **Case Investigation Start Date** 77979-3 _____

CASE INVESTIGATION STATUS CODE INV109 Approved Deleted Notified Ready for review Reviewed Unknown Closed In progress Other _____ Rejected Suspended

CLINICAL INFORMATION

Did patient have any underlying causes or prior illnesses? INV235 Y=yes N=no U=unknown **If "Yes" select below:**

UNDERLYING CONDITIONS	Y N U			Y N U			Y N U		
	Y	N	U	Y	N	U	Y	N	U
<input checked="" type="checkbox"/> INV236									
AIDS				Current chronic dialysis			Neuromuscular disorder		
Alcohol abuse				Current smoker			None		
Asthma				Deaf/profound hearing loss			Obesity		
Blood cancer				Dementia			Other (specify) _____		
Bone marrow transplant				Diabetes mellitus			Paralysis		
Broken skin				Emphysema/COPD			Parkinson's disease		
Cancer				Former smoker			Peptic ulcer		
Cancer treatment				Hodgkin's disease (clinical)			Peripheral neuropathy		
Cerebrovascular accident				HIV infection			Peripheral vascular disease		
Chronic hepatitis C				Immunoglobulin deficiency			Premature birth		
Chronic respiratory disease				Immunosuppressive therapy			Renal failure/dialysis		
Cirrhosis/liver failure				Intravenous drug user			Seizure disorder		
Cochlear prosthesis				Kidney disease			Sickle cell trait		
Complement deficiency disease				Leukemia			Solid organ malignancy		
Congestive heart failure				Missing spleen			Solid organ transplant		
Connective tissue disorder				Multiple myeloma			Splenectomy/asplenia		
Coronary arteriosclerosis				Multiple sclerosis			Systemic lupus erythematosus		
Corticosteroids				Myocardial infarction			Trouble swallowing		
CSF leak				Nephrotic syndrome			Unknown		

INV662 Y = Yes N = No U = Unknown

HOSPITALIZATION DURING TREATMENT FOR LEGIONELLOSIS	Hospitalized? Y=yes N=no U=unknown <input type="checkbox"/>	Hospital Admit Date _____ month day year
	Hospital Stay Duration 0-998 999=unknown <input type="text"/> <input type="text"/> (days)	Hospital Discharge Date _____ month day year
	Hospital Name _____	Hospital Treatment State _____

ILLNESS INFORMATION	Illness Onset Date _____ month day year	Illness Duration _____	Illness Duration Units* _____
	Illness End Date _____ month day year	Legionella Diagnosis: <input type="checkbox"/> Legionnaires disease <input type="checkbox"/> Pontiac fever	
	Illness Onset Age _____	Illness Onset Units* _____	Date of Diagnosis _____ month day year

Did the subject die from this illness or complications of this illness? Y=yes N=no U=unknown **Date of Death** _____
month day year

TRAVEL INFORMATION

NIGHTS AWAY FROM HOME: in the 14 days before onset, did the patient spend any nights away from home (excluding healthcare settings)? Y=yes N=no U=unknown *If yes, please complete the following table:*

ACCOMMODATION NAME	ADDRESS	CITY	STATE	ZIP	COUNTRY	ROOM NUMBER	DATES OF STAY	
							Start Date	End Date
TRAVEL42	TRAVEL43	TRAVEL45	TRAVEL44	TRAVEL51	TRAVEL46	TRAVEL47	TRAVEL49	TRAVEL50

ACCOMMODATION COMMENTS: TRAVEL48

HEALTHCARE SETTING INFORMATION

Was this case associated with a healthcare exposure? INV1071

- Presumptive:** Patient had 10 or more days of continuous stay at a healthcare facility during the 14 days before onset of symptoms
- No:** No exposure to the setting in the 14 days prior to date of symptom onset
- Possibly:** Patient had exposure to the setting for a portion of the 14 days prior to date of symptom onset
- Unknown**

HEALTH CARE SETTING: in the 14 days before onset, did the patient visit or stay in a healthcare setting (e.g., hospital, long term care/rehab/skilled nursing facility, clinic)? Y=yes N=no U=unknown *If yes, please complete the following table:*

TYPE OF HEALTHCARE SETTING/FACILITY (check one)	TYPE OF EXPOSURE (check one)	FACILITY NAME	IS THIS FACILITY ALSO A TRANSPLANT CENTER	REASON FOR VISIT	FACILITY ADDRESS	CITY	STATE	ZIP	DATE OF VISIT/ADMISSION	
									Start Date	End Date
1 <input type="checkbox"/> Hospital 2 <input type="checkbox"/> Long term care 3 <input type="checkbox"/> Clinic 4 <input type="checkbox"/> Nursing home 8 <input type="checkbox"/> Other 9 <input type="checkbox"/> Unknown	1 <input type="checkbox"/> Inpatient 2 <input type="checkbox"/> Outpatient 3 <input type="checkbox"/> Visitor/volunteer 4 <input type="checkbox"/> Employee 8 <input type="checkbox"/> Other 9 <input type="checkbox"/> Unknown	76696-4	INV1065 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 9 <input type="checkbox"/> Unknown	INV1066	65833-6	65647-0	68488-6	65648-8	INV1067	INV1068
1 <input type="checkbox"/> Hospital 2 <input type="checkbox"/> Long term care 3 <input type="checkbox"/> Clinic 4 <input type="checkbox"/> Nursing home 8 <input type="checkbox"/> Other 9 <input type="checkbox"/> Unknown	1 <input type="checkbox"/> Inpatient 2 <input type="checkbox"/> Outpatient 3 <input type="checkbox"/> Visitor/volunteer 4 <input type="checkbox"/> Employee 8 <input type="checkbox"/> Other 9 <input type="checkbox"/> Unknown		1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No 9 <input type="checkbox"/> Unknown							

HEALTHCARE SETTING EXPOSURE COMMENTS: INV1069

Did the healthcare facility have a water management program to reduce the risk of Legionella growth and spread in place?	Y	N	U
INV1070			
In the 14 days before onset, did the patient visit or stay in an assisted living facility or senior living facility?			
INV1072			

ASSISTED/SENIOR LIVING FACILITY EXPOSURE: was this case associated with an assisted/senior living facility exposure? INV1073

- 1 **Presumptive:** Patient was exposed to the setting for 10 or more continuous days during the 14 days before onset of symptoms
 2 **No:** No exposure to the setting in the 14 days prior to date of symptom onset
 3 **Possibly:** Patient had exposure to the setting for a portion of the 14 days prior to date of symptom onset 9 **Unknown**

FACILITY TYPE INV1074	FACILITY EXPOSURE TYPE INV1075	FACILITY NAME INV1076	FACILITY ADDRESS INV1077	CITY INV1078	STATE INV1079	ZIP INV1080	DATE OF VISIT/RESIDENCE	
							Start Date INV1081	End Date INV1082
1 <input type="checkbox"/> Assisted 2 <input type="checkbox"/> Senior 3 <input type="checkbox"/> Unknown	1 <input type="checkbox"/> Employee 2 <input type="checkbox"/> Resident 3 <input type="checkbox"/> Visitor/volunteer 8 <input type="checkbox"/> Other 9 <input type="checkbox"/> Unknown							
1 <input type="checkbox"/> Assisted 2 <input type="checkbox"/> Senior 3 <input type="checkbox"/> Unknown	1 <input type="checkbox"/> Employee 2 <input type="checkbox"/> Resident 3 <input type="checkbox"/> Visitor/volunteer 8 <input type="checkbox"/> Other 9 <input type="checkbox"/> Unknown							

ASSISTED/SENIOR LIVING FACILITY COMMENTS: INV1083

Did the assisted/senior living facility have a water management program to reduce the risk of Legionella growth and spread in place? INV1084

	Y	N	U

EXPOSURES PRIOR TO ONSET: was the patient exposed to any of the following during the 14 days prior to onset? INV1085

EXPOSURE	LOCATION INV1087 (facility name, city, state)	DATE(S) INV1088	Y	N	U
			INV1086		
Attend a convention, reception, conference, or other public gathering					
Construction/remodeling occur at or near the patient's home or a place visited by the patient					
Work in construction (esp. with spraying water, demolition, or refurbishing)					
Get in or spend time near a whirlpool spa/hot tub/Jacuzzi					
Near a decorative water fountain or water feature					
Near a mister (e.g., grocery store, outdoor cooling)					
Near a sprinkler (e.g., lawn, golf course, fire, etc.)					
Near some other water					
Work in another occupation involving water exposures					
Visit a water park					
Shower away from home					
Commercial or long-haul truck driver					
Use respiratory therapy equipment					
Visit an area with large buildings (e.g., shopping centers, high-rise complexes, etc.) that may have a cooling tower(s)					
Visit or live in a congregate living facility (e.g., correctional facilities, shelters, dormitories, etc.)					
Work in a commercial kitchen					
Work in a waste water treatment plant					
Work in an industrial/manufacturing plant with a water spray cooling system or processes involving spraying water					
Work in custodial services (e.g., housekeeping, janitor)					
Work in water-related leisure (e.g., hotels, cruise ships, water parks)					
Work with water device/system maintenance (e.g., cooling towers, plumbing, whirlpool spas)					

In the 14 days before onset, if the patient used a nebulizer, CPAP, BiPAP, or any other respiratory therapy equipment for the treatment of sleep apnea, COPD, asthma, or for any other reason, does this device use a humidifier? INV1089 Y=yes N=no U=unknown

If the respiratory therapy equipment used a humidifier, what type of water is used in the device? INV1090

	Bottled	Sterile	Other (specify) _____
	Distilled	Tap	Unknown

CRUISE PORT OF CALL INFORMATION

RECENT CRUISE TRAVEL: in the 10 days before onset, did the patient take a cruise? 473085002 Y=yes N=no U=unknown

Name of Cruise Line TRAVEL52	Name of Ship TRAVEL53	Cabin # TRAVEL62	Departure City TRAVEL54	Departure State TRAVEL55	Departure Country TRAVEL56
Date of Departure TRAVEL57	Return City TRAVEL58	Return State TRAVEL59	Return Country TRAVEL60	Return Date TRAVEL61	
Port of Call City TRAVEL63	Port of Call Country TRAVEL66	Port of Call State TRAVEL64	Port of Call Date TRAVEL65	____ month ____ day ____ year	

LABORATORY TESTING

CDC SPECIMEN

Was a specimen sent to CDC for testing 82314-6 Y=yes N=no U=unknown

Test Type	Test Result	Test Result Quantitative	Result Units	Serogroup	Legionella Species Isolated	Specimen Type	Date Specimen Collected	Date Specimen Sent to CDC	Reporting Laboratory Name	Performing Laboratory Type	Test Manufacturer	Test Brand Name
INV290	INV291	LAB628	LAB115	INV705	LAB278	66746-9	68963-8 mm/dd/yyyy	85930-6 (mm/dd/yyyy)	68994-3	82771-7	LAB650	LAB657
Urine Ag												
Culture												
DFA												
IHC												
PCR												
other												
Ab acute LAB669	ophila serogroup 1 LAB714											
Ab conv LAB670	ophila serogroup 1 LAB714											
Ab acute LAB669	Non-L pneumophila serogroup 1 LAB715											
Ab conv LAB670	Non-L pneumophila serogroup 1 LAB715											
unknown												

Test Results Codes

P=positive N=negative
X=not done
I=Indeterminate
PS>=4 rise in titer
U=unknown

Specimen Type Codes

1=amniotic fluid	7=heart	13=lymph node	19=pericardial fluid	25=serum	31=vascular tissue
2=BAL	8=internal body site	14=muscle/fascia/tendon	20=peritoneal fluid	26=spleen	32=vitreous
3=blood	9=joint	15=NP swab	21=placenta	27=sputum	33=wound
4=bone	10=kidney	16=oropharyngeal swab	22=pleural fluid	28=stool	34=other
5=brain	11=liver	17=ovary	23=purpuric lesion	29=trachael aspirate	35=unknown
6=CSF	12=lung	18=pancreas	24=respiratory secretion	30=urine	

Legionella Serogroup

1=1	5=5	9=9	13=13	17=17	21=unknown
2=2	6=6	10=10	14=14	18=non-1	22=not tested
3=3	7=7	11=11	15=15	19=not groupable	
4=4	8=8	12=12	16=16	20=other	

Performing Laboratory Type

1=CDC lab	2=commercial lab	3=hospital lab
4=other clinical lab	5=public health lab	
6=VPD testing lab	8=other	9=unknown

CASE NOTIFICATION

CONDITION CODE OBR-31	10490	Immediate National Notifiable Condition <input type="checkbox"/> 77965-2 Y=yes N=no U=unknown <input type="checkbox"/>	Legacy Case ID <input type="checkbox"/> 77997-5
State Case ID <input type="checkbox"/> 77993-4	Local Record ID <input type="checkbox"/> OBR-3	Jurisdiction Code <input type="checkbox"/> 77969-4	Binational Reporting Criteria <input type="checkbox"/> 77988-4
Date First Verbal Notification to CDC <input type="checkbox"/> 77994-2 month day year		Date Report First Electronically Submitted <input type="checkbox"/> OBR-7 month day year	
Date of Electronic Case Notification to CDC <input type="checkbox"/> OBR-22 (mm/dd/yyyy)		MMWR Week <input type="checkbox"/> 77991-8	MMWR Year <input type="checkbox"/> 77992-6
Notification Result Status <input type="checkbox"/> OBR-25 <input type="checkbox"/> Final results <input type="checkbox"/> Record coming as correction <input type="checkbox"/> Results cannot be obtained			
Current Occupation (type of work case-patient does) <input type="checkbox"/> 85658-3		Current Occupation Standardized (NIOCCS code) <input type="checkbox"/> 85659-1	
Current Industry (type of business or industry in which the case-patient works) <input type="checkbox"/> 85078-4		Current Industry Standardized (NIOCCS code) <input type="checkbox"/> 85657-5	

IMPORTATION AND EXPOSURE INFORMATION

IMPORTED CODE 77982-7	1 Indigenous	3 In state, out of jurisdiction	5 Imported, unable to determine source
	2 International	4 Out of state	9 Unknown

Imported Country INV153	Imported State INV154	Imported County INV156	Imported City INV155
Country of Exposure 77984-3	State/Province of Exposure 77985-0	County of Exposure 77987-6	City of Exposure 77986-8

OUTBREAK ASSOCIATED 77980-1 Y=yes N=no U=unknown <input type="checkbox"/>	OUTBREAK NAME 77981-9
Transmission Mode 77989-2	CDC NORS OUTBREAK ID INV883

Person Reporting to CDC NAME 74549-7 (first) _____ (last) _____	Person Reporting to CDC Email 74547-1 @ _____
	Person Reporting to CDC Phone No. 74548-9 (____) _____

COMMENTS 77999-1

CLINICAL CASE DEFINITION [†]

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.

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.

SUSPECTED

A clinically compatible case of LD with supportive laboratory evidence for *Legionella*.

PROBABLE

A clinically compatible case with an epidemiologic link[‡] during the 14 days before onset of symptoms.

CONFIRMED

A clinically compatible case of LD with confirmatory laboratory evidence for *Legionella*.

[†] <https://www.cdc.gov/nndss/conditions/legionellosis/case-definition/2019/>

[‡] 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

Epidemiologic link to a setting with a suspected source of *Legionella* that is associated with at least one confirmed case.