Legionella Surveillance Worksheet

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

This information will not be sent to CDC

REPORTING SOURCE TYPE
☐ physician ☐ PH clinic
☐ nurse ☐ laboratory
☐ hospital ☐ other clinic
☐ other source type ____________________

NAME ____________________
ADDRESS ____________________
ZIP CODE ____________________
PHONE (__ __ __) __ __ __ __ __ __ __

SUBJECT ADDRESS CITY ____________________
SUBJECT ADDRESS STATE ____________________
SUBJECT ADDRESS COUNTY ____________________
SUBJECT ADDRESS ZIP CODE __ __ __ __ __
LOCAL SUBJECT ID ____________________

CASE INFORMATION

Date of Birth __ __ / __ __ / __ __ __ __ (month day year) | Country of Birth ____ | Other Birth Place ________ | Country of Usual Residence __________

Ethnic Group H=Hispanic/Latino N=Not Hispanic/Latino O=Other ________ U=Unknown ☐ | Sex M=male F=female U=unknown ☐

Race ☐American Indian/Alaskan Native ☐Asian ☐Black/African American ☐Native Hawaiian/Pacific Islander ☐White ☐Not asked ☐ Refused to answer ☐Other ☐ Unknown

Age at Case Investigation ______ | Age Unit* _____ | Reporting County ________________ | Reporting State __________

Date Reported __ __ / __ __ / __ __ __ __ (month day year) | Date First Reported to PHD __ __ / __ __ / __ __ __ __ (month day year) | National Reporting Jurisdiction _____

Earliest Date Reported to County __ __ / __ __ / __ __ __ __ (month day year) | Earliest Date Reported to State __ __ / __ __ / __ __ __ __ (month day year) | Pregnancy Status Y=yes N=no U=unknown ☐

*UNITS a=year d=day mo=month w=week OTH=other UNK=unknown

CASE CLASS STATUS		Suspect		Probable		Confirmed		Not a case		Unknown	Case Investigation Start Date _______

CASE INVESTIGATION STATUS CODE

Approved		Deleted		Notified		Ready for review		Reviewed		Unknown	
Closed		In progess		Other ___________		Rejected		Suspended			

CLINICAL INFORMATION

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

UNDERLYING CONDITIONS

	Y	N	U		Y	N	U		Y	N	U
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			
Corticosteroid				Myocardial infarction				Trouble swallowing			
CSF leak				Nephrotic syndrome				Unknown			

Y = Yes N = No U = Unknown

HOSPITALIZATION DURING TREATMENT FOR LEGIONELLOSIS		
Hospitalized? Y=yes N=no U=unknown ☐	**Hospital Admit Date** __ __ __ __ __ __ __ __ (mm/dd/yyyy)	
Hospital Stay Duration 0 – 998 999=unknown ☐☐☐ (days)	**Hospital Discharge Date** __ __ __ __ __ __ __ __ month day year	
Hospital Name ____________	**Hospital Treatment State** ____	**Hospital Treatment City** ____________

ILLNESS INFORMATION		
Illness Onset Date __ __ __ __ __ __ __ __ month day year	**Illness Duration** _____	**Illness Duration Units*** ____
Illness End Date __ __ __ __ __ __ __ __ month day year	**Legionella Diagnosis:** ☐ Legionnaires disease ☐ Other ☐ Extrapulmonary legionellosis	
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

ACCOMMODATION COMMENTS:

HEALTHCARE SETTING INFORMATION

Was this case associated with a healthcare exposure? ☐

1 **Presumptive**: Patient had 10 or more days of continuous stay at a healthcare facility 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
8 **Other** (specify) ____ 9 **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	FACILITY ADDRESS	CITY	STATE	ZIP	DATE OF VISIT/ADMISSION	
								Start Date	End Date
1 ☐ Hospital 2 ☐ Long term care 3 ☐ Clinic 4 ☐ Nursing home 8 ☐ Other 9 ☐ Unknown	1 ☐ Inpatient 2 ☐ Outpatient 3 ☐ Visitor/volunteer 4 ☐ Employee 8 ☐ Other 9 ☐ Unknown		1 ☐ Yes 2 ☐ No 9 ☐ Unknown						
1 ☐ Hospital 2 ☐ Long term care 3 ☐ Clinic 4 ☐ Nursing home 8 ☐ Other 9 ☐ Unknown	1 ☐ Inpatient 2 ☐ Outpatient 3 ☐ Visitor/volunteer 4 ☐ Employee 8 ☐ Other 9 ☐ Unknown		1 ☐ Yes 2 ☐ No 9 ☐ Unknown						

HEALTHCARE SETTING EXPOSURE COMMENTS:

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

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

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
8 **Other (specify)** ____ 9 **Unknown**

FACILITY TYPE	FACILITY EXPOSURE TYPE	FACILITY NAME	FACILITY ADDRESS	CITY	STATE	ZIP	DATE OF VISIT/RESIDENCE	
							Start Date	End Date
1 ☐ Assisted 2 ☐ Senior 3 ☐ Unknown	1 ☐ Employee 2 ☐ Resident 3 ☐ Visitor/volunteer 8 ☐ Other 9 ☐ Unknown							
1 ☐ Assisted 2 ☐ Senior 3 ☐ Unknown	1 ☐ Employee 2 ☐ Resident 3 ☐ Visitor/volunteer 8 ☐ Other 9 ☐ Unknown							

ASSISTED/SENIOR LIVING FACILITY COMMENTS:

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

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

EXPOSURE	LOCATION (facility name, city, state)	DATE(S)	Y	N	U
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? Y=yes N=no U=unknown ☐

If the respiratory therapy equipment used a humidifier, what type of water is used in the device?						
	☐	Bottled	☐	Sterile	☐	Other (specify) _______________
	☐	Distilled	☐	Tap	☐	Unknown

CRUISE PORT OF CALL INFORMATION

RECENT CRUISE TRAVEL: in the 14 days before onset, did the patient take a cruise? Y=yes N=no U=unknown ☐

Name of Cruise Line	Name of Ship	Cabin #	Departure City	Departure State	Departure Country

Date of Departure	Return City	Return State	Return Country	Return Date

Port of Call City	Port of Call Country	Port of Call State	Port of Call Date
			__ __ / __ __ / __ __ __ __ (month day year)

LABORATORY TESTING

CDC SPECIMEN | **Was a specimen sent to CDC for testing?** Y=yes N=no U=unknown ☐

Test Type	Test Result	Test Result Quantitative	Result Units	Serogroup	Legionella Species Isolated	Specimen Source (Type)	Date Specimen Collected mm/dd/yyyy	Date Specimen Sent to CDC (mm/dd/yyyy)	Reporting Laboratory Name	Performing Laboratory Type	Test Manufacturer	Test Brand Name
Urine Ag							__ __ __ __ __ __ __ __	__ __ __ __ __ __ __ __				
Culture							__ __ __ __ __ __ __ __	__ __ __ __ __ __ __ __				
DFA							__ __ __ __ __ __ __ __	__ __ __ __ __ __ __ __				
IHC							__ __ __ __ __ __ __ __	__ __ __ __ __ __ __ __				
PCR							__ __ __ __ __ __ __ __	__ __ __ __ __ __ __ __				
other												
Ab acute	L. pneumophila serogroup 1						__ __ __ __ __ __ __ __	__ __ __ __ __ __ __ __				
Ab conv	L. pneumophila serogroup 1						__ __ __ __ __ __ __ __	__ __ __ __ __ __ __ __				
Ab acute	Non-L. pneumophila serogroup 1						__ __ __ __ __ __ __ __	__ __ __ __ __ __ __ __				
Ab conv	Non-L. pneumophila serogroup 1						__ __ __ __ __ __ __ __	__ __ __ __ __ __ __ __				
unknown							__ __ __ __ __ __ __ __	__ __ __ __ __ __ __ __				

Test Results Codes

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

Specimen Source (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/faschia/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 **10490** | **Immediate National Notifiable Condition** Y=yes N=no U=unknown ☐ | **Legacy Case ID** ___________

State Case ID _______ | **Local Record ID** ______ | **Jurisdiction Code** ___ | **Binational Reporting Criteria** __ __ __ __ __ __ __ __

Date First Verbal Notification to CDC __ __ __ __ __ __ __ __ (month day year) | **Date Report First Electonically Submitted** __ __ __ __ __ __ __ __ (month day year)

Date of Electronic Case Notification to CDC -- -- -- -- -- -- -- -- (mm/dd/yyyy) | **MMWR Week** _______ | **MMWR Year** _________

Notification Result Status ☐ Final results ☐ Record coming as correction ☐ Results cannot be obtained

Current Occupation (*type of work case-patient does*) ____ | **Current Occupation Standardized** (**NIOCCS code**) ______________

Current Industry (*type of business or industry in which the case-patient works*) __________________________________ | **Current Industry Standardized** (**NIOCCS code**) ________________

IMPORTATION AND EXPOSURE INFORMATION

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

Imported Country ___________	**Imported State** ___	**Imported County** _____________	**Imported City** _______________
Country of Exposure _____	**State/Province of Exposure** ______	**County of Exposure** ________	**City of Exposure**________

OUTBREAK ASSOCIATED Y=yes N=no U=unknown ☐	**OUTBREAK NAME** __________________________________
Transmission Mode __ __ __ __ __ __ __ __ __	**CDC NORS OUTBREAK ID** _______________________
Person Reporting to CDC NAME ____________________ (first) ________________________ (last)	**Person Reporting to CDC Email** _____________ @ ___________ **Person Reporting to CDC Phone No.** (__ __ __) __ __ __ __ __ __ __

COMMENTS

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[ǂ] during the 14 days before onset of symptoms.

CONFIRMED

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

† https://wwwn.cdc.gov/nndss/conditions/legionellosis/case-definition/2019/

ǂ 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.