Form Approved
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Medical Record Abstraction Form

Public reporting burden of this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road NE, MS D-74 Atlanta, Georgia 30333; ATTN: PRA (0920-1011)

Medical Record Abstraction Form *<Example. Modify to fit current outbreak.>*
Legionnaires ' disease in an Acute Care Hospital

Medical Record # _____
Abstractor Initials: _____
Today's Date: _____ (mm/dd/yyyy)

Information Source (check all that apply):
____ hospital chart
____ other (if other specify) _____

I. PATIENT INFORMATION
Name: _____

Gender: _____

DOB: _____ Age: _____ Race/Ethnicity: _____

Type of Residence: Home LTCF Other _____

Address: _____ Apt: _____

City: _____ County: _____ State: ____Zip Code: _____

Phone number:_____

CASE DEFINITIONS *<Modify to fit current outbreak>*

A **definitely nosocomial** case of LD associated with Hospital A:

- Signs or symptoms of pneumonia AND
- Laboratory confirmation of *Legionella* AND
- Continuously hospitalized at Hospital A for the entire 10 days prior to onset, OR
- The patient had exposure to Hospital A during the 10 days prior to onset AND a clinical respiratory isolate matches an environmental isolate from Hospital A by molecular methods

A **probably nosocomial** case of LD associated with Hospital A:

- Signs or symptoms of pneumonia AND
- Laboratory confirmation of *Legionella* AND
- Exposure to Hospital A (including but not limited to: overnight stay, outpatient visit, visitor, employee, volunteer) during a portion of the 2-10 days prior to onset

A **suspected** case of LD associated with Hospital A:

- Signs or symptoms of pneumonia AND
- No *Legionella* test performed or results unavailable AND
- No other laboratory-confirmed diagnosis for the pneumonia AND
- Exposure to Hospital A (including but not limited to: overnight stay, outpatient visit, visitor, employee, volunteer) during the 2-10 days prior to onset

A person is considered to have signs or symptoms of pneumonia if the following were present:

- Cough or shortness of breath, AND at least one of the following: fever ≥100.5°F, nausea, diarrhea (3 or more stools in 24 hrs.), confusion, malaise, or headache, OR
- Physician diagnosis of pneumonia, OR
- Chest x-ray consistent with pneumonia.

Laboratory criteria for confirmed legionellosis:

- Isolation of any *Legionella* organism from respiratory secretions, lung tissue, pleural fluid, or other normally sterile fluid, OR
- Detection of *Legionella pneumophila* serogroup 1 (Lp1) urinary antigen using validated reagents, OR
- Fourfold or greater rise in antibody titer to Lp1 using validated reagents.

Laboratory criteria for probable legionellosis:

- Fourfold or greater rise in antibody titer to non-Lp1 *Legionella* species using validated reagents.
- Detection of specific *Legionella* antigen or staining of the organism in respiratory secretions, lung tissue or pleural fluid by direct fluorescent antibody (DFA) staining, immunohistochemistry (IHC) or other similar method, using validated reagents
- Detection of *Legionella* species by a validated nucleic acid assay.

II. *LEGIONELLA*-SPECIFIC TESTING

1. Respiratory specimen collected and processed specifically for *Legionella* culture?
   _____ Yes (See 1a. below) _____ No (See 1b. below) _____ Unknown

   a.) If **YES**,
   Specimen type: (e.g., expectorated sputum, BAL, etc.) _____
   Collected Date: ____/____/ ____ Laboratory Name:_____
   Results:_____

   b.) If **NO**,
   Respiratory specimen collected for **any** culture?
   _____ Yes _____ No _____ Unknown
   If Yes,
   Specimen type: (e.g., expectorated sputum, BAL, etc.) _____
   Collected Date: ____/____/ ____ Laboratory: _____
   Results:_____

2. Urine specimen collected for *Legionella* urine antigen testing?
   _____ Yes _____ No _____ Unknown
   Collected Date: ____/____/ ____ Laboratory Name: _____
   Results: _____

3. Serum sample collected for *Legionella* serologic testing?
   _____ Yes _____ No _____ Unknown
   If Yes,
   Collected Date: ____/____/ ____ Laboratory: _____
   Type of assay (e.g., Lp1 only, Lp1-6 pooled antigen, *Legionella* species pooled antigen, etc.) _____
   Results: _____

   a.) If convalescent serum samples were collected, please provide the same information for each:

   Collected Date: ____/____/ ____ Laboratory: _____
   Type of assay (e.g., Lp1 only, Lp1-6 pooled antigen, *Legionella* species pooled antigen, etc.) _____
   Results:_____

   Collected Date: ____/____/ ____ Laboratory: _____
   Type of assay (e.g., Lp1 only, Lp1-6 pooled antigen, *Legionella* species pooled antigen, etc.) _____
   Results:_____

4. PCR testing for *Legionella*?
   _____ Yes _____ No _____ Unknown
   Collected Date: ____/____/ ____ Laboratory Name: _____
   Results: _____

5. DFA or IHC for *Legionella* species?
   _____ Yes _____ No _____ Unknown
   Collected Date: ____/____/ ____ Laboratory Name:_____
   Results: _____

6. Outcome: ____ Still Hospitalized ____ Transferred to another facility (list:_____)
   ____ Discharged Home ____ Deceased ____ Unknown

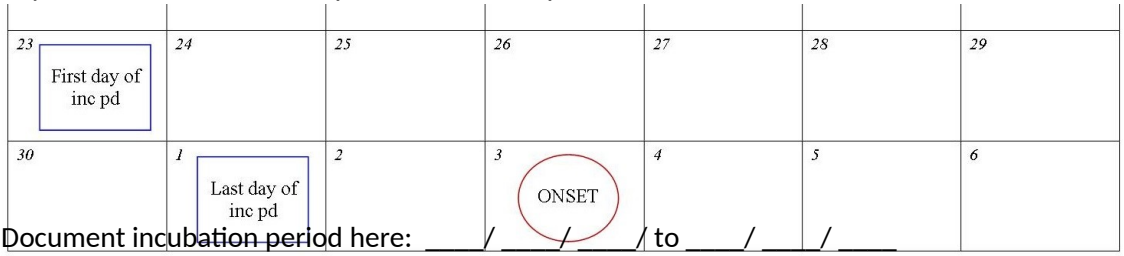
   a.) If deceased,
      a. Date of death: _____ (mm/dd/yyyy)
      b. Was a post-mortem examination performed? ___Yes ___No ____Unknown
         i. If yes, are tissue specimens available? ____ Yes ____No ____ Unknown

III. SIGNS AND SYMPTOMS

Shortness of breath:	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Cough:	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Hemoptysis:	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Myalgias:	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Fever (self-report):	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Fever ≥100.5°F:	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Diarrhea (3 stools/24h):	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Nausea:	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Malaise:	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Headache:	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Other (_____):	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Other (_____):	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown
Other (_____):	_____ Yes (Onset Date: _____)	_____ No	_____ Unknown

7. List date of earliest symptom onset (MM/DD/YYYY): ____/ _____/ _____

IMPORTANT: How to calculate incubation period
USE A CALENDAR! Start at the date of earliest symptom onset (Q.7) and count backward 2-10 days. This is the incubation period. See example below.



Document incubation period here: ____/ ____/ ____/ to ____/ ____/ ____

8. Document any radiographic testing in the 14 days after onset of symptoms of LD:

   Chest X-ray: _____ Yes _____ No _____ Unknown
   CT scan: _____ Yes _____ No _____ Unknown

   If Yes, when and what were the findings?
   Date: ____/____ / _____
   Result: ____ New Infiltrate ____ Old / Unchanged Infiltrate ____ Indeterminate
   ____ No infiltrate ____ Not available
   Findings: _____

IV. EXPOSURE HISTORY

Document the patient's general location for each day during their incubation period. (Additional details regarding specific location(s) within Hospital A will be asked later.)

Date *(start with first date of inc pd from top of this page)*	Location *(e.g., Hospital A, Hospital B, Home, LTCF, travel location)*	Water Exposures/Activities *(e.g., took pre-op shower, whirlpool spa in gym)*

9. Type of exposures to Hospital A during incubation period *(check all that apply)*:
   _____ Inpatient _____ Outpatient _____ Visitor _____ Volunteer _____ Employee

10. **Case Classification** *(see p. 2 for case definitions)*: _____ Definitely Nosocomial
    _____ Probably Nosocomial _____ Suspect Case _____ Not Nosocomial

    If **Not Nosocomial**, END HERE. Otherwise, continue to next page.

VI. MEDICAL HISTORY

COPD/Emphysema/Chronic Lung Disease:	_____ Yes	_____ No/Unknown
Diabetes:	_____ Yes	_____ No/Unknown
Congestive Heart Failure:	_____ Yes	_____ No/Unknown
History of stroke/CVA:	_____ Yes	_____ No/Unknown
Chronic Renal Insuffiency (CRI/CKD) or End-Stage Renal Disease (ESRD):	_____ Yes	_____ No/Unknown
Cirrhosis / Liver Disease:	_____ Yes	_____ No/Unknown
Cancer (Type: _____):	_____ Yes	_____ No/Unknown
Organ Transplant:	_____ Yes	_____ No/Unknown
HIV/AIDS:	_____ Yes	_____ No/Unknown
Dementia:	_____ Yes	_____ No/Unknown
Taking Immunosuppressive drugs (e.g., corticosteroids or chemotherapy):	_____ Yes	_____ No/Unknown
Other (_____):	_____ Yes	_____ No/Unknown
Other (_____):	_____ Yes	_____ No/Unknown

11. Current Smoker (or quit in the past year): _____ Yes _____No _____ Unknown
12. Former Smoker: _____ Yes _____No _____Unknown

VII. CLINICAL AND EXPOSURE INFORMATION FOR EACH HOSPITALIZATION TO HOSPITAL A PRIOR TO ONSET

Beginning at the First Day of Incubation Period (top of p. 5), complete this section for each hospitalization to Hospital A in the 10 days prior to symptom onset. If patient had only outpatient or other exposures (was not inpatient at Hospital A), skip to p. 11.

Hospitalization #____

Date of admission: ____/____/ ____ Date of discharge: ____/____/____

Admitted to ICU? _____ Yes _____ No _____ Unknown
If yes, # of days in ICU _____
Intubated? _____ Yes _____ No _____ Unknown

Discharge diagnosis: (Complete all)
Legionellosis? _____ Yes _____ No _____ Unknown
Pneumonia? _____ Yes _____ No _____ Unknown
If yes, Etiology: _____ Lab Test(s): _____
Other Dx: _____

Chest X-ray? _____ Yes _____ No _____ Unknown
CT scan? _____ Yes _____ No _____ Unknown
If Yes, when and what were the findings?
Date: ____/____ / _____
Result: ____ New Infiltrate ____ Old / Unchanged Infiltrate ____ Indeterminate
____ No infiltrate ____ Not available
Findings: _____

List all campuses, buildings, and rooms the patient stayed in during this visit:

Name of Campus	Building	Room#	Reason for Visit	Admit Date	Discharge Date

Was patient ambulatory? _____ Yes _____ No _____ Unknown
Did patient leave building during hospitalization? _____ Yes _____ No _____ Unknown

Showered in facility? _____ Yes _____ No _____ Unknown
How often? _____ Daily _____ Weekly _____ Monthly _____ Unknown

Used CPAP/BiPAP while in facility? _____ Yes _____ No _____ Unknown

Nebulized medications while in facility? _____ Yes _____ No _____ Unknown

Document any antibiotic therapies that the patient received during this hospitalization:

Antibiotic	Check if given	Dose	Route	Start Date	End Date	Check if continued as outpatient
Levofloxacin (Levoquin)						
Azithromycin (Zithromax)						
Ciprofloxacin (Cipro)						
Erythromycin						
Ceftriaxone (Rocephin)						
Other (specify): _____						
Other (specify): _____						

Hospitalization #____

Date of admission: ____/____/ ____ Date of discharge: ____/____/____

Admitted to ICU? _____ Yes _____ No _____ Unknown
If yes, # of days in ICU _____
Intubated? _____ Yes _____ No _____ Unknown

Discharge diagnosis: (Complete all)
Legionellosis? _____ Yes _____ No _____ Unknown
Pneumonia? _____ Yes _____ No _____ Unknown
If yes, Etiology: _____ Lab Test(s): _____
Other Dx: _____

Chest X-ray? _____ Yes _____ No _____ Unknown
CT scan? _____ Yes _____ No _____ Unknown
If Yes, when and what were the findings?
Date: ____/____ / _____
Result: ____ New Infiltrate ____ Old / Unchanged Infiltrate ____ Indeterminate
____ No infiltrate ____ Not available
Findings: _____

List all campuses, buildings, and rooms the patient stayed in during this visit:

Name of Campus	Building	Room#	Reason for Visit	Admit Date	Discharge Date

Was patient ambulatory? _____ Yes _____ No _____ Unknown
Did patient leave building during hospitalization? _____ Yes _____ No _____ Unknown

Showered in facility? _____ Yes _____ No _____ Unknown
How often? _____ Daily _____ Weekly _____ Monthly _____ Unknown

Used CPAP/BiPAP while in facility? _____ Yes _____ No _____ Unknown

Nebulized medications while in facility? _____ Yes _____ No _____ Unknown

Document any antibiotic therapies that the patient received during this hospitalization:

Antibiotic	Check if given	Dose	Route	Start Date	End Date	Check if continued as outpatient
Levofloxacin (Levoquin)						
Azithromycin (Zithromax)						
Ciprofloxacin (Cipro)						
Erythromycin						
Ceftriaxone (Rocephin)						
Other (specify): _____						
Other (specify): _____						

Hospitalization #____

Date of admission: ____/____/ ____ Date of discharge: ____/____/____

Admitted to ICU? _____ Yes _____ No _____ Unknown
If yes, # of days in ICU _____
Intubated? _____ Yes _____ No _____ Unknown

Discharge diagnosis: (Complete all)
Legionellosis? _____ Yes _____ No _____ Unknown
Pneumonia? _____ Yes _____ No _____ Unknown
If yes, Etiology: _____ Lab Test(s): _____
Other Dx: _____

Chest X-ray? _____ Yes _____ No _____ Unknown
CT scan? _____ Yes _____ No _____ Unknown
If Yes, when and what were the findings?
Date: ____/____ / _____
Result: ____ New Infiltrate ____ Old / Unchanged Infiltrate ____ Indeterminate
____ No infiltrate ____ Not available
Findings: _____

List all campuses, buildings, and rooms the patient stayed in during this visit:

Name of Campus	Building	Room#	Reason for Visit	Admit Date	Discharge Date

Was patient ambulatory? _____ Yes _____ No _____ Unknown
Did patient leave building during hospitalization? _____ Yes _____ No _____ Unknown

Showered in facility? _____ Yes _____ No _____ Unknown
How often? _____ Daily _____ Weekly _____ Monthly _____ Unknown

Used CPAP/BiPAP while in facility? _____ Yes _____ No _____ Unknown

Nebulized medications while in facility? _____ Yes _____ No _____ Unknown

Document any antibiotic therapies that the patient received during this hospitalization:

Antibiotic	Check if given	Dose	Route	Start Date	End Date	Check if continued as outpatient
Levofloxacin (Levoquin)						
Azithromycin (Zithromax)						
Ciprofloxacin (Cipro)						
Erythromycin						
Ceftriaxone (Rocephin)						
Other (specify): _____						
Other (specify): _____						

VIII. OUTPATIENT VISITS to Hospital A or associated clinics (including rehab visits)

Did patient have any outpatient visits during the 2-10 days prior to symptom onset?
_____ Yes _____ No _____ Unknown

If yes, list location of visits and name of clinic:

Name of Campus	Clinic (e.g., Primary Care, Cardiology)	Building	Room#	Date(s) of Visit

IX. OTHER EXPOSURES

Did patient have any other exposure to Hospital A in the 2-10 days prior to symptom onset (e.g., visitor, volunteer, employee)? _____ Yes _____ No _____ Unknown

Please note these exposures: _____