Form Approved
OMB No. 0920-1011
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Medical Record Abstraction Form

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

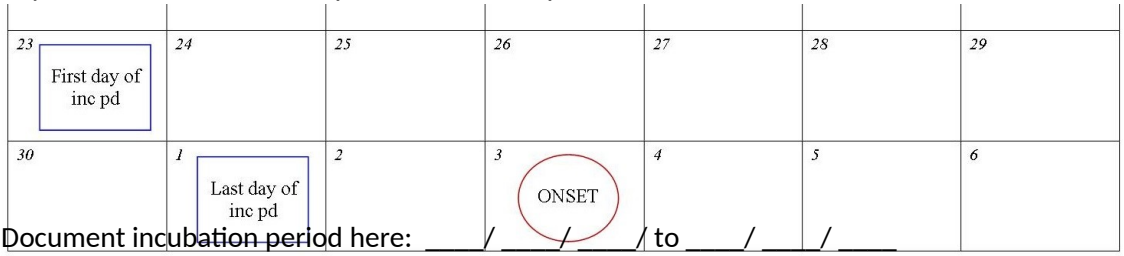
   a.) If deceased,
      a. Date of death: _____ (mm/dd/yyyy)
      b. Was a post-mortem examination performed? ___Yes ___No ____Unknown
         i. If yes, are tissue specimens available? ____ Yes ____No ____ Unknown

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: _____