

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 $\geq 100.5^{\circ}\text{F}$, 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 $\geq 100.5^{\circ}\text{F}$:	____ 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.

23	24	25	26	27	28	29
First day of inc pd						
30	1	2	3	4	5	6
	Last day of inc pd		ONSET			

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:	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
Diabetes:	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
Congestive Heart Failure:	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
History of stroke/CVA:	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
Chronic Renal Insufficiency (CRI/CKD) or End-Stage Renal Disease (ESRD):	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
Cirrhosis / Liver Disease:	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
Cancer (Type: _____):	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
Organ Transplant:	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
HIV/AIDS:	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
Dementia:	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
Taking Immunosuppressive drugs (e.g., corticosteroids or chemotherapy):	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
Other (_____)::	<input type="checkbox"/> Yes	<input type="checkbox"/> No/Unknown
Other (_____)::	<input type="checkbox"/> Yes	<input type="checkbox"/> 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: _____