LEGIONELLOSIS INVESTIGATION REPORT FORM

Local health departments should fax completed investigation form to regional DSHS office.
Regional DSHS offices should fax completed investigation form to 512-776-7616.

NBS ID:

Case status: ☐ Confirmed ☐ Not a Case

Patient name: _____
Last First

Address: _____

City: _____ **County:** _____ **Zip:** _____

Phone 1: ( ) _____ **Phone 2:** ( ) _____

Birthdate: ____/____/_____ **Age:**_____ **Sex:** ☐Male ☐Female ☐Unknown

Race: ☐White ☐Black ☐Asian ☐Pacific Islander ☐Native American/Alaskan ☐Unknown ☐ Other: _____

Hispanic: ☐ Yes ☐ No ☐ Unknown

Reported by: _____

Agency: _____

Phone: ( )_____ **Report date:**____/____/____

Investigated by: _____

Agency: _____

Phone: ( ) _____

Email:_____

Investigation start date: _____/_____/_____

Date investigation completed: _____/_____/_____

CLINICAL DATA

Symptom onset date: ____/____/_____ **Illness end date**: ____/____/_____

Outcome? ☐ Survived ☐ Died on: ____/____/____ ☐ Still ill** ☐ Unknown

If still ill, follow up on patient's outcome in 2-3 weeks and update in NBS.

Hospitalized? ☐ Yes† ☐ No ☐ Unknown

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

Hospital name:_____

Hospital address: _____

†If hospitalized in more than one facility, please add hospital details in comments section.

Physician:_____ **Phone:** ( )_____

Was the patient diagnosed with clinical or radiographic pneumonia?

☐ Yes ☐ No ☐ Unknown

Signs and symptoms *(Check all that apply)***:** ☐ Altered mental status/confusion

☐ Abdominal pain ☐ Chest pain ☐ Cough ☐ Diarrhea

☐ Fever (Max temp: _____) ☐ Headache ☐ Pneumonia ☐ Malaise

☐ Myalgia (muscle pain) ☐ Other: _____

☐ Shortness of breath ☐ Vomiting

UNDERLYING HEALTH CONDITIONS

☐ Yes (*check all that apply*) ☐ No ☐ Unknown

☐ Asthma ☐ Cancer, when? _____

☐ Chemotherapy ☐ Chronic kidney disease

☐ Corticosteroid therapy ☐ Diabetes ☐ Heart disease

☐ HIV/AIDS ☐ Liver disease

☐ Organ transplant recipient, when? _____

☐ Other chronic lung disease: _____

☐ Other: _____

HEALTH BEHAVIORS	Yes	No	Unk	Quantity per day (packs, drinks)	Duration (years)
Alcohol consumption	☐	☐	☐		
Current smoker	☐	☐	☐		
Former smoker	☐	☐	☐		

LABORATORY DATA

(If more than one urinary antigen test performed, record second test in "other legionellosis test" section)

Urine antigen test: Date collected: ____/____/____ Result: ☐ Positive ☐Negative ☐ Unknown

Ordering facility: _____ Reporting facility: _____ Date rec'd by public health: ____/____/____

Culture: Date collected: ____/____/____

Specimen source: ☐ Bronchoalveolar lavage (BAL) or bronchial wash ☐ Sputum ☐ Pleural fluid ☐ Lung tissue ☐ Other:_____

Result: ☐ Positive ☐ Negative ☐ Pending ☐ Unknown If positive, species and serogroup:_____

Ordering facility: _____ Reporting facility: _____ Date rec'd by public health:____/____/____

Antibody test:

1st (acute) antibody titer:_____ Species / serogroup:_____ Date collected: ____/____/____

2nd (convalescent) antibody titer:_____ Species / serogroup:_____ Date collected: ____/____/____

Ordering facility: _____ Reporting facility: _____ Date rec'd by public health: ____/____/____

Other legionellosis test:

Test name: ☐ Nucleic acid assay (PCR) ☐ Direct fluorescent antibody (DFA) ☐ Other:_____

Date collected: ____/____/____ Specimen source: ☐ Lung biopsy ☐ Sputum ☐ Pleural fluid ☐ Blood ☐ Other:_____

Result: ☐ Positive ☐ Negative ☐ Pending ☐ Unknown If positive, species_____ serogroup:_____

Ordering facility: _____ Reporting facility: _____ Date rec'd by public health: ____/____/____

Who was interviewed to obtain exposure history?

☐ Patient ☐ Surrogate; relationship to patient: _____ ☐ Neither; reason: _____

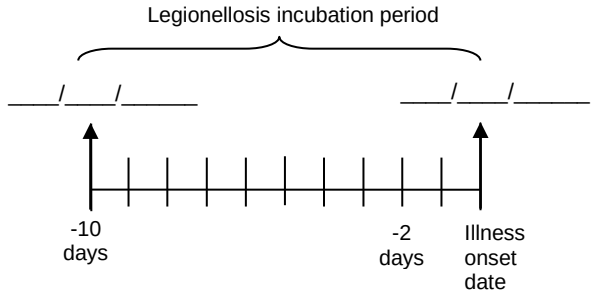
Whenever possible, interview a patient or surrogate to obtain exposure history. If the patient is unable to communicate at the time of investigation, complete the interview with a surrogate but please consider interviewing the patient at a later date. Ask patient/surrogate to refer to a calendar and gather booking info/receipts/itineraries for recent travel and medical stays.

Contact Attempts: Record date(s) and contact method (phone, text, letter):

Date 1: ___/___/____ Time:	**Date 2: ___/___/____ Time:**	**Date 3: ___/___/____ Time:**

Were medical records obtained and abstracted/reviewed for this investigation? ☐ Yes ☐ No ☐ Unknown

INFECTION TIMELINE: Enter onset of illness. Count backward to determine beginning of incubation period for exposure history sections below.



- ***Incubation period****: Legionnaires' disease is typically 2–10 days; Pontiac fever is 5–72 hours.*
- *For all legionellosis cases, please ask about exposures in the* ***entire 10-day period*** *prior to illness onset.*

TRAVEL HISTORY (OR RESIDENCE IN A TRAVEL ACCOMMODATION)

In the 10 days before onset, did the patient spend any nights away from home (e.g., hotel, motel, cruise ship, train, RV park, resort, hostel, private residence, campground, etc.), excluding healthcare settings, or was the person living in a travel accommodation?

☐ Yes, *please complete the table below* ☐ No ☐ Unknown

#	Accommodation name and type‡	Address, city, state, zip code, country	Room number	Arrival date	Departure date
1					
2					
3					
4					

‡If patient was on a cruise ship during the incubation period, complete this investigation form and the CDC Legionellosis Cruise Ship Questionnaire

ADDITIONAL TRAVEL QUESTIONS

If patient reported using a recreational vehicle (RV) or camper in the table above, please ask the following:

Name and location of RV park/campgrounds (if not given above): _____

Campsite/row number: _____ Used drinking water camper/RV hookups? ☐ Yes ☐ No ☐ Unknown

Date(s) when camper/RV water tanks were last flushed: _____

EVENTS

In the 10 days before onset, did the patient attend any conventions, conferences, public gatherings, meetings, festivals, or other events (e.g., wedding, reunion, exhibit, trade show, fair)? ☐ Yes, *please complete the table below* ☐ No ☐ Unknown

Type of event	Date(s) attended	Name/location and address of event

MEDICAL FACILITY EXPOSURE HISTORY

In the 10 days before onset, did the patient visit, stay, or work at a healthcare setting (e.g., hospital, rehab facility, clinic, dental office)?

☐ Yes, *please complete the table below* ☐ No ☐ Unknown

Type of healthcare facility	Type of exposure	Facility name and complete address	Reason for visit	Date(s) of visit / admission	Date of discharge
☐ Clinic ☐ Dental ☐ Hospital ☐ Other:_________ ☐ Rehab	☐ Employee ☐ Inpatient ☐ Outpatient ☐ Visitor ☐ Volunteer				
☐ Clinic ☐ Dental ☐ Hospital ☐ Other:_________ ☐ Rehab	☐ Employee ☐ Inpatient ☐ Outpatient ☐ Visitor ☐ Volunteer				
☐ Clinic ☐ Dental ☐ Hospital ☐ Other:_________ ☐ Rehab	☐ Employee ☐ Inpatient ☐ Outpatient ☐ Visitor ☐ Volunteer				

If yes, was the patient hospitalized or living at the facility for the entire incubation period? ☐ **Yes**§ ☐ No ☐ Not applicable ☐ Unknown

If yes, was the facility a transplant center? ☐ Yes ☐ No ☐ Unknown

In the 10 days before onset, did the patient visit, stay or work at a nursing home, assisted living facility, senior living facility, or similar?

☐ Yes, *please complete the table below* ☐ No ☐ Unknown

Type of facility	Type of exposure	Facility name and complete address	Date(s) of visit / admission	Date of discharge
☐ Assisted living facility ☐ Nursing home (with skilled nursing or personal care) ☐ Other:_________________ ☐ Senior living facility (without skilled nursing or personal care) ☐ Skilled nursing facility	☐ Employee ☐ Other: ___________ ☐ Resident ☐ Visitor ☐ Volunteer			
☐ Assisted living facility ☐ Nursing home (with skilled nursing or personal care) ☐ Other:_________________ ☐ Senior living facility (without skilled nursing or personal care) ☐ Skilled nursing facility	☐ Employee ☐ Other: ___________ ☐ Resident ☐ Visitor ☐ Volunteer			

If yes, was the patient living at the facility for the entire incubation period? ☐ **Yes**§ ☐ No ☐ Not applicable ☐ Unknown

CORRECTIONAL FACILITY EXPOSURE HISTORY

In the 10 days before onset, did the patient visit, work, or stay at a correctional facility? ☐ Yes ☐ No ☐ Unknown

If yes, name and address of facility:____

Type of exposure: ☐ Inmate ☐ Employee ☐ Visitor ☐ Other: ___________________________________

Date(s) of visit or incarceration:_________________________________ Date(s) of release / transfer:_________________________________

Was the patient living at the facility for the entire 10 days before onset? ☐ **Yes**§ ☐ No ☐ Not applicable ☐ Unknown

§Definitions:

Definite facility-associated case: Case spent entire incubation period in the facility

Possible facility-associated case: Case spent a portion of the incubation period in the facility

Outbreak‖ (one of the following):

- One definitely healthcare-associated case**, OR** at least 2 possibly healthcare-associated cases within 1 year associated with the same healthcare facility
- At least 2 cases associated with the same non-healthcare facility (e.g., hotel, gym, etc.) or other common location (e.g., amusement park) within 1 year

‖Note: A thorough investigation is important to exclude other plausible sources of infection (i.e., those not associated with the facility/location).

For outbreak investigation and other instructions, see EAIDB Investigation Guidelines: http://www.dshs.state.tx.us/IDCU/investigation/Investigation-Guidance/

OTHER EXPOSURE HISTORY QUESTIONS

In the 10 days before onset, did the patient have exposure (e.g., getting in, sitting/being near, or walking by, even briefly) to any of the following potential sources of misty/aerosolized water, while traveling, hospitalized, or in the case's home city?

Please complete the table below:

Exposure type *Includes getting in, sitting/ being near, or walking by a functioning/working device*	**Yes**	**No**	**Unknown**	**Location(s)**	**Date(s)**	**Description of exposure and duration (e.g., sat near for 1 hour)**
Car Wash	☐	☐	☐			
Centralized cooling tower/ HVAC systems	☐	☐	☐			
Decorative fountain, waterwall, or water display	☐	☐	☐			
Home humidifier or mister	☐	☐	☐			
Hot springs, mineral baths, or geothermal waters	☐	☐	☐			
Hot tub or whirlpool spa	☐	☐	☐			
Jetted bathtub (away from home, filled and drained after each use)	☐	☐	☐			
Other: _____	☐	☐	☐			
Other: _____	☐	☐	☐			
Pressure Washer	☐	☐	☐			
Recreational misters	☐	☐	☐			
Shower (away from home)	☐	☐	☐			
Steam room or wet sauna	☐	☐	☐			
Store misters (e.g., grocery store, gardening)	☐	☐	☐			
Swimming or wading pool	☐	☐	☐			
Therapeutic spa venue	☐	☐	☐			
Waterpark, splash pad	☐	☐	☐			

In the 10 days before onset, did the patient use a nebulizer, CPAP, BiPAP or any other respiratory therapy equipment for the treatment of sleep apnea, COPD, asthma or for any other reason? ☐ Yes, *please fill in details below* ☐ No ☐ Unknown

Type of device: _____ Date(s):_____ Location: _____

Does the device use a humidifier or misty water? ☐ Yes ☐ No ☐ Unknown

Type of water used in the device? ☐ Sterile ☐ Distilled ☐ Bottled ☐ Tap (well) ☐ Tap (city) ☐ Other:_____ ☐ None ☐ Unknown

Describe how the device is cleaned: _____

In the 10 days before onset, did the patient have any exposures to soil, potting soil, or compost (e.g., gardening, excavation, etc.)?

☐ Yes ☐ No ☐ Unknown *If yes, provide place, dates, product, description (e.g., "gardening–potting soil purchased from Store A"):*

Location, soil type, activities:_____ What dates:_____

In the 10 days before onset, does the patient recall any general construction, plumbing projects, water main breaks, or water line work at or near a location where the patient lived, was hospitalized, worked, or visited? ☐ Yes ☐ No ☐ Unknown

If yes, provide place, dates, and description (e.g., "new building construction at Hospital A on 1/1/16"):

Location and details:_____ What dates:_____

Location and details:_____ What dates:_____

Location and details:_____ What dates:_____

In the 10 days before onset, did the patient work, attend school, or volunteer? ☐ Yes, *please complete table below* ☐ No ☐ Unknown

Job/activity description	Employer/facility	Employer/facility address	Date(s) worked, volunteered, etc.	Duration *(e.g., 8 hours/day)*

Does the patient know of anyone else with similar symptoms or pneumonia? ☐ Yes, *please complete the table below* ☐ No ☐ Unknown

Name	Age	Onset date	Contact information	Shared Exposures	Legionella testing done?	Legionella test results
		___/___/_____			☐ Yes ☐ No	
		___/___/_____			☐ Yes ☐ No	

PUBLIC HEALTH ACTIONS TAKEN *(please refer to the Prevention and Control Measures section in the Legionellosis chapter of the EAIDB Investigation Guidelines for examples)*

_____

_____

_____

ADDITIONAL COMMENTS

_____

_____

_____

_____

_____

_____