

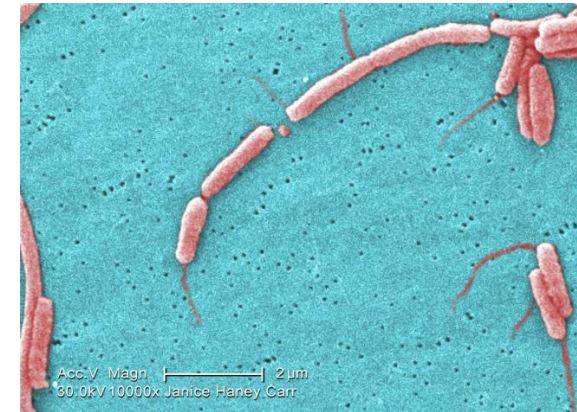


Legionella Reference Center Overview

January 26, 2024

Legionella

- Aerobic, rod-shaped, Gram negative bacteria
- Commonly found in natural and man-made freshwater environments
- Identified and named during the investigation into a pneumonia outbreak among attendees of the American Legion annual convention in Philadelphia, PA in 1976



Legionellosis

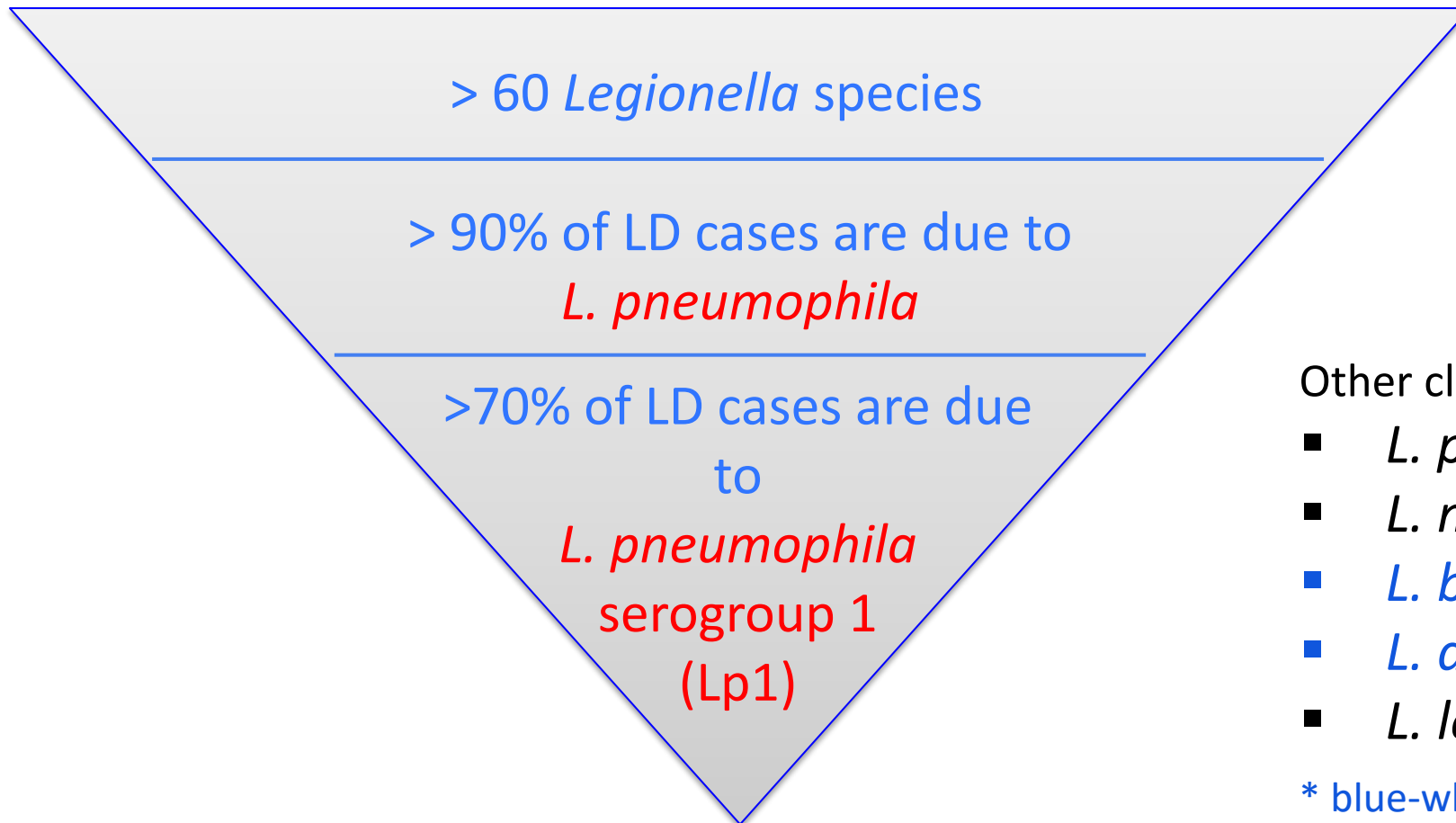
Legionnaires Disease (LD)

- Pneumonia
- Should be treated by antibiotics
- Fatality rate is approximately 10%
- Hospitalization is common

Pontiac Fever

- Flu-like illness
- Self limited
- Not fatal
- Hospitalization is uncommon

Most LD is Associated with *L. pneumophila* serogroup 1

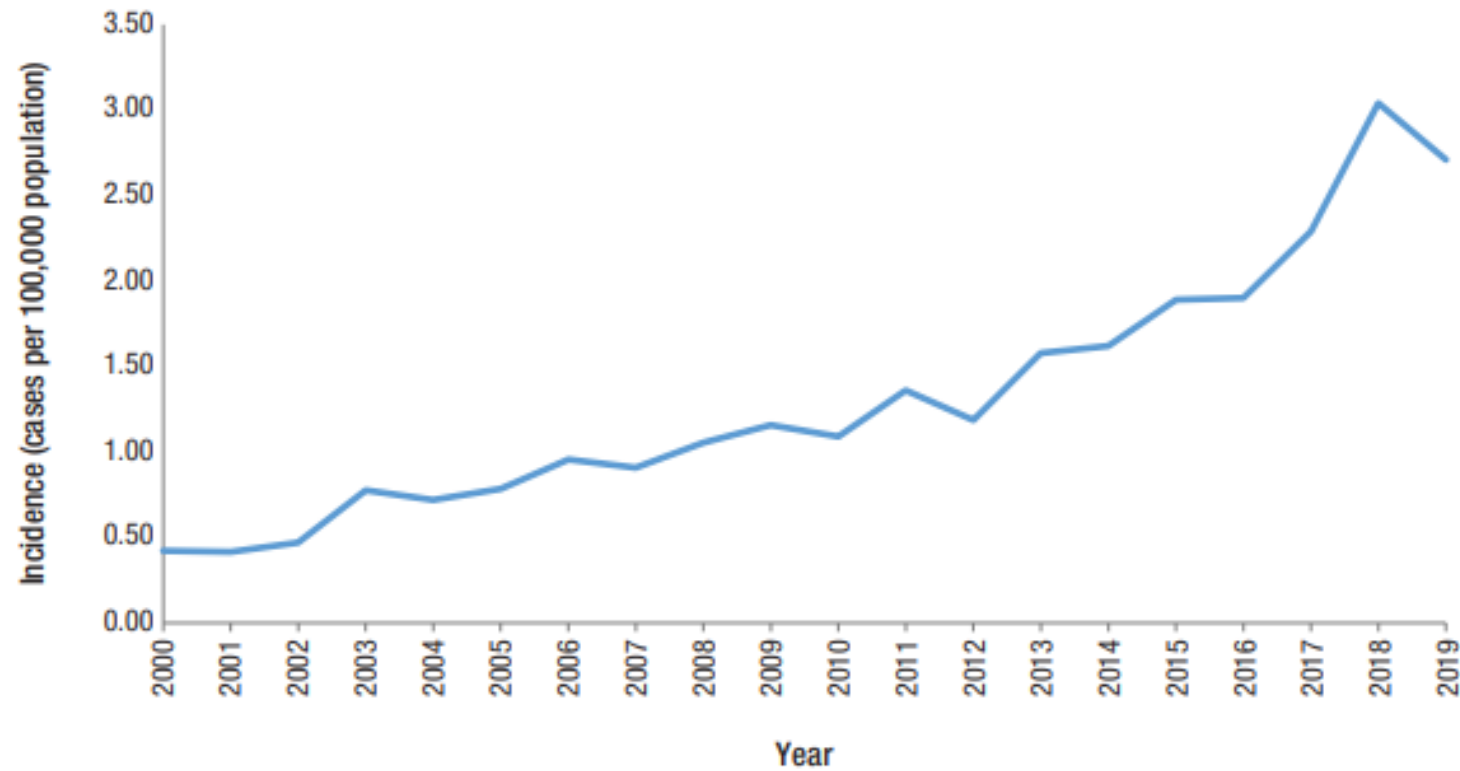


Other clinically relevant *Legionella*

- *L. pneumophila* sg 3 & 6
- *L. micdadei*
- *L. bozemanii**
- *L. dumoffii**
- *L. longbeachae*

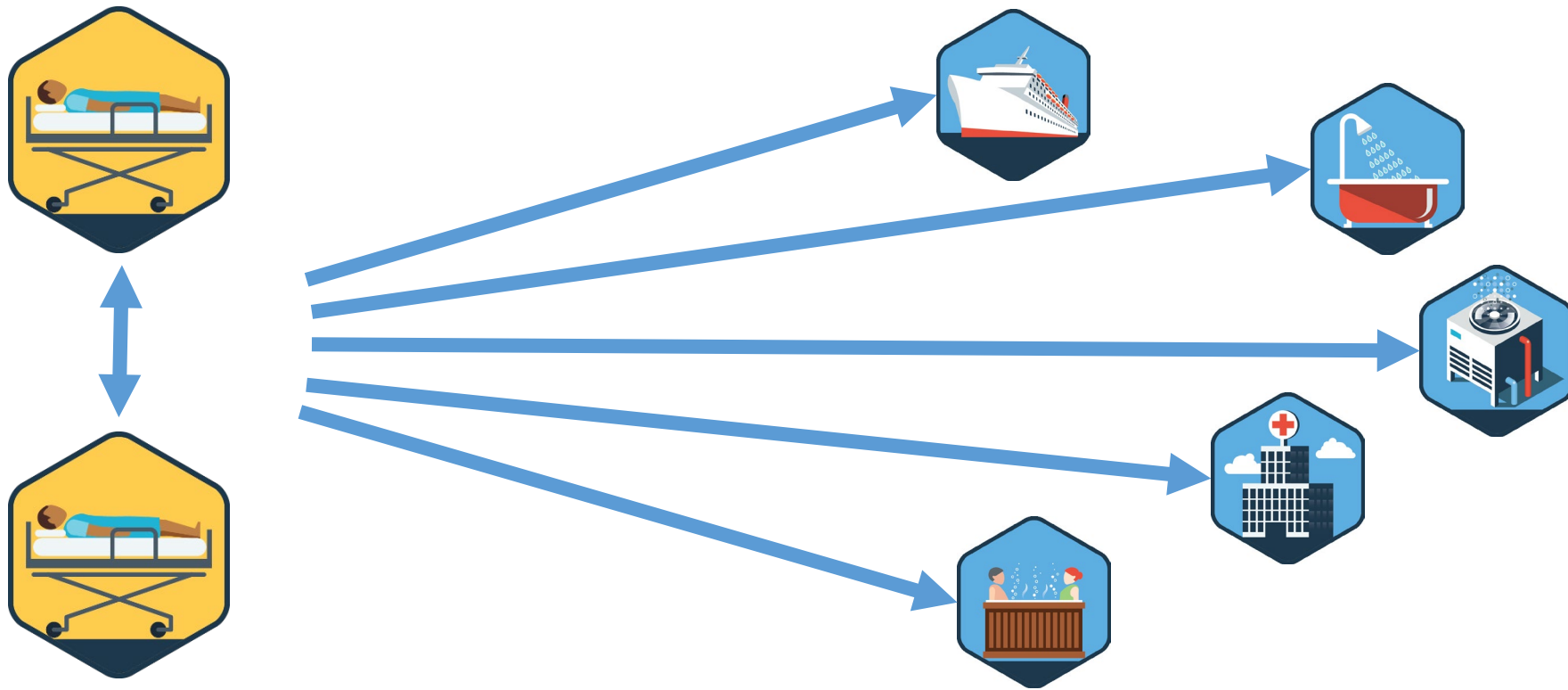
* blue-white fluorescent legionellae

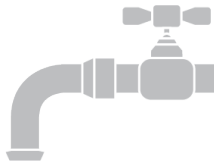
Legionnaires' Disease Rates are Increasing



Legionnaires' Disease Surveillance Summary Report, United States 2018-2019.

Investigations are Important for Linking Cases and Identifying Likely Sources





Legionnaires' disease case and outbreak investigations should include epidemiologic, environmental health, and laboratory support.

Laboratory Support is Important for LD Investigations, but Barriers Exist

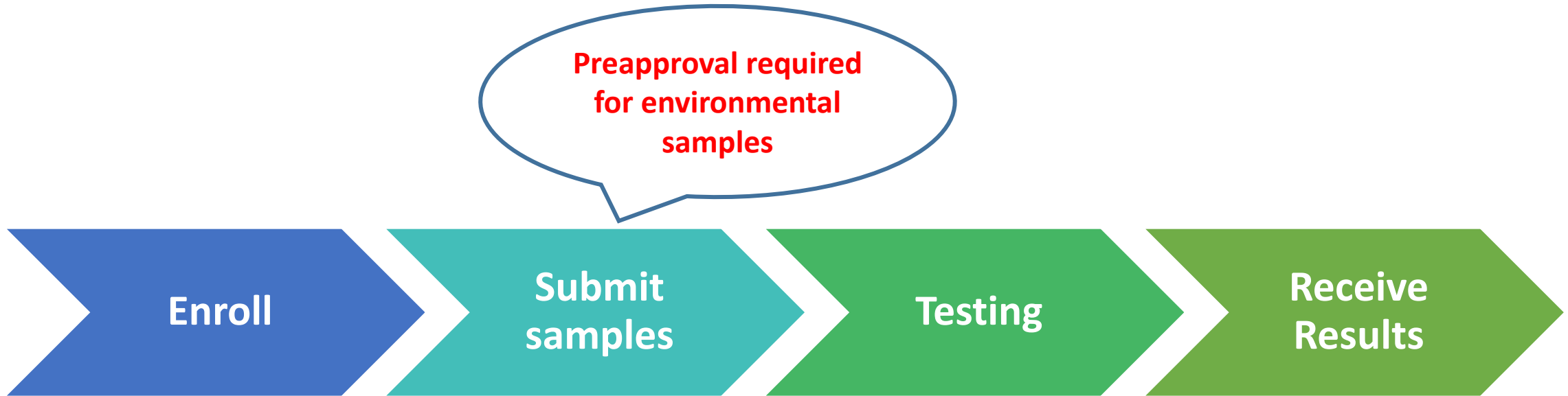
- Ideally, testing is conducted locally
 - Many jurisdictions do not have in-house testing capacity
 - Commercial laboratory support can be expensive and complicated
- CDC provides laboratory testing
 - Clinical testing
 - Environmental testing in association with an Epi-Aid or official technical assistance request

APHL Conducted an Assessment of Laboratory Needs in the Context of an LD Investigation

- Goal: assess stakeholder capabilities, capacities, needs, and challenges related to *Legionella* outbreak investigations
- Method: conduct one-on-one and group interviews with CDC and public health laboratory and epidemiology staff
- Outcome: desire to establish a *Legionella* Reference Center (LRC) providing a standard test menu to jurisdictions with limited in-house testing capability

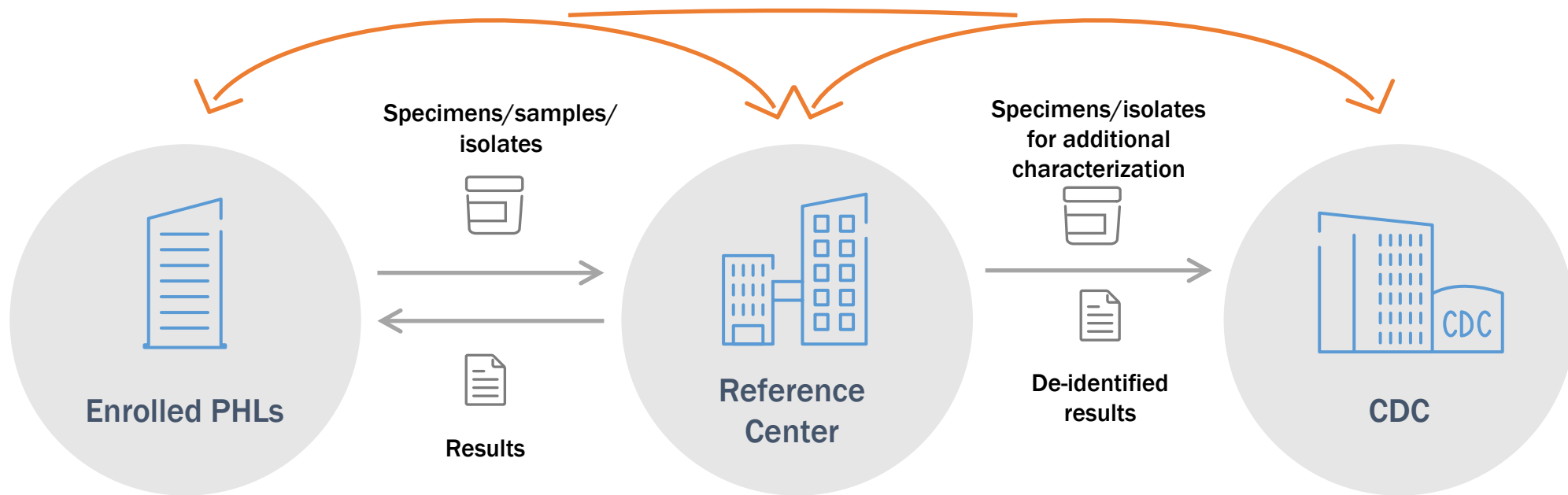
After a competitive application process, the State Hygienic Laboratory at The University of Iowa was selected as the first LRC.


Steps for Using the LRC



Collaboration Between Submitters, the LRC, and CDC will Strengthen Investigations

Consultation including laboratory, epidemiology, and environmental health specialists as appropriate
(topics include sampling, submission, result interpretation, next steps)





**Please type your
questions in the chat.
Thank you!**

If you think of something later, feel free to contact us:

Melisa Willby, PhD

ghx9@cdc.gov

Elizabeth Hannapel, MPH

qlr0@cdc.gov

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



Legionella Reference Center Enrollment & Environmental Sample Test Request Processes

Liz Toure



Legionella Reference Center Enrollment

Via [APHL.org](https://www.aphl.org)

Enrollment

- **Who:** Any governmental public health or environmental laboratory (PHLs)
- **When:** Enrollment is accepted on a rolling basis
- **Why:** Only enrolled PHLs can send samples to the reference center. Enrolling now ensures you have all the information you need to send samples in the future.
- **How:** The PHL point of contact fills out a brief form on APHL's website. Upon review and approval, the PHL will receive onboarding documents.

https://www.aphl.org/programs/infectious_disease/Pages/Legionella.aspx

Enrollment & Onboarding Process Overview

PHL fills out enrollment application

APHL sends onboarding documents to PHL

PHL applies for an LRC lab information system web portal account to receive results

PHL is ready to submit specimens/isolates

Enrollment form

Fill in basic information about the PHL and lab and epi points of contact



Legionella Reference Center Submitter Enrollment Application

Complete this application with the requested information. APHL will review your application. Upon approval, you will be sent enrollment materials.

If you have any questions about this application or the LRC, please email Liz Toure (elizabeth.toure@aphl.org) and CC infectious.diseases@aphl.org

Laboratory Information	
Laboratory Name	<input type="text"/>
Street	<input type="text"/>
City	<input type="text"/>
State	<input type="text"/>

Enrollment form

Legionellosis cases in most recent year

Submitter type
(clinical/environmental/both)

Current capabilities

Sample types you anticipate sending to the LRC

Application Information

How many Legionellosis cases did your jurisdiction report in the most recent year with data available? *

Are you interested in becoming a clinical submitter, environmental submitter, or both? * | v

What capability does your laboratory currently have for Legionella testing? Select all that apply. *

- Clinical – Nucleic Acid Amplification Testing
- Clinical –MALDI-ToF
- Clinical Identification/ Serotyping– Direct Fluorescence Antibody
- Clinical – culture
- Clinical – Sequencing (Sanger)
- Clinical – Sequencing (NGS)
- Environmental – Nucleic Acid Amplification Testing
- Environmental – MALDI-ToF
- Environmental – DFA
- Environmental – culture (spread-plate)
- Environmental – culture (Legiolert)
- Environmental – Sequencing (Sanger)
- Environmental – Sequencing (NGS)
- None of the above
- Other, please describe
-

What sample types do you anticipate sending to the LRC? Select all that apply. *

- Clinical Specimen
- Clinical isolate
- Environmental sample
- Environmental isolate

Please include any additional information you would like to add. (Optional)

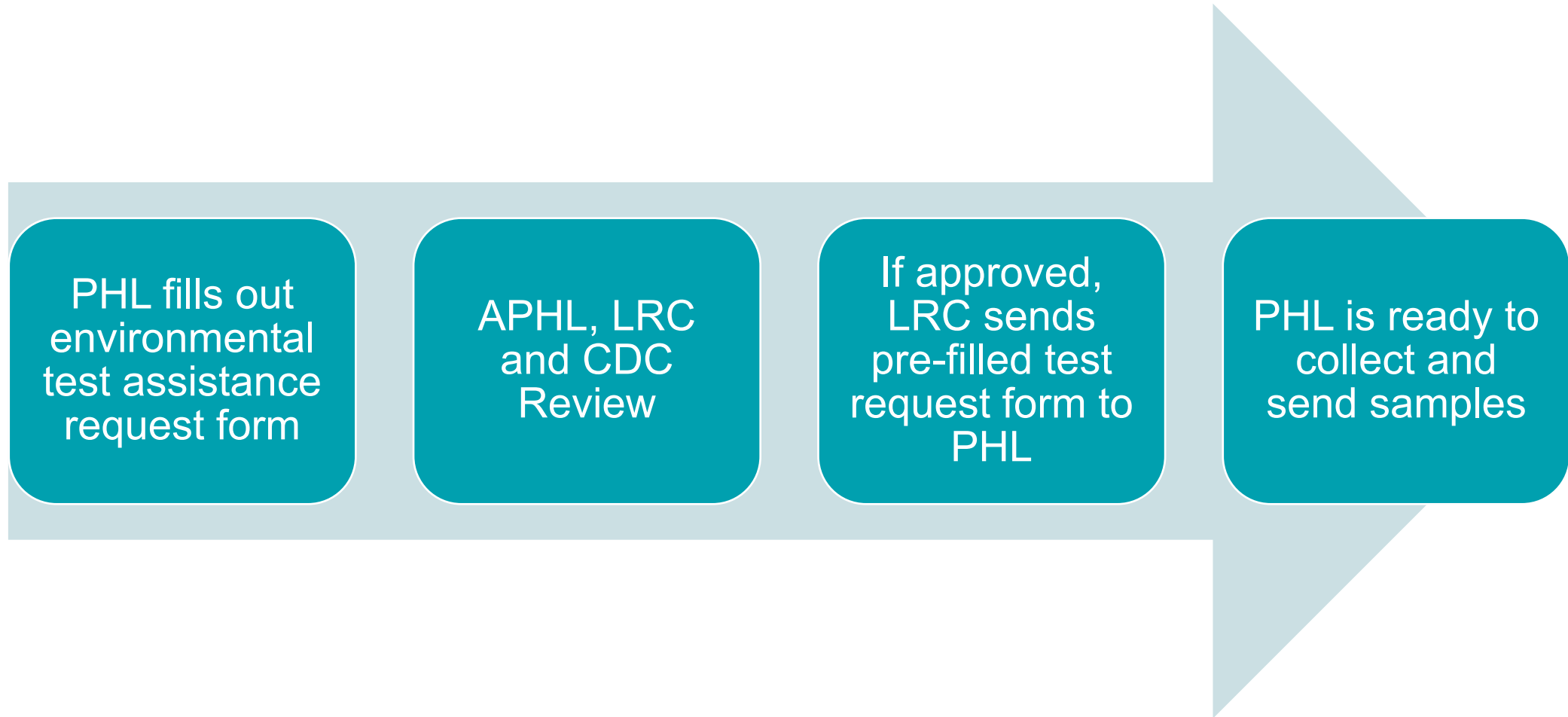
Enrollment Approval

- Upon approval, the lab and epi POC from the PHL will receive an email from APHL with the following:
 - **Legionella Reference Center Onboarding document**
 - Acceptable sample types and sample shipping instructions
 - Instructions for accessing results via the State Hygienic Laboratory's web portal
 - Description of test methodology and results
 - **Test Request Forms**
 - Clinical specimen/isolate
 - Environmental isolate

Environmental Sample Test Requests


- Testing of environmental samples must be pre-approved by APHL, CDC and the LRC.
- Enrolled PHLs must submit an **Environmental Testing Assistance Request Form** if they would like to send environmental samples to the LRC.
- Submission of this form is required for each investigation **before** collecting and shipping samples. Approval decisions will be considered based on the characteristics of the outbreak, availability of resources and additional relevant factors.
- Consultation with the CDC and LRC is available if needed for development or review of a sampling plan.
- Environmental samples **must be collected as part of an outbreak investigation**. Testing for routine monitoring or remediation purposes is not offered at the LRC.

Environmental Sample Test Request Process Overview



Environmental Sample Test Assistance Request Form

Fill in basic information about the PHL and lab and epi points of contact

 Legionella Reference Center Environmental Testing Assistance Request Form

Laboratory Information

Laboratory Name	<input type="text"/>
Laboratory State	<input type="text"/>
PHL Org ID:	<input type="text"/> <i>Your PHL Org ID should have been provided to you when you enrolled with the LRC. It is a numerical ID up to five digits long. Leave blank if you do not have it.</i>
Is your laboratory already enrolled in the Legionella Reference Center?	<input type="text"/>

If no, please submit an [enrollment application](#) before submitting this form

Environmental Sample Test Assistance Request Form

- Describe the nature of the investigation
- Describe environmental sampling plan
- Indicate if you would like a consult with CDC/LRC

*A consult may be required depending on the nature of the investigation

Providing as much detail as possible can help expedite the request

Additional Information

Please briefly describe the nature of the investigation including the following:

- A) Number of confirmed or suspected clinical cases, onset dates, relevant clinical test results including urine antigen test (UAT) results or Legionella detection via PCR
- B) Availability of lower respiratory specimens or isolates
- C) Investigation setting
- D) Public health implications

Please briefly describe your environmental sampling plan, including the following:


- A) Proposed number of samples
- B) Sampling locations
- C) Sample types
- D) Describe the available data informing the sampling plan (e.g., case epidemiology, environmental assessment findings, water quality parameters) and if additional information is pending

Would you like to have a phone consult with CDC and/or the LRC regarding sampling or testing for this investigation?



Environmental Sample Test Assistance Request Approval

- Upon approval, the lab and epi POC from the PHL will receive an email from the LRC with the following:
 - Pre-populated Environmental Sample Test Request Form
 - Used to provide general info on the facility where samples are collected
 - Pre-populated Sample Log Form
 - Used to record sample-specific information (e.g., collection, time, location, source, sample type, etc.)

Order #: 330740		REPORT TO:	BILL TO:
Pages in Order: 1 of 1		20361	22742
Containers in Order: 1		ABC PUBLIC HEALTH LABORATORY 123 Streetname City, State 12345	SHL LEGIONELLA REFERENCE CENTER UNIVERSITY OF IOWA RESEARCH PK 2490 CROSSPARK RD CORALVILLE, IA 52241

Environmental Sample Collection Form	Requested Analyses/Tests
	LEGIONELLA REFERENCE CENTER ENVIRONMENTAL SAMPLE TEST REQUEST FORM
	"lrc env sample panel" (test ids 366 and 1110, CV)
	Complete or correct the following information
	Collected Date: _____ <small>yyyy-mm-dd</small>
	Project Name: lrc <small>Laboratory approved projects only</small>
	APHL Environmental 8 Request ID: automatically assigned by APHL
	Collection Facility: _____ <small>name of facility where sample was collected</small>
	Submitting PHL 111-222-1234 Contact Phone: _____
	Submitting PHL Janedoe@phl.org Contact Email: _____

IOWA State Hygienic Laboratory		Sample Log - Fill out all information requested							
REPORT TO: ABC Public Health Laboratory (20361)		SHL Order No.: 330740			Test: lrc env sample panel, CV				
PROJECT NAME: lrc		APHL Environmental Request ID: 8			Collector Comments				
BILL TO: SHL Legionella Reference Center (22742)		Collector Name:							
Sample Type: DW=Drinking Water; NDW=Non-Drinking Water; S=Swab, F=Filter		Collector Phone:							
		Collected Date:							
Collected Time	Client Reference # (unique identifier)	Description (Source Location): sink, shower, water fountain, cooling tower, etc.	Location (Collection Location): Room#, Bldg#, Floor#	Sample Type	Temp (C)	Free Cl (mg/L)	Total Cl (mg/L)	pH	Sample Labels - SHL use only



Thank you

IOWA

State Hygienic Laboratory at the University of Iowa

Legionella Reference Center

Valérie Reeb

1/26/2024

Tests Offered for the LRC

Sample type	Plate count	Culture and Identification	Multiplex PCR Specimen	Multiplex PCR Isolate
Clinical specimen		✓	✓	✓
Clinical isolate				✓
Environmental sample	✓	✓		✓
Environmental isolate				✓

- Clinical tests CLIA validated
- Environmental culture and plate count follow CDC ELITE
- WGS in the near future

Clinical specimen/isolate submission

Clinical specimen/isolate submission
No prior approval needed



PHL sends specimens/isolates to LRC

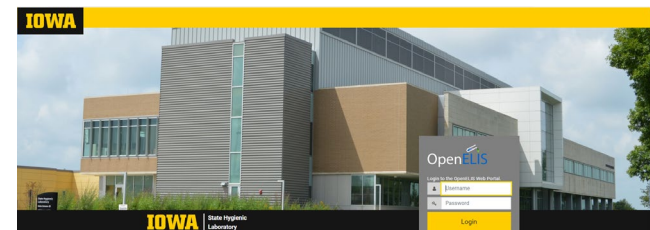
If sending more than 5, email first

SHL-LRC@iowa.uiowa.edu



PHL access results

[SHL OpenELIS web portal](#)



Clinical specimen and isolate TRF

Patient info

PHL address and Org. ID

Sample information

Information for Public health purposes and submitter info

TRF received with welcome package
Or ask SHL-LRC@iowa.uiowa.edu

One TRF per specimen/isolate

FACILITIES, PLACE YOUR PATIENT INFORMATION/ELECTRONIC INTERFACE LABEL HERE OR COMPLETELY FILL OUT INFORMATION BELOW

State Hygienic Laboratory at the University of Iowa

U of I Research Park
2490 Crosspark Road
Coraville, IA 52241-4721
Phone # 319-335-4500 or 800-421-IOWA


Ankeny Laboratory
2220 S. Ankeny Blvd.
Ankeny, IA 50023-9093
Phone # 515-725-1600

Lakeside Laboratory
1838 Highway 86
Milford, IA 51351-7267
Phone # 712-337-3659

<http://www.shl.uiowa.edu>

Legionella Reference Center Clinical Test Request Form

PATIENT INFORMATION			
Sample must have two patient identifiers that match this form.			
Client Reference (Patient ID/MRN/Chart ID)	Last Name	Legal First Name	Middle Name
Birth Date _____			
Gender		Race	
<input type="checkbox"/> Female <input type="checkbox"/> Male <input type="checkbox"/> Unknown		<input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Asian <input type="checkbox"/> American Indian/Alaskan Native <input type="checkbox"/> Native Hawaiian/Pacific Islander <input type="checkbox"/> Unknown	
Ethnicity			
<input type="checkbox"/> Hispanic <input type="checkbox"/> Non-Hispanic <input type="checkbox"/> Unknown			
PUBLIC HEALTH LABORATORY INFORMATION (Results are reported to this address.)			
PHL ORG. ID	Organization Name	Address 1	
Address 2		City	State Zip Code
BILLING INFORMATION			
<input checked="" type="checkbox"/> BILL TO: ID 22742, SHL LEGIONELLA REFERENCE CENTER, UNIVERSITY OF IOWA RESEARCH PK, 2490 CROSSPARK RD, CORALVILLE, IA 52241			
SAMPLE AND TEST INFORMATION (Complete collection date and time and select sample type.)			
Date Collected	Time Collected (24 hr. clock)	Sample Type	Source
<input checked="" type="checkbox"/> Legionella Panel			
REQUESTED INFORMATION FOR PUBLIC HEALTH PURPOSES			
Clinical Diagnosis: _____		Date of Onset: _____	
Previous urinary antigen test result: <input type="checkbox"/> Positive <input type="checkbox"/> Negative			
Previous culture-based test result: <input type="checkbox"/> Positive <input type="checkbox"/> Negative			
PCR Performed? <input type="checkbox"/> Yes <input type="checkbox"/> No		PCR manufacturer/method: _____	
Previous PCR test result: <input type="checkbox"/> Positive <input type="checkbox"/> Negative		Cycle Threshold Value 1: _____	
PCR Target 1 detected name: _____		Cycle Threshold Value 2: _____	
PCR Target 2 detected name: _____		Cycle Threshold Value 3: _____	
PCR Target 3 detected name: _____			
Resident in a congregate care setting: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
Hospitalized (inpatient/admitted): <input type="checkbox"/> Yes <input type="checkbox"/> No			
Collection Facility (name of facility where sample was collected): _____			
Collection City (city where sample was collected): _____			
Name of antibiotics used: _____		Antibiotics Start Date: _____	
Submitting PHL Contact Name: _____		Submitting PHL Contact Phone: _____	
Submitting PHL Contact Fax: _____		Submitting PHL Contact Email: _____	
Submitting Epi Contact Name: _____		Submitting Epi Contact Phone: _____	
Submitting Epi Contact Email: _____			



CR 102023

For State Hygienic Lab Use Only

Condition Received	Temp.	Rec'd by
Room Temp		
Frozen		
Cold Pack/Refrigerated		

FOR STATE HYGIENIC LAB USE ONLY

Clinical specimen/isolate requirements

Sample Type ¹	Sample Source	Minimum Sample Volume	Sample Storage	Shipping Requirements
Clinical Specimens	Sputum Bronchial alveolar lavage Other lower respiratory tract specimens	3 mL	2-8°C	Ship overnight within 24 hours of collection. Ship with frozen ice packs
	Lung tissue	Pea-sized or larger		
Clinical <i>Legionella</i> Isolates	On BCYE slant (preferred) or culture plate from a single colony	N/A	2-8°C for up to 4 days or frozen (≤ -20°C) in calf serum up to 40 days	Ship overnight at ambient temperature or with frozen ice packs. If frozen in calf serum, send on dry ice

¹ Unacceptable specimen/isolate: leaking specimens, insufficient quantity, ship at wrong temperature. For other specimen types or any questions, call 319-335-4335

Clinical specimen/isolate results

Sample type	Plate count	Culture and Identification	Multiplex PCR Specimen	Multiplex PCR Isolate
Clinical specimen		✓	✓	✓
Clinical isolate				✓

→ Culture and Identification

- Results: *Legionella* species based on MALDI-TOF results

→ Multiplex PCR

- Results: *L. pneumophila* (not sg1), *L. pneumophila* sg1

Environmental isolate submission

Environmental isolate submission

No prior approval needed



PHL sends isolates to LRC

If sending more than 5, email first

SHL-LRC@iowa.uiowa.edu



PHL access results

[SHL OpenELIS web portal](#)




Environmental isolate TRF

One TRF per isolate

PHL address and Org. ID

Sample collection information

Submitter information

Order #: 322537		REPORT TO:	BILL TO:
Pages in Order: 1 of 1		PHL ORG. ID 	22742 
Containers in Order: 1		NAME _____	SHL LEGIONELLA REFERENCE CENTER
		ADDRESS _____	UNIVERSITY OF IOWA RESEARCH PK
		ADDRESS _____	2490 CROSSPARK RD
		CITY, ST, ZIP _____	CORALVILLE, IA 52241

Environmental Isolate Collection Form	Requested Analyses/Tests	
	LEGIONELLA REFERENCE CENTER ENVIRONMENTAL ISOLATE TEST REQUEST FORM	
	"Irc env isolate pan" (test ids 1091, 1121, 1106, 1107, CV)	
	Complete or correct the following information	
	Collected Date: _____ <small>yyyy-mm-dd</small>	Collected Time: _____ <small>24 hour format hh:mm</small>
	Client Reference: _____ <small>submitter's unique identifier</small>	Project Name: Irc <small>Laboratory approved projects only</small>
	Collection City: _____ <small>city where sample was collected</small>	Collection Facility: _____ <small>name of facility where sample was collected</small>
	Description (Source Location): _____ <small>sink, shower, water fountain, cooling tower, etc.</small>	Location (Collection Location): _____ <small>room #, building #, floor #, etc.</small>
	Submitting PHL Contact Name: _____	Submitting PHL Contact Phone: _____
	Submitting PHL Contact Fax: _____	Submitting PHL Contact Email: _____
Submitting Epi Contact Name: _____	Submitting Epi Contact Phone: _____	
Submitting Epi Contact Email: _____		

TRF received with welcome package
Or ask SHL-LRC@iowa.uiowa.edu

IOWA

State Hygienic Laboratory

Environmental isolate requirements

Sample Type ¹	Sample Source	Minimum Sample Volume	Sample Storage	Shipping Requirements
Environmental <i>Legionella</i> Isolates	On BCYE slant (preferred) or culture plate from a single colony	N/A	2-8°C for up to 4 days or frozen ($\leq -20^{\circ}\text{C}$) in calf serum up to 40 days	Ship overnight at ambient temperature or with frozen ice packs. If frozen in calf serum, send on dry ice

¹ Unacceptable isolate types: broken plates or tubes. For other specimen types or any questions, call 319-335-4366

Environmental isolate results

Sample type	Plate count	Culture and Identification	Multiplex PCR Specimen	Multiplex PCR Isolate
Environmental isolate				✓

→ Multiplex PCR

- Results: *L. species*, *L. pneumophila* (not sg1), *L. pneumophila* sg1

Environmental sample submission

Environmental sample submission
PRIOR APPROVAL REQUIRED



PHL complete APHL env. test request



CDC/APHL/LRC review request

PHL notify of decision via email

LRC send pre-filled TRF and sample log to point of contact



PHL complete TRF and sample log

send to LRC with samples



PHL access results

[SHL OpenELIS web portal](#)




Pre-filled environmental sample TRF

One TRF per collection facility
 General info on facility where samples are collected

Prefilled PHL
 address / Org. ID

Collection information

Pre-filled request ID /
 submitter information

Order #: 313134		REPORT TO:	BILL TO:
Pages in Order: 1 of 1		1	22742
Containers in Order: 1			
		NAME _____	SHL LEGIONELLA REFERENCE CENTER
		ADDRESS _____	UNIVERSITY OF IOWA RESEARCH PK
		ADDRESS _____	2490 CROSSPARK RD
		CITY _____, 00000	CORALVILLE, IA 52241

Environmental
 Sample Collection Form

Requested Analyses/Tests	
LEGIONELLA REFERENCE CENTER ENVIRONMENTAL SAMPLE TEST REQUEST FORM	
Drinking Water	
"lrc env sample panel" (test ids 366 and 1110, CV)	
Complete or correct the following information	
Collected Date: _____ <small>yyyy-mm-dd</small>	Project Name: lrc _____ <small>Laboratory approved projects only</small>
APHL Environmental Request ID: _____ <small>automatically assigned by APHL</small>	Collection City: _____ <small>city where sample was collected</small>
Collection Facility: _____ <small>name of facility where sample was collected</small>	Submitting PHL Contact Name: _____
Submitting PHL Contact Phone: _____	Submitting PHL Contact Fax: _____
Submitting PHL Contact Email: _____	Submitting Epi Contact Name: _____
Submitting Epi Contact Phone: _____	Submitting Epi Contact Email: _____

TRF received pre-filled for the request
 Or ask SHL-LRC@iowa.uiowa.edu



Pre-Filled Environmental Sample Log Form

Pre-filled sample log form accompany the TRF

Record sample-specific information (e.g., collection time, unique identifier, location, source, sample type, etc.)

One sample per line (print additional sample log form for over 7 samples)

IOWA		State Hygienic Laboratory		Sample Log - Fill out all information requested						
REPORT TO: Pre-filled				SHL Order No.: Pre-filled			Test: lrc env sample panel, CV			
PROJECT NAME: lrc				APHL Environmental Request ID: Pre-filled						
BILL TO: SHL Legionella Reference Center (22742)				Collector Name:						
Sample Type: DW=Drinking Water; NDW=Non-Drinking Water; S=Swab, F=Filter				Collector Phone:						
				Collected Date:						
Collected Time	Client Reference # (unique identifier)	Description (Source Location): sink, shower, water fountain, cooling tower, etc.	Location (Collection Location): Room#, Bldg#, Floor#	Sample Type	Temp (°C)	Free Cl ₂ (mg/L)	Total Cl ₂ (mg/L)	pH	Sample Labels - SHL use only	

Sample Log Form received pre-filled for the request
Or ask SHL-LRC@iowa.uiowa.edu

Environmental sample requirements

Sample Type ¹	Sample Source	Minimum Sample Volume	Sample Storage	Shipping Requirements
Environmental Samples	Bulk water	1 L	2-8°C	Ship overnight within 24 hours of collection. Ship with frozen ice packs in insulated coolers ²
	Hot water tank sediment	120 mL		
	Cooling tower water			
	Swabs	N/A		
	Filter Media	300-500 mL		

¹Unacceptable sample types include broken containers and frozen samples. For other specimen types or any questions, call 319-335-4366

Environmental sample results

Sample type	Plate count	Culture and Identification	Multiplex PCR Specimen	Multiplex PCR Isolate
Environmental sample	✓	✓		✓

→ Plate count

- Results: Range for CFU/mL

→ Culture and Identification

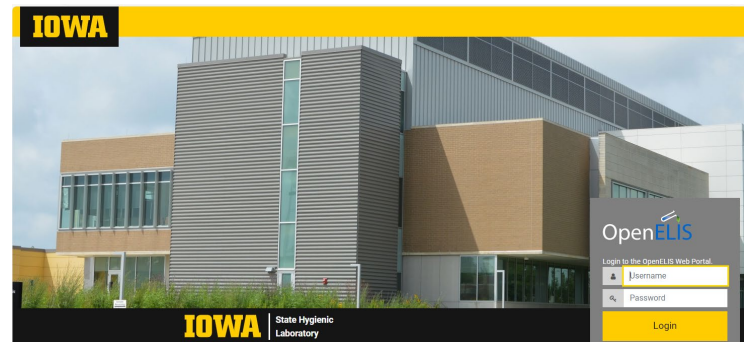
- Results: *Legionella* species based on Maldi-TOF

→ Multiplex PCR

- Results: *L.* species, *L. pneumophila* (not sg1), *L. pneumophila* sg1

Results via SHL OpenELIS Web Portal

- Test results available from LRC lab information system (SHL OpenELIS) Web Portal
- New enrollee needs to apply for an SHL OpenELIS Web Portal account
 - <https://www.shl.uiowa.edu/openelisweb/OpenELIS.html>
- Set-up email notifications when samples are received, and test results are ready
- Results downloadable as PDF or spreadsheet



Contact information

→ LRC shipping address (ship Monday through Thursday)

State Hygienic Laboratory at the University of Iowa
U of I Research Park
2490 Crosspark Road,
Coralville, IA 52241-4721
Phone: 319-335-4500

→ LRC Technical Point of Contact:

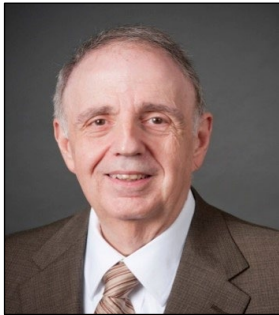
- Clinical specimen submission lab phone #: 319-335-4335
- Environmental sample submission lab phone #: 319-335-4366
- General LRC:
 - SHL-LRC@iowa.uiowa.edu
 - Valerie Reeb: 319-335-4866 or valerie-reeb@uiowa.edu

→ SHL customer services:

- SHL Customer Service Phone: 319-335-4500
- Operating hours: 8 am to 5 pm Central Time
- After hours calls to SHL customer service phone will be directed to the duty officer.

Legionella Reference Center

State Hygienic Laboratory at the University of Iowa



Michael Pentella, Ph.D.
D(ABMM)
Laboratory Director



Cynthia Cass, Ph.D.
Assistant Director
LRC Co-PI



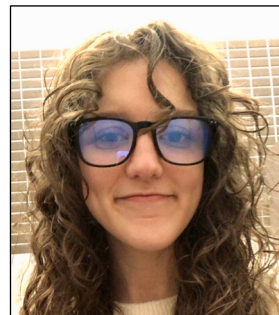
Valérie Reeb, Ph.D.
AMD NGS Lead
LRC Co-PI



Wade Aldous, Ph.D.
D(ABMM)
CLIA Director



Jeff Benfer, M.S.
M.B. (ASCP)^{CM}
Molecular Supervisor



Megan Nelson, M.S.
Microbiology Supervisor



Ryan Jepson, M(ASCP)^{CM}
Environmental Microbiology
Manager



Nancy Hall, MT(ASCP)
Former Environmental
Microbiology Manager

Legionella Reference Center FAQ

- Can clinical laboratories enroll as submitters with the Legionella Reference Center (LRC)?
 - No, only public health laboratories (PHLs) can enroll as submitters.
- If my PHL already has the capability to test for *Legionella*, can we still enroll?
 - Yes; the LRC can provide surge support for PHLs that already have testing capability. If your PHL has existing *Legionella* testing capability, please continue to maintain that. LRC services are intended to supplement, not replace, *Legionella* testing at PHLs.
- If I enroll as an environmental submitter but later want to send clinical specimens, is that OK?
 - Yes, the ‘submitter type’ question on the enrollment form is just to give us a sense of your current needs. However, if you are enrolled, you can submit both clinical and environmental samples and isolates.
- Is there a cost associated with using the LRC?
 - Testing is provided free of charge, however the submitter is responsible for shipping costs.
- Does the LRC offer urine antigen testing (UAT)?
 - No.



Legionella Reference Center FAQ continued

- **How are test results reported?**
 - The submitting PHL can access the result reports online from the Iowa State Hygienic Laboratory's OpenELIS web portal.
- **Will the LRC accept environmental samples related to a single clinical case?**
 - Yes, the LRC may accept environmental samples for investigations linked to one or more cases. Pre-approval is still required prior to collecting and shipping any environmental samples.
- **What if a local health department would like testing assistance for an outbreak?**
 - The health department should work with their local or state PHL to coordinate testing assistance. The local/state PHL can enroll as an LRC submitter and can forward samples collected by the local health department to the LRC.



Q&A