Welcome to the Congregate Residential Facilities Module, a supplement to the Legionnaires’ Disease Risk Communication Toolkit. This module should be used in conjunction with the Toolkit document and the other supplemental modules. The Congregate Residential Facilities Module contains the following information:

Contents                                                                 Page
Overview of Legionnaires’ Disease Risk Communication Toolkit Modules       HC-5
(Information about the module supplements)
Congregate Residential Facilities Module                                    HC-7
(Foundational materials for communicating LD risks in congregate
residential settings)
Congregate Residential Facilities Module References                       HC-15
Congregate Residential Facilities Messaging Tables                         HC-17
(Multiple messaging templates for a variety of audiences and scenarios in
congregate residential settings)

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The individual chapters in the *Legionnaires’ Disease Risk Communication Toolkit* document provide foundational information applicable to all the settings in which exposure to *Legionella* most commonly occurs. The LDRC Toolkit document offers key information about Legionnaires’ disease (LD), identifies legal issues, discusses important considerations when communicating about LD with stakeholders and the public, and provides an overview of water management programs (WMPs). The information in these chapters applies to all the settings in which exposure to *Legionella* most commonly occurs. The LDRC Toolkit’s supplemental modules are a series of setting- and scenario-specific documents that address LD-related information and messaging targeted for that setting. The setting- and scenario-specific modules are:

- Healthcare Facilities
- Congregate Residential Facilities
- Hotels and Hospitality Facilities
- Community Settings
- Routine Environmental Test Results in the Absence of Cases

Each module also provides templates and sample messages for key communication items such as notification letters, public health orders, press releases, and health department advisories. The modules also identify practice tips and other resources to help state, tribal, local, and territorial (STLT) health agency staff communicate the risks of LD in these specific settings and scenarios to target audiences.

**Variables Affecting LD Outbreaks**

The goal of the modules is to provide STLT health agency staff with clear guidance about communicating LD risks in a specific setting or scenario and tools to use in those efforts. However, it is important to note that there are many factors that may affect a jurisdiction’s investigation, response, and communications about a specific LD outbreak. The following factors are just some of the variables that can influence the course of an LD outbreak—even within the same types of settings—and the response to it:

- Potential for population with increased risk for LD in the setting
- Overnight stay at the setting or not
- Commercial setting or non-commercial setting
- Length of exposure in the setting
- Mixed/hybrid settings (i.e., locations with features common to different LD risks)
- Environmental assessment and environmental sampling *Legionella* results

Above all, these modules provide a starting point from which to tailor risk communication about
LD outbreaks in the identified setting. Each jurisdiction can make its own determination about the nature and scope of its investigation and response, and the messages and targets for communication, given the specifics of each LD outbreak and the jurisdiction’s laws, regulations, and policies.

Module Components

The setting- and scenario-specific modules follow the same format and include the following sections:

- **Scope of Module**—Provides a quick overview of the types of buildings and facilities addressed in the module.

- **Factors Affecting Investigation**—Discusses factors in the specific setting (e.g., healthcare, congregate residential) or scenario (i.e., routine environmental test results in the absence of cases) that help determine how a public health agency addresses LD cases or an outbreak in that setting.

- **Key Risk Factors**—Identifies and discusses the key risk factors in the setting that can give rise to *Legionella* growth and LD. This section addresses risk factors associated with buildings and facilities as well as factors affecting persons who occupy or visit the setting. Each module includes a one-page figure summarizing these key risk factors for quick reference.

- **Key Audiences and Messages Overview**—Identifies and addresses the key audiences for messaging in the module setting. The section discusses the relevance and role of each audience to the identification, investigation, mitigation, and prevention of *Legionella* and LD.

- **Key Audience and Messaging Tables**—A series of tables provides detailed messaging guides geared to each key audience in the setting or scenario. This section opens with an index table that lists all the messaging table templates by audience. Each series of color-coded key audience tables includes one or more messaging scenarios for that audience. Each messaging table contains an annotated, customizable template of text to include in communications about that scenario.

- **Toolkit Appendix**—Provides other samples and templates related to the content of the module.

Finally, the messaging needed in a specific scenario or outbreak will vary with the unique facts of that event and the laws and policies of the jurisdiction where it is occurring. For this reason, the information in each module and the messaging tables, templates, and samples should be used as a starting point to craft communications tailored to the user’s specific needs and circumstances.
Congregate residential settings are broadly defined as a type of housing in which each person or family has an individual living space but also shares communal areas such as common dining, recreational, laundry, and other shared areas. For the purposes of this toolkit, congregate properties are categorized into two groups—congregate settings that serve individuals at increased risk for Legionnaires’ disease (LD) (hereafter referred to as “increased-risk”) and congregate settings that serve individuals with the same general level of risk as the community in which the property is located (hereafter referred to as “general-risk”). Congregate residential facilities vary greatly in size and complexity in terms of their water, plumbing, and cooling systems, the risk profiles of residents, and the seasonality and rate of occupancy.

Scope of Module
This module covers the following types of increased-risk and general-risk congregate residential facilities:

- Increased-risk congregate residential facilities
  - Assisted living facilities
  - Senior independent living facilities
  - Group homes for individuals with disabilities
  - Correctional and detention facilities
  - Homeless shelters and transitional housing

- General-risk congregate residential facilities
  - Apartment and condominium buildings
  - Dormitories
  - Barracks
  - Domestic violence shelters

Factors Affecting Investigation
Several factors affect how a public health agency addresses LD cases in a congregate residential facility. These factors can include:

- Type and size of the congregate residential facility (i.e., increased-risk or general-risk).
- Other agencies and/or levels of government with jurisdiction over the facility.
- Existing capacity of the facility and health department.

About Assisted Living & Senior Independent Living Facilities...
CDC notes that it “...does not consider assisted living facilities, senior living facilities, or prisons to be healthcare facilities for Legionnaires’ disease surveillance purposes. However, these facilities often house at-risk populations and can have large, complex building water and plumbing systems. It is important to consider these facilities as likely sources in outbreak investigations as residents may have limited or no exposures outside these facilities. These facilities should all have effective water management programs.”

• Number of cases.
• Water management program (WMP) performance.
• Routine environmental sampling results.

The decision to conduct a full investigation of LD cases in a congregate residential facility will depend on the number of cases identified within a defined time, which could raise the concern about potential for ongoing *Legionella* transmission at the facility.

• Some increased-risk facilities (e.g., assisted living, correctional facilities) in which residents do not leave the facility for the entire 14-day exposure period are treated like healthcare facilities for the purposes of investigations.
  ▪ See CDC resources for public health agencies in determining the extent of an investigation at a healthcare facility at https://www.cdc.gov/legionella/health-depts/healthcare-resources/cases-outbreaks.html.

• General-risk facilities (e.g., apartments, dormitories) in which residents spend time in multiple locations during the 14-day exposure period are treated like community-associated outbreaks for the purposes of investigations. An increase in cases or identification of common potential exposures may prompt a full outbreak investigation.
  ▪ See CDC resources for determining the extent of a community-associated outbreak at https://www.cdc.gov/legionella/health-depts/epi-resources/outbreak-investigations.html#considerations-outbreaks.

**Key Risk Factors in Congregate Residential Facilities**

Multiple factors make congregate residential properties potentially vulnerable for *Legionella* colonization and exposure of their residents and staff. While some of these risk factors are similar between increased-risk and general-risk facilities, the health status and other personal risk factors of residents vary considerably between the two settings. Risk factors applicable to congregate residential facilities are discussed below.

**Complex Potable and Drinking Water Distribution Systems**

While it can vary among facilities, congregate residential facilities generally have complex water systems given the size of these properties and the wide range of water applications in them. Large buildings can have complex water systems which can lead to multiple potential sources of *Legionella*. Smaller facilities may not have the same level of complexity in their water systems; however, they may not receive the same level of ongoing maintenance as larger properties. These types of facilities can also undergo frequent construction or renovation to modernize and expand capacity, which can cause disruptions and changes in water pressure. These changes can dislodge biofilm and release *Legionella* into the water system, as well as introduce contaminants into the water system and potential stagnation in areas where water flow is reduced or cut off.

**Sources of Aerosolized Water**

This is a broad category that includes many different types of potential sources of *Legionella* colonization within congregate facilities. Depending on the size and features of a facility,
potential sources of aerosolized water can include water from showers and faucets in residential areas of the facility. Given the nature of a facility, the property may also include features like hot tubs, decorative fountains, beauty salon sinks, or other water features. Alternatively, some congregate facilities may have areas that contain equipment with the potential to generate aerosolized water such as respiratory therapy equipment, hydrotherapy tubs, or dental devices using water.

**Building Systems with Cooling Towers**
Large facilities are likely to have complex cooling systems that may include cooling towers, which if not properly maintained, can become colonized with *Legionella*. The bacteria are then dispersed through aerosolized water droplets generated during cooling processes. The mist generated by cooling towers can drift to areas neighboring the facility. Large congregate facilities and complexes can have one or more cooling towers on the property. Smaller properties may or may not have cooling towers.

**Specific Building or Location Features**
There may be features specific to a particular congregate residential building, facility, or location that increase its potential for *Legionella* colonization or the potential for people occupying it to be exposed. For example, dormitories may be unoccupied over summer and semester breaks; water can become stagnant if the systems are not maintained or flushed during times of reduced occupancy. Vacancy issues were especially a consideration for college dormitories and commercial apartments serving students during the COVID-19 pandemic as these facilities sat vacant for months (CDC, 2021c). Similarly, if apartment buildings, condominiums, or senior independent living facilities have vacant units for extended periods, water may stagnate in pipes and become a reservoir for *Legionella*. The needs of a building’s occupants may also produce operating conditions that can foster the development in *Legionella* in water systems. Hot water temperatures may be limited due to safety concerns in assisted living and senior independent living facilities, group homes for persons with disabilities, or in other congregate facilities, but this precaution may result in favorable temperatures for the growth of *Legionella*.

**Hybrid Settings**
Depending on the size and features of the facility, a congregate residential facility may have several different aspects to the property that make it a risk for fostering *Legionella* colonization. Facilities can contain hot tubs, decorative fountains, beauty salon hair sinks, or other water features that produce water droplets that can be inhaled. In increased-risk congregate residential settings, there may be aspects of the facilities similar to healthcare facilities. These settings may contain medical equipment that use water like that found in healthcare settings (e.g., respiratory therapy equipment, therapeutic tubs, dental equipment). (See also Healthcare Facilities Module.) Each element is assessed as an individual functional unit as well as in the context of a congregate residential facility as a whole.
Length of Stay in the Facility
Because LD is associated with overnight stays or extended exposures to a source within a facility with water containing *Legionella*, the longer a person is at the facility—as a resident, staff member, volunteer or otherwise working or spending prolonged periods in the congregate residential setting—the greater the potential to contract LD. In increased-risk congregate settings, residents may spend all or most of their time in the facility and staff may spend extended time in the facility as well. Conversely, residents and staff of apartments, dormitories, or other general-risk congregate settings may spend extended periods outside of the residential facility, increasing the relative likelihood of exposure to other possible sources of *Legionella*.

At-risk Persons in the Facility
The most significant distinction between increased-risk and general-risk congregate facilities is the differences in health status and other risk factors that heighten a person’s susceptibility to LD. These risk factors include being aged 50 years and older, being a current or former smoker, or having a higher risk of infection (e.g., have a chronic illness, respiratory disease, weakened immune system). Residents in properties like apartments, condominiums, dormitories, or other similar facilities generally have fewer risk factors for acquiring LD. In properties like assisted living, senior living, correctional facilities, group homes, and homeless and transitional housing, residents may be at greater risk for LD due to age or other underlying conditions. Additionally, individuals may be more likely to use personal respiratory equipment that uses water (e.g., CPAP machines) in increased-risk facilities. While CDC (2021b) does not consider assisted living, senior independent living, and group home facilities to be healthcare facilities for the purposes of LD surveillance, it has developed exposure categories for surveillance in two of these:

- **Assisted living**: A facility that provides custodial care without skilled nursing (e.g., assistance with activities of daily living, like bathing and dressing) (CDC, 2021a).
- **Senior living**: A facility that provides independent living for the elderly (CDC, 2021a).

Some states may allow for healthcare-associated legionellosis recommendations to be used in non-healthcare institutions in which residents’ movement outside of the facility is restricted, such as in correctional facilities, while acknowledging that some recommendations may need to be modified somewhat to reflect differences in healthcare facilities and non-healthcare facilities (Texas DHHS, 2022, p. 173).

Figure 1 describes risk factors that affect buildings and the person using them. Specific congregate residential facility types are listed by size (large, medium, small), the overall risk profile of residents (increased-risk, general risk), and the risk factors to which they may be subject indicated in parentheses.

Key Audiences and Messages
Congregate residential facilities have multiple key audiences for messaging about LD identification, investigation, mitigation, and prevention. Each of these persons and organizations may require foundational information about LD as well as information tailored to their capabilities and circumstances. Messaging may also evolve during an LD event as suspected outbreaks are confirmed, additional information becomes available, or if follow-up
### Figure 1: Key Risk Factors in Congregate Residential Facilities

#### Building and Facility Factors

**Water Distribution Systems**
- Complex potable/drinking water systems likely that may include recirculating hot water, long distribution or riser runs, multiple water heaters, and numerous fixtures (*large congregate facilities*)
- Complex potable/drinking water distribution systems possible (*medium congregate facilities*)
- Less complex potable/drinking water distribution systems likely but potential for less frequent maintenance and water system management (*small congregate facilities*)
- Technical water/non-potable systems of varying complexity possible (*all*)

**Sources of Aerosolized Water**
- Numbers and sizes of sources will vary with the type and size of the facility
- Potential sources:
  - Showers and faucets in residents’ rooms, shared bathroom areas, and elsewhere in the facility (*all types and sizes*)
  - Hot tubs (*apartments, condominiums, senior living*)
  - Other water features possibly onsite (e.g., pools, hot tubs, decorative fountains, hair wash sinks) (*apartments, condominiums, senior living, dormitories*)
  - Medical devices and therapeutic equipment possible (*assisted living, correctional*)

**Features Specific to the Building or Location**
- Potential for frequent to periodic construction or renovation that can dislodge biofilm and introduce pathogens and stagnation in areas where water flow is reduced or cut off (*large and medium congregate facilities*)
- Unused or infrequently used rooms or areas (possible for all types of congregate facilities)
- Potentially fewer staff for water system maintenance (*smaller congregate facilities*)
- Technical water/non-potable systems of varying complexity possible (*all*)

**Building Systems with Cooling Towers**
- Complex cooling systems with one or more cooling towers possible (*large and medium congregate facilities*)
- Cooling systems with cooling towers in some facilities, not likely in smaller facilities (*small congregate facilities*)

**Hybrid Setting / Features of Multiple Settings**
- May include one or more recreational water setting features (e.g., hot tubs, pools) (*most general-risk facilities; some increased-risk facilities*)
- Increased-risk settings may include aspects of healthcare settings (*all increased-risk facilities*)

#### Personal Factors

**Length of Time in Setting**
- Residents spend all or most of their time in the facility (*primarily increased-risk congregate settings*)
- Residents may spend extended periods outside of the residential setting (*primarily general-risk congregate settings*)
- Employees, contractors, visitors, and volunteers working on site for extended periods (*all*)

**Persons with Risk Factors**
- Residents are more likely than the general population to have conditions increasing LD susceptibility (*all*)
- Can have employees, contractors, visitors, and volunteers with a cross-section of personal risk factors (*all*)
is indicated with affected persons and facilities. The key audiences for congregate residential facilities are discussed below.

**Facility**

Owners, operators, and managers are generally both the operational and legal points of contact for suspected and confirmed public health communicable disease investigations and response activities; however, this should be confirmed by the laws and regulations in a specific jurisdiction.

A congregate residential facility’s owners, operators, or managers are also likely to be a key source of information about residents, staff, volunteers, contractors, and other persons who stayed, worked at, or visited during the period under investigation. Depending on the laws, regulations, or policies of a jurisdiction, facility managers and employees may be required to use messaging supplied by a public health agency to communicate with potentially exposed persons or to alert prior, current, and prospective residents and visitors about an ongoing LD investigation; however, in other jurisdictions, public health agencies can recommend but not require specific messaging. With barracks and correctional facilities, other government agencies at the federal, state, or local levels are likely to be involved in the investigation and response activities of the facility; they may also manage the messaging to residents, inmates, and staff. Messaging should also consider the ability of residents to comprehend risk factors and mitigation measures; it may be necessary to direct communications to legal guardians or other personal representatives as well.

Should a facility raise concerns about sharing personally identifiable information about residents, note that federal and state laws provide exceptions to confidentiality requirements for public health purposes or other exceptions that would allow for access to information about individuals. (See *LDRC Toolkit Chapter 3 “Access to Information and Confidentiality”*. ) Any questions or concerns about accessing or sharing personally identifiable information may be discussed with the public health agency’s legal counsel.

The facility representatives should be informed about the process for investigating, testing, and mitigating potential sources of *Legionella* in the facility’s water systems, cooling towers, and plumbed water features, as well as medical devices, therapeutic equipment, and any other water features at the facility. If general risk communication methods are ineffective at promoting action by the facility, messaging about and the use of public health orders or other enforcement mechanisms may be helpful.

Finally, public health agencies should consider requesting (or requiring) copies of all written materials and other notices shared with residents, staff, and visitors to ensure that the information being provided is accurate and complete. Correct information is especially important for persons potentially exposed to *Legionella* who should be monitored for symptoms and seek treatment if symptoms develop. Facilities subject to health orders may also be required to provide copies of all notices and notifications. Public health agencies should also confirm that facilities notify residents, staff, and visitors about the results of tests on its water systems arising from a public health investigation.
Residents and Visitors
Any messaging to residents in a congregate living facility (and/or their designated contacts or legal representatives) and visitors should include clear information in plain language about LD basics such as the cause, sources, risk factors, and symptoms of the disease. If available, information should be provided about their specific potential exposure to *Legionella* at the congregate facility and when it occurred (if known). Also consider including language advising recipients to speak with a medical provider if they develop symptoms within 14 days of exposure and how to speak with their doctor about the exposure. Clearly communicate information about sources to consult for additional information and points of contact within the public health agency, if appropriate. At correctional and detention facilities, other government agencies may be involved in notifying facility staff and prisoners (and their designated contacts or legal representatives) and identifying procedures for testing and medical services.

Employees, Contractors, and Volunteers
Similar to the messaging for residents and visitors, employees, contractors, volunteers, and others who are regularly at a congregate residential facility should receive clear information about LD in plain language that addresses the cause, sources, risk factors, and symptoms of the disease. Messaging should include information about specific potential exposures at the facility and when exposure likely occurred (if known). It should also address how the employees and others should proceed if they are sick or worried about having been exposed, and how to speak with their doctor about the exposure. Additionally, a jurisdiction’s occupational health and safety laws and workers’ compensation system, as well as obligations arising from union contracts and other agreements or personnel policies affecting the rights of employees can arise. Further, the issue of personal protective equipment (PPE) consistent with or beyond that already used in some congregate settings may arise if there are employees or others at higher risk for LD (whether due to personal medical history or exposure risks due to job duties). Points of contact within the organization and the public health agency, information about employee rights, and sources for additional information should also be clearly communicated.

Persons with Confirmed LD
Persons who have been confirmed to have LD from an outbreak may require additional information as the public health investigation proceeds (e.g., for medical or legal purposes, out of interest or concern). Health agency staff should identify the extent and types of information that can be legally shared within the scope of their jurisdiction’s laws, and that the information released to them is supported by data and sound public health practice. Health agencies may also consider media releases with investigation updates to keep affected and interested persons informed. (See “Media and the Public” item below.)

Healthcare Providers and Facilities
At congregate residential facilities serving populations that may be at increased risk for LD (e.g., assisted living, group homes for individuals with disabilities, correctional facilities, homeless shelters, transitional housing), the facilities are likely to have some healthcare providers on staff or under contract to provide general medical oversight of a facility. Public health agencies should inform these providers about suspect or confirmed LD case(s) associated with the congregate facility so they can monitor occupants for *Legionella* exposure and LD symptoms. Additionally, conducting outreach to other healthcare providers and targeted healthcare facilities in the community in which an LD outbreak is occurring or has occurred helps to
educate providers about LD and alert them to the signs and symptoms indicating a patient may be suffering from LD. The public health agency can also provide guidance on appropriate diagnostic testing and treatment, and instructions about retaining or forwarding clinical specimens or isolates. Health alerts sent by the public health agency to healthcare providers and facilities are used to highlight specific suspected or confirmed LD outbreaks and to inform practitioners and clinical laboratories how to report cases to the agency.

Other Agencies and Governments
A public health agency may inform other divisions within the public health agency, other government agencies in its state/jurisdiction, and agencies in other units of government (i.e., local, regional, state, federal, tribal, territorial) about an LD outbreak at a congregate residential facility as required by law, standard procedure, or voluntarily as public health partners. Consider issuing an Epi-X alert if the facility may draw visitors, students, or staff from other geographic areas, especially if the facility is located in a common travel destination. Identifiable personal information can only be shared according to state and federal confidentiality laws and rules. Depending on the extent and nature of the LD event, other divisions, agencies, or units of government may have regulatory or other legal authority over the operation of a congregate residential facility (e.g., department of corrections, military, regulation of congregate facilities, building code enforcement, recreational water inspections). For example, depending on the type of congregate residential facility and the residents served, the public health agency may have to coordinate with universities, corrections agencies, and other departments or divisions related to regulated housing and human services.

Media and the Public
Providing information to the media and the public about a suspected or confirmed LD outbreak is an important part of the risk communication process in many situations, but it should be approached taking care to balance the privacy interests of the involved facilities and individuals with the right of the public to be made aware of public health threats. (See LDRC Toolkit Chapter 3 “Accessing Information and Confidentiality” for more information.) LD cases or outbreaks associated with congregate residential facilities may generate significant public and media attention. Issuing press releases and other statements about an LD outbreak at a specific congregate residential facility can help to identify other persons who may have been exposed at that facility and alert them to the symptoms to watch for during the incubation period. In some instances, proactive messaging with a suspected source facility may garner the facility’s voluntary cooperation with testing, investigation, mitigation, and prevention; some facilities may react to negative media attention by being hesitant to test or undertake mitigation activities unless ordered to do so. Providing updates on the status of an LD investigation can help to assure the public that the outbreak is being addressed and mitigated.
### Congregate Residential Facilities Module References


### Congregate Residential Facilities Module Selected Resources


This section of the module contains messaging tables that address key audiences associated with a suspect or confirmed LD case(s)/outbreak at a congregate residential facility. LD risk communication materials gathered from states, localities, and federal sources were used to help create the messaging tables in this module. Readers should consider the following when using the messaging tables:

- Each series of color-coded key audience tables includes one or more messaging scenarios for that audience.
  - The same colors are used across all the modules for the same audiences (e.g., materials for the press and public are in tables with orange banners).
- Each messaging table contains an annotated template of text to include in communications about that scenario.
  - Module users are free to choose which content to use in a template and modify it according to their needs.
- **Italicized topic headings** introduce a series of bulleted statements with text that can be adapted into letters, handouts, or notices.
  - Topic headings are not necessarily intended to be used in messaging documents.
- [Text in brackets] can be edited or added by the user to tailor a document for the specific use.
  - For example, “The [state/local health agency] has identified...” becomes “The Anytown Health Department has identified...”
- [Italicized text in brackets] are instructions to the user and are not intended to be included in messaging documents.

The next page contains an index of the messaging tables and lists each key audience and messaging scenarios addressed. The index also lists the corresponding module page numbers for the messaging tables.

**IMPORTANT NOTE:**

The messaging indicated in a specific scenario or outbreak will vary with the unique facts of that event and the laws and policies of the jurisdiction where it is occurring. **For this reason, these messaging tables, templates, and samples should be used as a starting point to craft communications tailored to the user’s specific needs and circumstances.**
# Index of Congregate Residential Facilities Module Messaging Tables

<table>
<thead>
<tr>
<th>Messaging Audience and Messaging Scenarios</th>
<th>Module Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Owners, operators, managers, and representatives of congregate residential facilities</strong></td>
<td></td>
</tr>
<tr>
<td>• Informing congregate residential facility about a single LD case with other potential exposure sites</td>
<td>CR-19</td>
</tr>
<tr>
<td>• Informing congregate residential facility about multiple LD cases or a single case with minimal/no other exposure sites</td>
<td>CR-21</td>
</tr>
<tr>
<td>• Investigation at a cooperative or compliant congregate residential facility</td>
<td>CR-23</td>
</tr>
<tr>
<td>• Investigation at an uncooperative or non-compliant congregate residential facility</td>
<td>CR-25</td>
</tr>
<tr>
<td>• Health order to require a congregate residential facility to address and remediate Legionella in the facility</td>
<td>CR-27</td>
</tr>
<tr>
<td>• Providing general information about LD risks to persons associated with a congregate residential facility</td>
<td>CR-33</td>
</tr>
<tr>
<td>• Providing general information about LD risks, mitigation, and prevention for congregate residential facility engineering and maintenance staff</td>
<td>CR-35</td>
</tr>
<tr>
<td><strong>People associated with a congregate residential facility such as residents, occupants, visitors, employees, contractors, and volunteers</strong></td>
<td></td>
</tr>
<tr>
<td>• Congregate residential facility letter/notice to residents of increased-risk facility about LD case(s)</td>
<td>CR-37</td>
</tr>
<tr>
<td>• Congregate residential facility letter/notice to residents of general-risk facility about LD case(s)</td>
<td>CR-39</td>
</tr>
<tr>
<td>• Letter or memo to staff (employees, volunteers, and contractors) about LD case(s)</td>
<td>CR-41</td>
</tr>
<tr>
<td><strong>Healthcare providers and other healthcare facilities in the community/jurisdiction in which the congregate residential facility with LD case(s)/outbreak is located</strong></td>
<td></td>
</tr>
<tr>
<td>• Alert to healthcare providers about LD case(s)/outbreak in a congregate residential facility</td>
<td>CR-43</td>
</tr>
<tr>
<td><strong>Other agencies and governments that may assist in the investigation and response, and those with authority over different aspects within a congregate residential facility or over different types of congregate residential facilities</strong></td>
<td></td>
</tr>
<tr>
<td>• Alert to other divisions, agencies, or units of government about identifying and investigating LD case(s)/outbreak in a congregate residential facility</td>
<td>CR-45</td>
</tr>
<tr>
<td><strong>Media and the public</strong></td>
<td></td>
</tr>
<tr>
<td>• Press release/alert to the media and public about LD case(s)/outbreak at a congregate residential facility</td>
<td>CR-47</td>
</tr>
</tbody>
</table>
Purpose of communication:

- As of [date], the [state/local public health agency] has identified a person diagnosed with Legionnaires’ disease (LD) who reported [residing/staying at] or being at [facility name] from [date range], which is within the LD incubation period of 2 to 14 days.
- LD is one of the illnesses reported to the [state/local health agency] because of its potential to cause outbreaks.
- The [state/local public health agency] welcomes your cooperation in the investigation of this case as it relates to your facility.

Basics about LD:

- LD is a serious form of pneumonia (lung infection) that is spread from aerosolized water (water droplets) that contains Legionella bacteria.
- LD is generally not spread from person to person.
- Most healthy people do not get LD after being exposed to Legionella.
  - Being 50 years or older or having certain risk factors such as being a current or former smoker, having chronic lung disease, having a weakened immune system, or taking medication that weakens your immune system can increase the chances of getting LD.
- Symptoms usually start 2 to 14 days after breathing in water droplets with Legionella.
- Symptoms of LD include cough, muscle aches, fever, shortness of breath, and headache.
- LD is diagnosed using chest x-rays or physical exams to check for pneumonia.
  - Other tests include urine and sputum (phlegm) samples to determine if an infection is caused by Legionella.
- LD can be treated with antibiotics.
  - Most people who get LD need care in a hospital but make a full recovery. However, LD can sometimes result in lung failure or death.

Sources of exposure:

[Describe potential sources of LD common to the facility type:]

- Legionella is naturally found in freshwater environments, such as lakes and streams; however more commonly causes human infection when it grows and spreads in building water systems (e.g., large plumbing systems, cooling towers, hot water tanks and heaters, showerheads, sink faucets, hot tubs, other water sources like fountains).
Legionella is common in the environment and can remain unless measures are taken to control it.

**Suggested actions:**
- You may wish to inform building staff, [residents/other], and visitors about the LD case. [Health agency] can assist you with [and/or provide you with templates for] notifications.
- You may wish to review your water/facility maintenance procedures to help minimize future risk.
- Information about water management programs are available through the CDC at https://www.cdc.gov/legionella/wmp/overview.html.
- If your facility does not already have a water management program (WMP), the CDC Water Management Program Toolkit at https://www.cdc.gov/legionella/wmp/toolkit/index.html can help you determine where a WMP is needed and to develop one.

**Actions potentially required:**
- [While there are currently no legal restrictions or actions required,] we are informing you to ensure that you have updated information and help you minimize the risk of Legionella in your facility’s water systems.
- If we determine that other people with LD also reside in, work at, or visited your facility, we may ask for your assistance in investigating further.

**Communications requested:**
- Thank you for your active cooperation in the [state/local health agency] investigation.
- Please contact the [state/local public health agency or other agency] if you learn of other cases of LD among residents, staff, or visitors.
- Please contact [name, phone number, and email address of person/office] at the [state/local health agency or other agency] for more information or to answer questions.

**Templates & Samples**
See additional samples and templates in the LDRC Toolkit Appendix
Purpose of communication:

- As of [date], the [state/local public health agency] has identified [people/a person] diagnosed with Legionnaires’ disease (LD) who reported residing/staying at [facility name] from [date range], which is within the LD incubation period of 2 to 14 days.
- LD is one of the illnesses reported to the [state/local health agency] because of its potential to cause outbreaks.
- The [state/local public health agency] welcomes your cooperation in the investigation of this case as it relates to your facility.

Basics about LD:

- LD is a serious form of pneumonia (lung infection) that is spread from aerosolized water (water droplets) that contains Legionella bacteria.
- LD is generally not spread from person to person.
- Most healthy people do not get LD after being exposed to Legionella.
  ▪ Being 50 years or older or having certain risk factors such as being a current or former smoker, having chronic lung disease, having a weakened immune system, or taking medication that weakens your immune system can increase the chances of getting LD.
- Symptoms usually start 2 to 14 days after breathing in water droplets with Legionella.
- Symptoms of LD include cough, muscle aches, fever, shortness of breath, and headache.
- LD is diagnosed using chest x-rays or physical exams to check for pneumonia.
  ▪ Other tests include urine and sputum (phlegm) samples to determine if an infection is caused by Legionella.
- LD can be treated with antibiotics.
  ▪ Most people who get LD need care in a hospital but make a full recovery. However, LD can sometimes result in lung failure or death.

Sources of exposure:

[Describe potential sources of LD common to the facility type:]

- Legionella is naturally found in freshwater environments, such as lakes and streams; however more commonly causes human infection when it grows and spreads in building water systems (e.g., large...
plumbing systems, cooling towers, hot water tanks and heaters, showerheads, sink faucets, hot tubs, other water sources like fountains).

- *Legionella* is common in the environment and can remain unless measures are taken to control it.

**Actions requested/required:**

- You [should OR may] inform building staff, [residents/other], and visitors about the LD case(s)/outbreak. [Health agency] can assist you with [AND/OR] provide you with templates for] notifications.
- You should review your water/facility maintenance procedures to help minimize future risk.
  - Information about water management programs are available through the CDC at [https://www.cdc.gov/legionella/wmp/overview.html](https://www.cdc.gov/legionella/wmp/overview.html).
- If your facility does not already have a water management program (WMP), the CDC Water Management Program Toolkit at [https://www.cdc.gov/legionella/wmp/toolkit/index.html](https://www.cdc.gov/legionella/wmp/toolkit/index.html) can help you determine where a WMP is needed and to develop one.
- The [state/local public health agency] will be contacting you to further investigate the cases and potential sources of exposure at the facility.

**Communications requested:**

- Thank you for your active cooperation in the [state/local health agency] investigation.
- Please contact the [state/local public health agency or other agency] if you learn of other cases of LD among residents, staff, or visitors.
- Please contact [name, phone number, and email address of person/office] at the [state/local health agency or other agency] for more information or to answer questions.

**Templates & Samples**

See additional samples and templates in the *LDRC Toolkit Appendix*
## Purpose of communication:

- Thank you for your cooperation with the [state/local health agency] investigation of [a case(/cases)] of Legionnaires’ disease (LD) in a [resident/visitor/person] at your facility. [OR [State/local health agency] is investigating a case of LD in a [resident/visitor/person] at your facility.]

- The [state/local public health agency] has identified [number of people/person(s)] diagnosed with LD who are residents at or visited your facility from [date range], which is within the LD incubation period of 2 to 14 days.

- There is reasonable cause to believe that your property is or may be colonized with *Legionella* (the bacteria that cause LD) and that it may be a threat to public health.

- An environmental assessment of your facility by [state/local public health agency] is necessary and specific response activities may be needed based on the assessment findings.

## Basics about LD:

- LD is a serious form of pneumonia (lung infection) that is spread from aerosolized water (water droplets) that contains *Legionella* bacteria.

- Symptoms of LD can include cough, muscle aches, fever, shortness of breath, and headache.
  - Symptoms usually start 2 to 14 days after breathing in mist or water droplets that contain *Legionella*.

- LD can be treated with antibiotics. Most people who get LD need care in a hospital but make a full recovery. However, LD can sometimes result in lung failure or death.

- The bacteria are generally not spread from person to person.

## Sources of exposure:

[Edit sources as appropriate for setting:]

- *Legionella* is naturally found in freshwater environments, such as lakes and streams; however, it more commonly causes human infection when it grows and spreads in building water systems (e.g., hot water tanks and heaters, showerheads, sink faucets, large plumbing systems, hot tubs, cooling towers, other water sources like decorative fountains).

## Actions required as applicable:

- The [state/local public health agency] is requesting your assistance in gathering more information about the LD case(s) who have been at the facility during [time frame].

- An environmental assessment of your facility by the [state/local public health agency] is necessary to determine if there is potential for ongoing risk of exposure to *Legionella*.

[Continued next page]
If cases are linked to a specific device such as a decorative fountain, hot tub, or other device that aerosolizes water and there is evidence to suggest the device may be the source of the outbreak:

- Remove [device] from service until [state/local public health agency] can conduct the environmental assessment.

Upon completion of the environmental assessment, [state/local public health agency] personnel may recommend control measures as indicated by the assessment findings that your facility should undertake to mitigate any ongoing risk and prevent future Legionella colonization.

You should inform building staff, residents, and visitors about the LD cases/outbreak. [Health agency] can assist you with [AND/OR] provide you with templates for] notifications.

You should also review your water/facility maintenance procedures to help minimize future risk.

Information about water management programs are available through the Centers for Disease Control and Prevention (CDC) at https://www.cdc.gov/legionella/wmp/overview.html.

[Facility name] may need to have a water management program (WMP).

- If [facility] does not have a WMP and it meets the characteristics outlined in ASHRAE Standard 188, it should develop and implement one. See the worksheet from CDC to identify which buildings or systems should have a WMP: https://www.cdc.gov/legionella/wmp/toolkit/wmp-risk.html.

- If [facility] does not meet the characteristics outlined in ASHRAE Standard 188 indicating the need for a WMP, consider implementing elements of a WMP according to facility or device characteristics.


Communications requested:

- You [will/may] be contacted by [the state/local public health agency] to gather more information about the LD case(s) and schedule an environmental assessment of the facility.

- In the meantime, if you have additional information and questions, or if you learn of other cases of LD among residents, staff, or visitors, regardless of where they live, please contact [name, phone, email] at the [the state/local public health agency].

Templates & Samples

See additional samples and templates in the LDRC Toolkit Appendix
**Messaging Purpose:**

- Investigation at an uncooperative or non-compliant congregate residential facility
  AND/OR
- Investigation is needed for public health purposes
  AND/OR
- Remediation is indicated per investigation findings
  - Facility is uncooperative/non-compliant with public health requests
  - Ordering the facility to allow assessment or investigation and take actions required by law to mitigate conditions giving rise to LD
  - Depending on the type of facility (e.g., assisted living, correctional facility, apartments) other agencies and regulatory bodies may also have authority to investigate and order compliance.
  - A decision may be made to send a final notice before issuing an order or combining the two.
- The legal requirements for notice and an order depend on a specific jurisdiction’s laws and should be followed.

**Purpose of communication:**

- On [date(s)], the [state/local public health agency] contacted [facility name] because there is reasonable cause to believe that the property is or may be colonized with *Legionella* (the bacteria that causes Legionnaires’ disease (LD)) and that it may be a threat to public health.
- The [state/local public health agency] has identified [number of people/person(s)] diagnosed with LD who report [being at/residents of/visiting] your facility from [date range], which is within the LD incubation period of 2 to 14 days.
- [Facility] has not responded to requests to [allow an environmental assessment, perform environmental sample testing for *Legionella*, and/or has not undertaken remediation measures indicated].
- This notice is a final request to [allow an environmental assessment, perform environmental sample testing for *Legionella*, and/or undertake remediation measures] before a [health order] is issued mandating compliance.
  - [OR] [Facility] is ordered pursuant to [cite state/local law] to [allow the property to undergo an environmental assessment, perform environmental sample testing for *Legionella*, and/or take the required actions to mitigate the conditions that promote *Legionella* growth and spread].

**Sources of exposure:**

[Edit sources as appropriate for setting:]

- *Legionella* is naturally found in freshwater environments, such as lakes and streams; however, it more commonly causes human infection when it grows and spreads in building water systems (e.g., hot water tanks and heaters, showerheads, sink faucets, large plumbing systems, medical devices that aerosolize water, cooling towers, other water sources like decorative fountains).
Actions required:

[Edit actions as appropriate for setting:]

- An environmental assessment of your facility by the [state/local public health agency] is necessary to determine if there is potential for ongoing risk of exposure to *Legionella*.

- [If cases are linked to a specific device such as a decorative fountain, hot tub, therapy tub, or other device that aerosolizes water and there is evidence to suggest the device may be the source of the outbreak:]  
  - Remove [device] from service until [state/local public health agency] can conduct the environmental assessment.

- Upon completion of the environmental assessment, [state/local public health agency] personnel may recommend control measures as indicated by the assessment findings that your facility should undertake to mitigate any ongoing risk and prevent future *Legionella* colonization.

- Failure to comply with this [final notice] [and/or order] may result in further administrative, civil, and criminal penalties.

Communications requested:

- You may be contacted by [the state/local public health agency] to schedule an environmental assessment of the facility if you do not respond to this notice.

- In the meantime, if you have additional information and questions, or if you learn of other cases of LD among residents, staff, or visitors, regardless of where they live, please contact [name, phone, email] at the [the state/local public health agency].

Templates & Samples

See additional samples and templates in the *LDRC Toolkit Appendix*
[Note: This order may be modified with revised requirements as additional information about the condition of the congregate residential facility becomes available or initial response activities are implemented. If the facility does not comply with the initial order, additional administrative, civil, or criminal proceedings may be required.]

Introduction:

- [Congregate residential facility name] has been issued a [license] by the [health/other agency name] to operate a [identify type of congregate residential facility, e.g., assisted living, apartment].
- Based on information and belief, you are the [facility owner, person in control, registered agent OR other] of [congregate residential facility name and address] (the “Property”).
  - If you are not the [owner, person in control, or registered agent OR other] of the Property, please contact [health agency contact name] at [phone number/email address] immediately.
- [Samples were taken from [several locations at] the Property by [state/local/other health agency name/ CDC] as part of a Legionella outbreak in [community name OR at the Property].]
  - [Preliminary testing by [health agency/CDC] has detected the presence of Legionella bacteria in the Property’s [list sites, e.g., water heater, faucet heads sinks/showers, cooling towers, medical devices using water].]
- The [health agency] has identified [case(s)/an outbreak] of legionellosis among persons at or associated with the Property.
- [If facility failed to comply with previous required actions:] [Facility name] failed to take previously identified required actions identified by the [health agency] [include list].

Legionella basics:

[Include basic information about Legionella as appropriate.]

- [Legionella] bacteria can cause Legionnaires’ disease (LD) or related conditions that may adversely affect public health.
- [People may be exposed to Legionella when they inhale aerosolized water droplets containing the bacteria.]
- [Legionella can grow in a building’s water systems or devices (e.g., hot water heaters, pipes, water storage tanks, cooling towers, decorative fountains, hot tubs, medical devices containing water).]

[Continued next page]

CSTE–LEGIONNAIRES’ DISEASE RISK COMMUNICATION TOOLKIT

CR-27
Statement of authority:

- Pursuant to [cite statute authorizing the public health order], this Order is being issued based on [reasonable cause OR (other legal standard specified in authorizing statute)] to believe that the Property is or may be [colonized by Legionella OR a source of a communicable disease] that could constitute a threat to public health [OR other language contained in authorizing statute].

- [[Cite statute authorizing regulation of congregate residential facility type, or authorizing public health investigation] authorizes the [health director] to require [emergency action OR other standard in statute] to protect the health, safety, and welfare of any [residents, occupants] at [congregate residential facility type].]

- In accordance with [cite statute authorizing public health investigation], the [health director] may investigate incidents of communicable disease.
  - These investigations can include assessments of buildings and conveyances and their contents and laboratory analysis of samples collected during the course of investigations [OR other similar language from applicable statute].

- Further, [pursuant to [cite statute authorizing public health action if different statute]], the [health agency] may take actions necessary to protect public health, including ordering that specific measures be undertaken at the Property [OR other similar language from applicable statute].

Actions ordered:

- You are ordered to authorize entry to and submit Property to investigation by [health agency].

- The Property at issue and water systems and devices therein may not be [moved, caused to move, or allowed to move from its current location OR (other language contained in authorizing statute)] until authorization is received from the [health agency].

- The [health agency] issues this Order to [identify actions required (e.g., implement water system control measures, temporarily close property)] as [identified below OR listed in Appendix/Exhibit __].
  - [Note: required actions can be listed in the text of the order instead of an in appendix.]

- This Order will be in effect until the [health agency] determines that all components of this Order have been satisfied and there are no additional cases of legionellosis associated with the Property.

- If subsequent samples collected from the Property test positive for Legionella at any time, appropriate response activities should be undertaken, and this Order may be further modified or extended.
  - [If the [health agency] receives a new report of a case of legionellosis that is epidemiologically linked to the Property, a new or amended Order may be issued.]

- Failure to abide by this Order and further instructions from [health agency] may result in fines, criminal penalties, and/or other further legal action.

To contest or appeal order:

- If you object to this Order, you may request a hearing in the [administrative body or court name] in accordance with [statute citation].
  - [Include information about your jurisdiction’s administrative procedures and judicial processes]

[Continued next page]
Contact information and signatures:

- If you have any questions, information, or concerns, please contact [health agency contact name] at [phone number/email address] immediately.
- This Order is issued under my authority as the [health director or other official’s title] for the [jurisdiction or health agency] on this [date] day of [month and year].
  - [Signature block for health/other official]

Proof of service:

- [I hereby certify that this Order was served [by mail/posting/in-hand/(other)] to the above-named individual and upon the establishment listed above.]
- [Date] at [time AM/PM] by [signature and print name of person serving order].

APPENDIX OR EXHIBIT LANGUAGE

The [health agency] orders you to take the following required actions associated with the Property:

[Note: The required actions in a particular scenario will depend on the type of congregate residential facility and the specific water systems/devices in which Legionella has been identified. Broadly, required actions can be identified as administrative, disease surveillance, required notifications, environmental health, and other required actions.

The required actions listed below are examples of some types of action that can be ordered. They are intended for illustrative purposes only and are not a complete list of all appropriate required actions.]

Administrative required actions:

- Immediately notify the [health agency program or contact person name] at [contact information] if you or personnel at the Property are unable to comply with any of the identified required actions.

Disease surveillance required actions:

- Immediately notify the [health agency program, contact person name, OR agency disease reporting line] at [contact information] of any probable, suspect, or confirmed cases of legionellosis and any known [residents, guests, visitors, staff, contractors, or volunteers] exhibiting any symptoms compatible with legionellosis.
Notification required actions:

Provide written notice

- Immediately provide the [attached] public health notice from the [health agency] to all [residents, guests, visitors, staff, and volunteers] at the Property.
  - The information in the public health notice should be communicated to all current [residents, guests, visitors, staff, and volunteers] and those who visited or occupied the Property [before [date] OR between dates of ___ and ___].
- Immediately notify all [residents, guests, visitors, staff, and volunteers] by [identify date, time or event], using documents provided by the [health agency], of the Legionella outbreak occurring at the Property.

Post notice

- The public health notice or other signage provided by the [health agency] should be posted at all entries to the Property, on the front entrance, and placed within view of [residents, guests, visitors, staff, and volunteers] at the [front desk, foyer, reception area, etc.] of the Property.
  - The public health notice should also be posted in staff areas of the Property.
  - A copy of the public health notice shall also be given to all [residents, guests, visitors, staff, and volunteers].

Record of notice

- You are advised to retain documentation that each notification was made.
- [Records of notification shall be provided to the [health agency].]

Environmental health required actions:

[Note: Environmental health required actions will vary depending on the type and size of congregate residential facility, the water systems/devices involved, the extent of Legionella colonization, and the regulatory authority/policies of the health agency. The items below are samples of possible environmental health required actions. These items are examples only and not an exhaustive list of appropriate actions.]

Retain consultant to assess water systems

- Example 1: Within [72, 48 OR ___] hours of this Order, hire at your own expense the services of a Legionella consultant or environmental consulting firm to assess the Property’s water systems.
- Example 2: Retain the services of an environmental consultant who is both (1) able to develop and implement an ASHRAE 188-compliant water management program (WMP) and (2) capable of Legionella environmental testing at an ELITE member laboratory (or able to subcontract with such a laboratory).
  - The chosen consultant must be reviewed and approved by the [health agency] prior to conducting any assessments or services. The deadline for complying with this provision is [date].
  - If the Property’s contract with the consultant terminates early for any reason, then the Property
must immediately implement and maintain an ASHRAE 188-compliant WMP with another environmental consultant that meets the same criteria above for selection of the initial consultant.

Perform environmental assessment/develop environmental sampling plan

- **Example 1**: Within [24 OR ___] hours of hire, have an assessment performed by the consultant and provide the [health agency] with a written summary of actions taken toward remediation at least every [48 OR ___] hours.

- **Example 2**: Direct the consultant to contact [health agency contact name] at [contact information] within [24 hours OR ____] of the consultant’s selection to determine the actions necessary for developing the Property’s *Legionella* sampling plan.
  - Submit the sampling plan to [health agency contact name] at [contact information] within [7 days OR ___] of selecting the consultant.
  - Within [48 hours OR ___] of sampling plan approval by the [health agency], perform all *Legionella* sampling tests in accordance with the sampling plan.

Remediation plan

- **Example 1**: In response to any positive *Legionella* sample results, [and if directed so by the [health agency],] prepare and submit for approval a remediation plan that addresses [, but is not necessarily limited to,] the following:
  - A short-term remediation plan, to be submitted within [72 hours OR ___], describing methods and corrective actions for controlling the risks of legionellosis from the Property’s water system. The short-term remediation plan must be substantially implemented within [96 hours OR ___] of approval by the [health agency].
  - A long-term prevention plan describing the water system management and the ongoing operational methods for controlling and monitoring the growth of *Legionella* within the Property’s water systems and devices. A draft of the plan must be presented to the [health agency] no later than [30 days OR ___] after being directed to complete a plan.

Conduct response activities

- **Example 1**: Initiate remediation actions within [24 OR ___] hours of hiring the environmental consultant.

- **Example 2**: Increase the temperatures of water heaters on the property to a minimum of [140 OR ___] degrees Fahrenheit, while following local and state anti-scald regulations. The deadline for complying with this provision is [date].

- **Example 3**: Restrict the use of tap water at the Property and use bottled water until [facility] can provide satisfactory proof to the [health agency] that [0.2-micron biological OR ___] point of use filters are installed on all showerheads, sink and tub faucets, and other water sources intended for use in the facility.

**Testing water systems/devices for Legionella**

- **Example 1**: The Property’s water system shall be tested for *Legionella* according to the investigation

[Continued next page]
sampling plan devised by [Property OR consultant name] to verify the effectiveness of treatment of the Property’s water system.

- **Example 2**: The WMP shall require testing according to the investigation sampling plan for *Legionella* using traditional spread-plate culture methods, that testing be performed at least quarterly, and that the investigation sampling plan shall remain in place [through the termination date of this Order].

- **Example 3**: At a minimum, each set of tests performed as part of the investigation sampling plan shall include a representative sample of the building’s water system, including but not limited to the following locations: [edit as appropriate: distal, medial, and proximal locations from the water distribution system, hot water heaters, medical or other devices that use water, cooling towers].

- **Example 4**: Provide results of all water testing to [health agency contact name] within [one business day OR (other timeframe)] of receipt via email [OR other method] to [email address/other].

- **Example 5**: Perform ongoing *Legionella* testing to confirm remediation and report results to the [health agency] as they become available.

**Other required actions:**

- [Additional information regarding feasible, required technical actions to be implemented will be provided to you in a timely manner.]

### Templates & Samples

See additional samples and templates in the *LDRC Toolkit Appendix*. 
Overview:
- Legionnaires’ disease (LD) is a form of pneumonia (lung infection) caused by *Legionella* bacteria.

Sources of exposure:
- *Legionella* bacteria can occur in nature and in water systems in built environments.
- *Legionella* grow well in warm water and can multiply in large or complex water systems, like those found in [congregate residential facility name].
- [Edit sources as appropriate for congregate residential facility type:] Likely sources of exposure include water in showers (and other potable water), cooling towers, hot water heaters, and medical and therapeutic equipment pools, hot tubs, and decorative fountains.
- People can become sick when they breathe in mist from a water source (e.g., shower) that contains *Legionella*.
- LD cannot normally be spread from person to person.

Persons at risk:
- Most healthy people do not get LD after being exposed to *Legionella*.
- Being 50 years or older or having certain risk factors such as being a current or former smoker, having chronic lung disease, having a weakened immune system, or taking medication that weakens the immune system can increase the chances of getting LD.
- [For increased-risk facilities:] Many people residing in [congregate residential facility type] may have underlying conditions that put them at greater risk of getting sick and dying from LD.

Signs and symptoms:
- Symptoms of LD include cough, muscle aches, fever, shortness of breath, and headache.
- Symptoms usually start 2 to 14 days after breathing in mist or water droplets that contain *Legionella*.
- Symptoms of LD may be similar to those of other respiratory diseases, such as COVID-19. It is important that people discuss the potential for LD with their doctors because the treatment for LD is different than for COVID-19.
- LD is diagnosed using chest x-rays or physical exams to check for pneumonia and tests for infection with *Legionella*.

[Continued next page]
**Treatment:**
- LD is treated with antibiotics (drugs that kill bacteria in the body).
- Most people who get LD need care in a hospital but make a full recovery. However, LD can sometimes result in lung failure or death.

**Contact information:**
- Please contact [name, phone number, and email address of person/office] at the [congregate residential facility] for more information or if you have questions.
- Further information is also available from the [state/local health agency and/or CDC website].
Basics about LD:

- Legionnaires’ disease (LD) is a serious form of pneumonia (lung infection) that is spread from aerosolized water (water droplets) that contains *Legionella* bacteria.
- Symptoms of LD can include cough, muscle aches, fever, shortness of breath, and headache.
  - Symptoms usually start 2 to 14 days after breathing in water droplets that contain *Legionella*.
- Most healthy people do not get LD after being exposed to *Legionella*.
  - Being 50 years or older or having certain risk factors such as being a current or former smoker, having chronic lung disease, having a weakened immune system, and taking medication that weakens the immune system can increase the chances of getting LD.
- LD can be treated with antibiotics. Most people who get LD need care in a hospital but make a full recovery. However, LD can sometimes result in lung failure or death.
- The bacteria are generally not spread from person to person.

Sources of exposure:

- *Legionella* can be found in freshwater environments and in water systems in built environments.
- *Legionella* grow well in warm water and can multiply in large or complex water systems, like those found in [congregate facility type or name].
  - Likely sources of exposure in a facility include water in sinks and showers, cooling towers, hot water heaters, medical and therapeutic equipment, hot tubs, and decorative fountains [edit sources as appropriate for setting].
- *Legionella* bacteria are common in the environment and can persist unless proper steps are taken to control it.

Investigation:

- An environmental assessment can help determine if there are conditions and devices that could promote *Legionella* growth and spread.
- Testing environmental samples from the facility’s water systems for *Legionella* can help to determine if a facility is [potentially] colonized with the bacteria.

Mitigation:

- Water systems that are suspected to be colonized with *Legionella* should undergo response activities.
  - [Cleaning and other response activities may be [requested/required] by [state/local health agency] to address an [ongoing community-associated] LD outbreak even if a source of infection has not yet been determined.]

[Continued next page]
Recommended mitigation measures may include:

- Flushing of the facility’s water systems.
- Installation of point-of-use filters on water fixtures in resident, staff, and public areas.
- Restricting use of water that cannot be filtered.
- Determining adherence to the facility’s water management program (WMP).
- Ensuring that routine or investigative environmental sampling is conducted and reviewing results.
- Working with facility to optimize the WMP and reduce the risk of [and control] Legionella growth.
- Installation of supplemental disinfection systems in water systems throughout the facility.
- Working with facility to address identified deficiencies.
- Determining if the deficiencies have been properly addressed.

Prevention:

- To prevent Legionella growth, building water systems should be properly monitored and maintained.
- Many congregate residential facilities should consider having a water management program (WMP).
  - If the facility does not have a WMP and it meets the characteristics outlined in ASHRAE Standard 188, it should develop and implement one. See the worksheet from CDC to identify which buildings or systems should have a WMP: [https://www.cdc.gov/legionella/wmp/toolkit/wmp-risk.html](https://www.cdc.gov/legionella/wmp/toolkit/wmp-risk.html).

Contact information:

- Please contact [name, phone number, and email address of person/office] at the [state/local health agency or other agency] if your facility tests positive for Legionella, you learn of [any/other] cases of LD, or for more information or questions.

Templates & Samples

See additional samples and templates in the LDRC Toolkit Appendix
Purpose of communication:
• We are writing to inform you that [number] person(s) have recently been diagnosed with Legionnaires' disease (LD) in [congregate residential facility name].
• LD is a serious form of pneumonia (lung infection) caused by Legionella bacteria that is spread from aerosolized water (water droplets) that contains Legionella.
• We are working with the [state/local health agency [and CDC (if applicable)]] to investigate the source of exposure and determine the risk for ongoing spread.

Sources of exposure:
• Legionella can occur in freshwater environments and in water systems in built environments.
• Legionella grow well in warm water and can multiply in large or complex water systems, like those found in [congregate residential facility type ] like [congregate residential facility name].
• Sources of exposure can include water used for showering, washing hands, and other water-sources like decorative fountains.
• People can become sick when they breathe in mist from a water source containing Legionella.
• LD cannot normally be spread from person to person.

Persons at risk:
• Most healthy people do not get LD after being exposed to Legionella.
• Being 50 years or older or having certain risk factors such as being a current or former smoker, having chronic lung disease, having a weakened immune system, or taking medication that weakens your immune system can increase the chances of getting LD.

Signs and symptoms:
• Symptoms of LD can include cough, muscle aches, fever, shortness of breath, and headache.
• Symptoms usually start 2 to 14 days after breathing in water droplets that contain Legionella.
• Symptoms of LD may be similar to those of other respiratory diseases, such as COVID-19. It is important to discuss the potential for LD with your doctor because the treatment for LD is different than for COVID-19.

Action requested:
• If you develop the symptoms of LD, please seek medical attention right away.
• Please show this letter to your doctor so they know to test you for LD if indicated by your symptoms.
  ▪ LD is diagnosed using chest x-rays or physical exams to check for pneumonia and tests for infection with Legionella.

[Continued next page]
If your doctor determines that testing is appropriate, ask to be tested with both a urine test and a respiratory (sputum/phlegm) culture or PCR before antibiotics are administered.

If you test positive, ask your doctor to report your illness to [state/local health agency] as soon as possible.

- Please also see CDC information about steps that you can take to prevent waterborne disease at https://www.cdc.gov/healthywater/drinking/preventing-waterborne-germs-at-home.html.

**Treatment:**

- Your doctor should prescribe you an antibiotic for treatment if you develop symptoms and are diagnosed with LD.
- Most people who get LD need care in a hospital but make a full recovery. However, LD can sometimes lead to lung failure or death.
- Speak with your doctor about other precautions they may recommend.

**Action being taken:**

- [Edit response as applicable:] In addition to monitoring our water system, water in our resident areas is being repeatedly flushed and tested for Legionella.
  - We have also installed extra water treatments in various water systems throughout our facility and are installing water filters on the showerheads and sinks.

**Contact information:**

- Please contact [name, phone number, and email address of person/office] at the [congregate residential facility] for more information or if you have questions.
- For more information about LD, visit [[state/local health agency website] and] CDC’s website https://www.cdc.gov/legionella/index.html [and/or see the attached information sheet].
Purpose of communication:

- The [state/local public health agency] is working with [congregate residential facility name] to test the water in your building because [number] persons have been reported being sick with Legionnaires’ disease [LD] within the past 12 months. [Note: time period may vary by jurisdiction].
- We wanted to notify you right away about this testing, and we will keep you informed once we have the results.

Basics about LD:

- LD is a serious form of pneumonia (lung infection) caused by Legionella bacteria that is spread from aerosolized water (water droplets) that contains Legionella.
- LD cannot normally be spread from person to person.
- [Describe potential sources of LD common to the facility type:]
  - Legionella is naturally found in freshwater environments, such as lakes and streams; however, it more commonly causes human infection when it grows and spreads in building water systems (e.g., large plumbing systems, cooling towers, hot water tanks and heaters, showerheads, sink faucets, hot tubs, other water sources like fountains).
- Most healthy people do not get LD after being exposed to Legionella.
  - Being 50 years or older or having certain risk factors such as being a current or former smoker, having chronic lung disease, having a weakened immune system, or taking medication that weakens your immune system can increase the chances of getting LD.
- Symptoms usually start 2 to 14 days after breathing in water droplets with Legionella bacteria.
- Symptoms of LD include cough, muscle aches, fever, shortness of breath, and headache.
- Symptoms of LD may be similar to those of other respiratory diseases, such as COVID-19. It is important to discuss the potential for LD with your doctor because the treatment for LD is different than for COVID-19.
- LD can be treated with antibiotics. Most people who get LD need care in a hospital but make a full recovery. However, LD can sometimes result in lung failure or death.

Action requested:

- Please see your doctor right away if you start having symptoms of LD such as cough, muscle aches, fever, shortness of breath, and headache.
  - Please also show this letter to your doctor so that they know to test you for LD if indicated by your symptoms.

(Continued next page)
If you have one of the risk factors above, take these extra steps as a precaution [edit as needed for specific facility]:

- Do not take a shower (hot or cool) since it creates water mist. Take a bath instead; fill the tub slowly to reduce splashing and water mist, and minimize your time in the bathroom while the tub is filling.
- You may wash dishes but fill the sink slowly to avoid creating mist.
- You can drink cold water from the tap but start with cold water when heating water for tea, coffee, or cooking.
- Speak with your doctor about other precautions they may recommend.

Please also see CDC information about steps that you can take to prevent waterborne disease at https://www.cdc.gov/healthywater/drinking/preventing-waterborne-germs-at-home.html.

Contact information:

- We will continue to update you on important information about your building.
- Please contact [name, phone number, and email address of person/office] at [congregate residential facility name] for more information or for questions.
- For more information about LD, visit [state/local health agency website] and] CDC’s website https://www.cdc.gov/legionella/index.html [and/or see the attached information sheet].
Purpose of communication:
- We are writing to inform you that a person associated with [congregate residential facility name] was recently diagnosed with Legionnaires’ disease (LD).
- LD is a serious form of pneumonia (lung infection) that is spread from aerosolized water (water droplets) that contains Legionella bacteria.
- We are working with the [state/local health agency [and CDC] (if applicable)] to investigate the source of exposure and determine the risk for ongoing spread.

Sources of exposure:
- Legionella can occur in freshwater environments and in water systems in built environments.
- Legionella grow well in warm water and can multiply in large or complex water systems, like those found in [congregate residential facility type ] like [congregate residential facility’s name].
- Sources of exposure can include water used for showering, washing hands, hot tubs, cooling towers, other water sources like decorative fountains or medical equipment that uses water.
- People can become sick when they breathe in mist from a water source containing Legionella.
- LD cannot normally be spread from person to person.

Persons at risk:
- Most healthy people do not get LD after being exposed to Legionella.
- Being 50 years or older or having certain risk factors such as being a current or former smoker, having chronic lung disease, having a weakened immune system, or taking medication that weakens your immune system can increase the chances of getting LD.

Signs, symptoms, and treatment:
- Symptoms of LD can include cough, muscle aches, fever, shortness of breath, and headache.
- Symptoms usually start 2 to 14 days after breathing in mist or droplets that contain Legionella.
- Symptoms of LD may be similar to those of other respiratory diseases, such as COVID-19. It is important to discuss the potential for LD with your doctor because the treatment for LD is different than for COVID-19.
- LD is treated with antibiotics (drugs that kill bacteria in the body).
- Most people who get LD need care in a hospital but make a full recovery. However, LD can sometimes result in lung failure or death.

Action being taken:
- [Edit response as applicable:] To ensure that staff and residents are protected, we are monitoring our water system. Water in our [staff/resident] areas is being repeatedly flushed and tested for Legionella.

[Continued next page]
We have also installed extra water treatments in hot water systems throughout our facility and are installing water filters on the showerheads and sinks.

No showers are allowed in [staff/resident areas] that do not have a filter attachment.

The cold water in ice machines and drinking water fountains [may/should not] be used.

• [Edit response as applicable:] Staff (employees, volunteers, and contractors) who have or are experiencing symptoms of LD during [timeframe] should seek medical attention immediately.

• [Facility name] will also contact staff who took sick leave during this time.

• [We are also offering staff [counseling and] information services. If you would like to use these services or want more information, contact [your manager/name].]

**Action requested:**

• If you are not sick, there is no need for you to see a doctor.

• If you are at increased risk for getting LD based on the risk factors listed above and are concerned about getting sick, or if you are currently or become sick with a cough, muscle aches, fever, shortness of breath, or headache, see your private healthcare provider right away or contact [name/office] to arrange to see a doctor.
  
  ▪ Tell the doctor that you work in a congregate residential facility where there has been a [case/outbreak] of LD so they can test you for LD if indicated by your symptoms.
  
  ▪ If you test positive, ask your doctor to report your illness to [health agency] immediately.
  
  ▪ Speak with your doctor about any other precautions they may recommend.

• If you see a doctor, notify [name/office] so our [facility] can track your illness.

• If you have any concerns or questions, please discuss them with [your manager/name].

**Contact information:**

• Please contact [name, phone number, and email address of person/office] at the [state/local health agency] for more information or if you have questions.

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**Templates & Samples**

See additional samples and templates in the *LDRC Toolkit Appendix*
Purpose of communication:
• [State/local public health agency] has confirmed [number] person[s] with Legionnaires’ disease (LD) associated with [congregate residential facility name].
• The person[s] with LD were likely exposed to Legionella bacteria during [timeframe] based on clinical symptoms and the incubation period of LD.
• The [state/local public health agency] is working the [congregate residential facility name], [in conjunction with the CDC,] to identify potential sources of exposure and mitigate risk of additional cases.

Action required:
• Healthcare providers should report probable, suspect, and confirmed cases of LD to the [state/local public health agency] as soon as possible.
• [Include jurisdiction-specific notifiable disease reporting requirements and processes for Legionella/legionellosis.]

Action requested:
• Healthcare providers should consider LD when evaluating patients with community-acquired pneumonia:
  ▪ Ask patients about residence, visits, or work at [congregate residential facility] within the 14 days prior to symptom onset.
  ▪ Also ask patients about any healthcare visits (inpatient, outpatient, or staff), travel (including local travel), or possible exposure to other community sources of Legionella in the 14 days prior to symptom onset.
  ▪ Keep in mind that the initial presentation of LD may be similar to other respiratory diseases, such as COVID-19, and prompt identification of Legionella infection can inform antibiotic treatment.
• Diagnostic testing for LD should include both urinary antigen and culture or PCR of lower respiratory secretions before treatment is administered. Lower respiratory specimens should be collected even if antibiotic therapy has been initiated.
  ▪ Lower respiratory specimens (e.g., sputum, bronchoalveolar lavage) should be collected and frozen. [It may be possible to perform additional Legionella testing on lower respiratory specimens even if they do not test positive by culture or PCR.]
  ▪ Isolation of Legionella by culture or PCR is important for public health investigation.
    • Molecular techniques can be used to compare clinical isolates to environmental isolates and confirm the outbreak source.
    • [Cultured specimens from patients who reported exposure to the facility under investigation should be retained for potential additional testing at [the state public health laboratory].]
• [Note if state PH laboratory is available to support testing (may not be applicable in some jurisdictions).]

[Continued next page]
See [state/local public health agency] at [website] for additional information.

Additional treatment information is available on the CDC website at https://www.cdc.gov/legionella/clinicians.html.

Contact information:

- Please contact [name, phone number, and email address of person/office] at the [state/local health agency] for more information or to answer questions.

Templates & Samples

See additional samples and templates in the LDRC Toolkit Appendix
Overview:

- [State/local public health agency] is investigating [number] confirmed case[s] of Legionnaires’ disease (LD).
- Persons with LD were likely exposed to *Legionella* [during/since timeframe] at [congregate residential facility name].
- The [state/local public health agency] is working with [congregate residential facility] to inform current and former [residents, employees, volunteers, and contractors] who are known to have stayed at or visited [suspected source facility] during/since [timeframe] based on [facility’s] records.
- Investigation of any suspected illness identified through this notification will be communicated and coordinated with the respective state [or local] health department[s].
- Additional potential cases [are/may be] under investigation.

Potential sources and dates of exposure:

- The [number] confirmed case[s] of LD report [identify potential source of exposure at congregate residential facility].
- Illness onset dates range from [date] to [date].
- The [state/local public health agency] is currently working to identify the source of these infections and mitigate the risk of additional cases.

Clinical and laboratory:

- All persons’ illnesses were diagnosed by [identify diagnostic methods such as *Legionella* urinary antigen testing and respiratory (sputum/phlegm) culture or PCR].
- [Number] cases were hospitalized and [no/number] deaths have been reported [as of/since] [date].

Environmental investigation:

- The [state/local health agency] is working with [congregate residential facility] to ensure [include applicable]:
  - Environmental assessment of the facility’s water systems to identify conditions favorable for *Legionella* growth and spread.
  - Testing of the facility’s water systems for *Legionella*.
  - Flushing of the facility’s water systems.
  - Installation of point-of-use filters on water fixtures in resident rooms/units.
  - Restricting use of water that cannot be filtered.
  - Determining adherence to the facility’s water management program (WMP).
  - Ensuring that routine or investigative environmental sampling is conducted and reviewing results.

[Continued next page]
Working with the facility to optimize the WMP and reduce and control *Legionella* growth.

Installation of supplemental disinfection systems in various water systems throughout the facility.

Working with the facility to remediate identified deficiencies.

Determining if any identified deficiencies have been properly addressed.

**Action requested:**

- Whenever possible, diagnostic testing of residents, visitors, and staff at [congregate residential facility] with community-acquired pneumonia should include collection of urine for antigen testing and lower respiratory specimens for culture or PCR of *Legionella* before antibiotics are administered.
  - Lower respiratory specimen should be collected even if antibiotic therapy has been initiated.
  - Lower respiratory specimens (e.g., sputum, bronchoalveolar lavage) should be collected and frozen. [It may be possible to perform additional *Legionella* testing on lower respiratory specimens even if they do not test positive by culture or PCR.]
  - Isolation of *Legionella* by culture or PCR is important for public health investigation. Molecular techniques can be used to compare clinical isolates to environmental isolates and confirm the outbreak source.
  - [If possible, isolates obtained should be saved/stored appropriately (rather than discarded) to allow [public health agency/laboratory] to conduct molecular comparisons if needed.] [OR [If isolates are obtained, the [public health agency/laboratory] should be consulted for coordination of next steps related to molecular comparisons.]

- The [state/local public health agency] is requesting that state and local health departments examine reports of suspect or confirmed cases of legionellosis to determine whether any could be associated with contact to [congregate residential facility] as a resident, staff member, or visitor since [date/timeframe].

**Contact information:**

- Public health/agency officials who identify cases of LD among persons with a history of contact to [congregate residential facility] and illness onsets within 14 days of exposure are asked to contact [name, phone number, email address of person/office] at the [state/local health agency].

**Templates & Samples**

See additional samples and templates in the *LDRC Toolkit Appendix*
Overview:
• The [state/local public health agency] is investigating [number] case[s] of Legionnaires’ disease (LD) among people who were [residents/other] at [congregate residential facility] in [timeframe].
• LD is a potentially serious pneumonia (lung infection) that people can get when exposed to Legionella bacteria.
• Based on when they first had symptoms of LD, the people were at the [congregate residential facility] for [all/part] of the time when they could have been exposed to the bacteria. They likely were exposed to Legionella during [timeframe] at [facility].
• [If applicable: [Congregate residential facility] is cooperating with the [state/local health agency] investigation of the potential sources of exposure to Legionella.]

Actions being taken:
• The [state/local public health agency] is working with the [congregate residential facility] to collect information and further investigate these cases.
• The [state/local public health agency] has been on site to collect samples of the facility’s water and test it for Legionella.
  ▪ [OR if health agency not involved in sampling:] [Water samples have been collected and are being tested for Legionella.]
  ▪ [Previous water samples collected at [congregate residential facility] tested positive for Legionella.]
• The [congregate residential facility] has reported to public health officials that it [routinely conducts water testing and] has already taken steps to reduce the chances that anyone is exposed to Legionella, such as adding disinfectant to the water, flushing pipes, and installing point-of-use filters.
  ▪ The facility is also conducting surveillance to identify other potential cases of LD and to ensure the appropriate testing and medical treatment of [residents, staff, and others].

Potential sources of exposure:
• Legionella occurs naturally in the environment and is generally not passed from person-to-person.
• The bacteria can become a health concern when they grow and spread in building water systems, like plumbing systems, cooling towers, hot water tanks, hot tubs, and decorative fountains.
• People can become sick when they breathe in mist from a water source (e.g., shower) containing Legionella.
• Outbreaks are most commonly associated with facilities that have complex water systems like hospitals, hotels, or large apartment buildings.

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Persons at risk:

- Most healthy people do not get LD after being exposed to *Legionella*.
- Being 50 years or older or having certain risk factors such as being a current or former smoker, having chronic lung disease, having a weakened immune system, or taking medication that weakens your immune system can increase the chances of getting LD.

Signs, symptoms, and treatment:

- The symptoms of LD include cough, muscle aches, fever, shortness of breath, and headache.
- Symptoms usually start 2 to 14 days after breathing in mist or water droplets that contain *Legionella*.
- Symptoms of LD may be similar to those of other respiratory diseases, such as COVID-19. It is important that people discuss the potential for LD with their doctors because the treatment for LD is different than for COVID-19.
- LD can be treated with antibiotics; however, it can cause severe illness requiring hospitalization and sometimes results in lung failure or death.

Action requested:

- If an individual visited [congregate residential facility] and developed symptoms of LD within 14 days of their visit, they should contact their healthcare provider and seek medical attention as soon as possible.
- [Add one or more quotes from PH agency staff:]
  - *Sample quote from PH official:* [“Legionnaires’ disease is a serious infection. We want to make sure the public is aware of the potential risk of this disease so that each person can work with their healthcare provider to get tested and treated if necessary.”]
- Residents/visitors should also see CDC information about steps they can take to prevent waterborne disease at [https://www.cdc.gov/healthywater/drinking/preventing-waterborne-germs-at-home.html](https://www.cdc.gov/healthywater/drinking/preventing-waterborne-germs-at-home.html).

Contact information:

- If you have information or questions, please contact [name, phone number, and email address of person/office] at the [state/local health agency].
- For further information on Legionnaires’ disease, please visit the [state health agency website and/or] CDC webpage at [www.cdc.gov/legionella/](http://www.cdc.gov/legionella/).

Templates & Samples

See additional samples and templates in the *LDRC Toolkit Appendix*