

**Chapter 8: Communications, Media, Public Reporting, Notification, and Disclosure for
Healthcare Acquired Infections
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Chapter

(Preface)

When patients are placed at risk as a result of an outbreak in a healthcare setting, an infection control breach, or another situation that decreases their safety in a healthcare setting, they have a right to know what happened, what has been done, what their risk is, and what they need to do. Incorporating a patient notification into an outbreak response can be challenging, particularly when not all the information has been collected or analyzed; but is necessary for public health agencies to protect the health of their populations. This chapter describes the rationale for patient notification, the who/what/how of patient notification events, and communication considerations.

8.0 Introduction

8.0.1 Patients' Stories

Patient A went into his small local hospital for treatment of a minor ankle fracture in 2008. He was readmitted to the hospital, had prolonged and complicated hospitalization, and died three months after the initial admission from a diagnosis of pneumonia caused by methicillin-resistant *Staphylococcus aureus* (MRSA). Patient A's daughter reported discovering two other deaths at the hospital related to MRSA infections in the month prior to his admission. When Patient A's daughter had questions, she felt frustrated and talked down to with no empathy; hospital staff responded with "expressed helplessness and 'I don't know' answers." Patient A's family was left with unanswered questions, making the traumatic loss of a loved one even more difficult.^{1,2}

When a patient gets an infection in a hospital or other healthcare setting, it can be a shocking and frightening experience. When infections spread, it may become more frightening and confusing for patients and their families and may be frightening for the staff as well. Early in an outbreak, healthcare providers and staff feel an understandable urgency to stop it. However, in that urgency, we ought not forget to inform the very people who are affected the most.

As in Patient A's case, patients and their families can be left in the dark in the midst of a known outbreak or ongoing disease transmission. At a large hospital in 2017, Patient B delivered her baby who was admitted to the neonatal intensive care unit (NICU). According to Patient B, she was not informed prior to delivery that the NICU was in the midst of an ongoing outbreak of MRSA, which the hospital had not yet been able to control. She was not even informed about the outbreak when she was told that her child tested positive for MRSA while still in the NICU.³

There is a great emphasis today on patient-centered care but informing patients and others who need to know about outbreaks within healthcare settings has not always kept up with the current prevailing philosophy of transparency. Neglecting to inform for whatever reason or excuse can lead to speculation, disinformation, and distrust of the hospital, healthcare setting, and healthcare providers. Not only is lack of transparency poor patient care, but it also neglects what can be an important part of outbreak response: gaining the patient's perspective. By informing patients and families, including discharged patients, of the outbreak and investigation, they can become active participants who can help identify risk factors and reasons for an outbreak.

The framework presented in this chapter acknowledges the importance of informing patients, families, providers, and in some cases the general public when outbreaks occur in healthcare settings. Considerations for notification of patients, their families, and the public should always include the experiences of the people public health is entrusted to protect.

8.0.2 Considerations for Notification

Historically, some debate has existed about when and if to notify patients and their families, and the public, of suspected and confirmed outbreaks. More recent experience of public health agencies and healthcare facilities and providers has shifted the tide on the debate, toward early notification.

A paper on large-scale adverse events, which include outbreaks, infection control breaches, and other adverse events, describes two ethical frameworks that often guide the decision to notify. The first framework, utilitarian, focuses on minimizing risk and maximizing benefit. Under the utilitarian framework, which public health might encounter when a healthcare facility faces a decision to disclose an outbreak or infection control breach, if the disclosure of a low-risk event is perceived to create the potential for harm (e.g., patient worry, undermining public confidence), the decision on face value might appear to with-hold information. However, when taking a broader perspective, this framework raises issues that would support disclosure. For example, disclosure can help with epidemiologic and/or diagnostic interventions to determine which patients might have been exposed or harmed. In addition utilitarian framework might also support notification to ensure building or maintaining trust of the public. The second ethical framework, duty-based, focuses on the duty to notify; all patients have a right to know and an expectation that a healthcare provider will notify them of any potential risks. This second framework supports disclosure in most all situations. In both ethical frameworks, notifying patients at risk, which can include the public, is supported.⁴

It is important to reiterate that the duty of public health agencies is to protect the health of the public. A part of this duty is to maintain the trust of the public; any public sense that information is being withheld undermines public trust and does not support the mission of public health. It is critical to employ risk communication strategies, described later in this chapter, to effectively communicate. However, the difficulty in how to communicate messages should not be a barrier to the decision to communication. Patients and the public should be given information to understand their risk, even if extremely low. Reasons to communicate include a duty to communicate (as described in a duty-based ethical framework above), ensuring accurate communication (which prevents misinformation from filling any void of information), establishing and maintaining trust, and providing information, including methods of prevention and guidance for next steps after a risk.

When notifying patients and communicating with the public, keep in mind that the actual risk might not match the perception of risk. Different people will experience different levels of risk to the same situation. According to Peter Sandman, the amount of actual risk and the outrage of people hearing about the risk do not always correlate. When preparing for a patient notification, consider the following categories of risk and outrage:

- High risk and low outrage: communication should include messaging to alert people to potentially serious risks;
- Low risk and high outrage: communication should include messaging for reassurance;
- High risk and high outrage: communication should include helping people cope with serious risks;
- Low risk and low outrage: communication might focus on providing information.⁵

Additional considerations for notification and risk communication are discussed throughout this chapter.

8.1 Notification of Patients, Stakeholders, and General Public of Outbreaks

In this section we will discuss the notification of affected and exposed patients, stakeholders such as providers and healthcare facilities, and the general public both during and after an

outbreak. CDC describes 3 potential triggers to perform patient notifications: (1) when patients have experienced a healthcare associated infection (e.g., an infection, colonization with an antibiotic-resistant pathogen), (2) when patients need to be able to mitigate risks (e.g., identify symptoms of an infection incubating or already present, receive screening for a pathogen present without symptoms), and (3) when patients have experienced an alteration in care due to an outbreak or infection control breach (e.g., receipt of care they would not have otherwise received, use of additional infection control precautions).⁶

For additional detail described in this section, please refer to Table 8.1. For examples of how to apply the table, see Box 8.3 for an example involving *Legionella pneumophila* and Box 8.4 for New-Delhi metallo-beta-lactamase-producing carbapenem-resistant Enterobacteriaceae.

8.1.1 Immediate Notification

Immediate notification refers to the set of initial and critical communications that occur when an outbreak is first suspected. Healthcare settings or providers should immediately report any suspected outbreak or infection control breach to the designated internal team members (e.g., infection preventionists, hospital epidemiologists, patient safety officers, etc.) and to public health authorities, following state and local regulations and guidelines. There may be instances where state or federal reporting and notification policies might require a more immediate notification and reporting timeline. Follow federal or state requirements where applicable. The role of public health will be to assist in the assessment of the outbreak and content of notifications. Refer to Chapter 4 for additional information on cluster and outbreak definitions and reporting to public health agencies. Pathogen-specific outbreak definitions can be found on CORHA's website at www.corha.org/resources-and-products/.

Ideally, representatives of healthcare settings should take the lead on immediate notification. Public health staff may need to take the lead when healthcare setting representatives do not or are unable to do so. As best possible, the notification process should be initiated as soon as possible, within 24 hours of recognition of an outbreak but may have to occur before all facts about the outbreak are known. In most cases, notification plans should ensure patients who have been infected are notified and counseled promptly (by their healthcare providers whenever possible). Notification to other prioritized groups should follow as soon as possible and steps may occur simultaneously instead of sequentially. The same principles will apply as new cases are identified.

8.1.1.1 Affected and Exposed Patients

When cases are identified, patients with the pathogen or condition of interest should be notified immediately, ideally by their healthcare provider. The rationale for immediate notification includes fully informing patients of the event and implications for their health and allows them to seek appropriate treatment and supporting the prevention and control of the outbreak. Affected patients can be notified verbally (in person or by phone if no longer in the facility), or if unable to notify verbally, in writing. Regardless of the method of notification, patients should be given or directed to written information in an easy-to-understand format, such as a frequently asked questions document. Applicable counseling and information about potential risk of transmission, infection, clinical illness, testing, treatment and additional care measures should be clearly communicated. If there are many affected patients or if there is likely to be a large volume of inquiries, consider establishing a

dedicated call line or other method to allow opportunities for questions; ideally the dedicated call line is conducted by the facility, since the facility is responsible for the direct care of the patients. However, in some circumstances it might be beneficial for the public health agencies to establish a line of communication, either in parallel to or in place of the facility (typically only when the facility does not establish one). A webpage with the same information presented to patients can be considered when inquiries are likely to be of high volume. If patients are incapacitated or have died, their designated healthcare proxy should be notified. If others in the healthcare setting, such as healthcare workers or visitors, are determined to be part of the outbreak, they should be in the same group and immediately notified with the same considerations.

Patients and other persons who have been exposed should be notified as soon as possible after the patients directly affected. The methods for notification should be the same, with the same considerations, as the patients directly affected. The messaging is likely to vary, and additional counseling information regarding risk of infection after exposure and post-exposure prophylaxis need to be considered in addition to the information communicated to affected patients.

Patients and other persons who might be at risk of exposure in the future should also be notified before the potential exposure. This might include patients undergoing a procedure or patients admitted to a unit or area in a healthcare setting currently experiencing an outbreak, or it might include persons with an intrinsic increased risk for the condition under investigation (e.g., elderly, immunocompromised). The methods for notification can be the same as affected and exposed persons but might also include notification via postings at strategic locations, such as at the entry of a unit or at handwashing stations. The primary purpose is to decrease the risk of exposure for this group of persons understanding that the risk tolerance will vary by different people for the same actual risk of exposure

Additional detail and considerations for affected, exposed, and future exposed persons can be found in Table 8.1, Step 1.

8.1.1.2 Healthcare Providers and Personnel

Affected patients' healthcare providers should be notified as soon as possible and preferably on the same timeline as the affected patients. Healthcare providers can help in contacting their patients, and in many cases the healthcare provider is the best person to notify the patient, as they have an existing relationship; the provider can also help answer their patients' questions and provide a level of trust and confidence that can support the patient. Providers should understand the current situation and outbreak and their patients' condition and risk. It is important to give providers full information about the outbreak and condition, and not assume that they know how to proceed in an outbreak situation, which might differ from routine clinical care. The method of provider notification might depend on the internal processes of the facility, and might include direct communication with each provider, or more general messaging to healthcare providers facility wide.

Other providers to consider notifying include providers at the same facility who are not direct providers of affected patients, or community providers who provide care to patients who are not directly affected; either or both of these provider types might also provide care to at-risk patients or exposed patients. These providers should be notified as soon as possible and should be given complete information about the outbreak to be able to counsel their patients

and answer questions. There are many methods by which this information might be communicated, including during team meetings, group emails, or written postings; the exact methodology will depend on the severity of the situation, the need for broader communication, healthcare facility internal policies, and recommendations of public health agencies. In some cases, a health alert might be sent by the public health agency to make many providers aware of the situation; this should occur when there is a need to do so, such as the potential for wide-spread exposures for purposes of case-finding and recommendations for next steps to providers who might care for these patients in the community. A contaminated medication distributed broadly among healthcare facilities and providers is one example of when a health alert might be needed.

Note that other employee types not directly affected or exposed should also be notified of the outbreak when they might hear about it from other employees; it is better to communicate early prior to any rumors and ensure that all employees are informed and feel safe. In addition, healthcare professionals and support staff may often work in other settings, raising the prospect of exposure and spread to other health care settings (see 8.2.1.4).

Additionally, healthcare providers or other employees might themselves be affected or exposed persons or might have underlying illnesses that make them at risk for complications for the condition of interest. These persons should be considered in a similar manner to affected and exposed patients in the previous section. Employee health should be consulted and involved in the communication to and management of these employees.

See Table 8.1, Step 1, for more information about communication with healthcare providers and employees.

8.1.1.3 Visitors

Visitors should be informed when they might be at risk of exposure, including those who might have underlying illnesses increasing their risk, and when they might need to change behavior at the location of the outbreak (e.g., PPE use, additional handwashing). Visitors who might have been exposed should receive similar messaging to other exposed persons as described above. Methods for communication might include written postings, in person communication at the time of a visit, or written or verbal communication prior to a visit. Remember that visitors are often family or friends, and they will have questions not only about any risk to them, but also any risk to the patient. For visitors that need to make behavioral changes or institute safety precautions (e.g., transmission-based precautions), the changes must be communicated clearly, and taught directly as necessary via education or demonstrations. Communication should occur as soon as possible and prior to any exposure when possible. Under some circumstances, cessation of visitation might need to be considered for a period of time if visitation might pose a risk to patients or visitors.

Refer to Table 8.1, Step 1, for more information about communication with visitors.

8.1.1.4 Other Healthcare Facilities

Other healthcare facilities might need information about an outbreak at another facility when they might care for patients affected or exposed when receiving care at multiple facilities, or when their own patients and healthcare workers might be exposed. In addition, healthcare professionals and support staff may also move and work between facilities. Other facilities

might need to be notified when a patient at the affected facility is transferred, posing a risk to healthcare workers and patients at the receiving facility. Public health should encourage complete documentation in medical records including upon transferring patients, especially when there is a risk for pathogen transmission. Additionally, other facilities might need to be notified when they might incur a risk to their staff and patients, such as when a contaminated product might be distributed beyond the affected facility. In these cases, a health alert might be sent by the public health agency to notify multiple healthcare facilities and providers, often when there is the potential for wide-spread exposures, for purposes of case-finding, and when making recommendations to providers who might care for these patients in the community.

More information on notifying other healthcare facilities can be found in Table 8.1, Step 1.

8.1.2 Expanded Notification

As an investigation progresses and more information becomes available, notification should be updated and may require expansion to other individuals, groups, or partners. . This is especially true if the investigation expands to additional units or to additional healthcare settings. Additionally, original groups of people notified as part of the immediate notification should be updated as appropriate. As coordination and timing of messaging becomes more complicated, public health might increasingly assume the role of coordination of notifications and communication. Public health should work with providers to at least be aware of but ideally providing assistance in developing a coordinated media communication plan among involved healthcare facilities, public health agencies, other government agencies, and other involved partners. It is important to anticipate media and public attention whenever possible. Public health staff should continue to defer to representatives of the healthcare settings perform individual notifications whenever possible, unless circumstances require public health staff involvement (e.g., facility closed, surge capacity needed, lack of cooperation or timeliness, or whenever representatives of the healthcare setting do not or are unable to [such as a smaller facility or outpatient setting]). Coordination among involved partners is critical to a successful notification, and often public health leads coordination for notifications when multiple facilities or agencies are involved; consider frequent communication among entities and coordinated timelines for notification.

8.1.2.1 Affected and Exposed Patients

Additional affected and exposed patients might be detected during the course of the investigation as the result of additional case-finding activities that may come about from notifications. Affected patients, or their designated healthcare proxy, who were not notified during the immediate notification but subsequently identified should be notified as soon as they are identified, ideally within 24 hours of identification or as soon as possible; do not wait for the investigation to be completed. All information discussed above in Section 8.2.1.1 related to methods for notification and considerations apply to additional affected patients identified; see Section 8.2.1.1 and Table 8.1, Step 2, for additional details. Additionally, consider giving additional information related to why notification might be coming later than for other patients already notified. Transparency and open communication are critical.

Additional detail and considerations for affected, exposed, and future exposed persons identified after the immediate notification can be found in Table 8.1, Step 2. This can help

get an early handle on the extent of the outbreak to avoid continually chasing the outbreak each time you expand the breadth of the notification.

8.1.2.2 Healthcare Providers and Personnel

As additional affected and exposed patients and patients and persons at risk are identified, consideration should be given to notifying their providers as soon as possible, similar to provider notification in Section 8.2.1.2. It is often during the expanded notification stage that other providers, such as providers at the same facility who are not direct providers of affected patients, or community providers who provide care to patients who are not directly affected, might be notified. See Table 8.1, Step 2, for more information about communication with healthcare providers and employees.

8.1.2.3 Visitors

Additional visitors beyond the immediate notification might be identified that need to be notified as the investigation progresses. For example, if during the outbreak investigation additional units are identified as being affected, additional signage might be posted in strategic locations within these units. If there are additional risk factors identified during the investigation with methods for prevention for visitors, these methods for prevention should be communicated as well. Methods and considerations for communicating with visitors can be found in more detail in Section 8.2.1.3 and Table 8.1, Step 2.

8.1.2.4 Other Healthcare Facilities

It is often during expanded notification that healthcare facilities other than those affected might need to be notified. This might be needed when other healthcare facilities care for patients affected or exposed, or when their own patients and healthcare workers might be exposed. The methods and considerations for notifying other healthcare facilities is described in Section 8.2.1.4 and in Table 8.1, Step 2.

Box 8.1. Additional Considerations for Immediate and Expanded Notification and Communication

- Include language on what is known, what is not yet known, who is at risk, who is not at risk, how individuals can protect themselves, and how they can prevent spread to others.
- For outbreaks limited to a specific unit (e.g., NICU, ICU, Hematology-Oncology ward):
 - Postings can be at entry doors to unit, nursing stations, handwashing stations, waiting rooms, staff break rooms.
 - Postings in patient rooms may indicate precautions to take but need to be mindful of HIPAA.
- For outbreaks that affect multiple floors/units (e.g., legionellosis, pathogen affecting several units):
 - Postings can be in lobby, visitor check-in desk, elevators to floor(s) that are affected, each potentially affected unit, etc.
- Provide information on actions the healthcare setting is taking to prevent spread and future outbreaks.

- To ensure the quality and effectiveness of the content to the target audience, consider language challenges, making sure communication is available in multiple languages as well as determine the need for translators.
- Where applicable, refer to state or federal reporting and notification policies, which may require a more immediate notification and reporting timeline.
- NOTE: postings in the facility may be inadequate when the outbreak is in areas that the patient may not have a choice about accessing once they are admitted to the facility such as the emergency room, ICU or operating room. Then notification may have to occur prior to the person deciding to seek services at the health care facility (see 8.2.3 public notification).

8.1.3 Public Notification

Public notification in the context of a healthcare investigation should occur when doing so provides an important opportunity to communicate ongoing risks or advocate actions to a broader audience, especially if the event involves many cases or exposures, or when necessary to provide information to potentially exposed persons that cannot be reached through other means. This may also be required when the outbreak is within a confined area of the healthcare setting but which the provider cannot choose to use once they have begun care in the facility. For example, a woman entering a hospital to deliver a baby may not be aware of an outbreak in the NICU until after delivery, which at this point, notification does not allow her to make a decision to seek care for her child in the NICU. In these settings the goal of public notification is to ensure and promote public health by limiting transmission.

8.1.3.1 *When to Notify the Public*

Notification of the public can be beneficial under certain circumstances, including the following situations. The decision for public notification should be considered when any of the following apply:

- If the outbreak has already, or is likely to, become public through other channels in order to proactively provide accurate information, to clarify or correct wrong or misleading information already in the public sphere, and to more effectively communicate risks.
- To assist an active investigation by helping to identify additional affected and exposed persons outside the current healthcare setting where the cases were identified.
- To inform healthcare providers in the community for the purposes of adjusting patient care, assisting with identifying cases, assisting with other aspects of an investigation, and preventing further transmission.
- To advise the public and potential patients at risk when the at risk population is large (e.g. patients treated with endoscopes found to be contaminated).
- To provide information people should take to protect their health and prevent transmission to others. This could include notifying patients who were exposed but who have not been reached through other means. Often this includes specific recommendations and actions to take, such as clinical evaluation, testing, symptom watch, or contacting the local public health authority.
- To provide information to people considering visitation to affected healthcare settings when visitation might put them at risk, including specific persons at risk. They should be informed to be able to consider options for visitation suitable for their healthcare needs.

- When a novel pathogen is identified or emerging, or if the outbreak involves unusual or rare multidrug-resistant infections for which there is limited treatment, such as *Candida auris* or novel multidrug resistance organisms, for awareness of the public and providers.
- If the illness is severe or there are many cases or associated deaths.
- To demonstrate commitment to transparency and ensure the organization's perspective is accurately represented in the media.
- When the outbreak occurs in areas not typically accessed until after seeking care at the healthcare setting.

8.1.3.2 *How to Notify the Public*

Public notification often depends on collaboration between public health and healthcare settings. In general it is preferred that the involved healthcare settings take the lead in notifying the public when possible but should notify and ideally work with public health on the message. If the healthcare setting does not or is unable to provide public notification, or when it is more appropriate, such as notifications involving multiple facilities, public health should take the lead to notify the public. Considerations for methods to notify the public include the following:

- Any communication developed should be reviewed by the healthcare facility or setting and involved public health agencies and should be coordinated in content and timing.
- Potential methods for message dissemination include media statements, press releases, news conferences, social media postings, text messages, or other methods. Spokesperson availability for media interviews should be considered.
- Consider if engaging community partners might be helpful for the population to be targeted, such as faith-based organizations, LGBTQ+ organizations, or culturally-based organizations. Consider that public health might be in a better position to contact community partners.
- Prior to public notification, healthcare facilities and public health agencies should identify resources and designate staff needed to respond to inquiries and for follow up. Strongly consider the need for using incident management structure when notifying the public.
- With guidance from your legal team, consider establishing a central location such as an easily accessible 508 compliant webpage that provides the same vetted information communicated in other correspondence with FAQs and links to additional resources.

8.1.3.3 *Additional Considerations*

Additional issues to consider when delivering public notification include the following:

- Present as much relevant detail as possible regarding what is known and not known, who is at risk and who is not, what has been done so far, and planned next steps. Remember to show empathy in the message as people will be concerned about their risk of infection or may have experienced infection already. If relevant, include any action patients or others should take for protection and where to obtain additional information, such as a website or call line.
- Prevent identification of affected persons (confidentiality breach). Establish clear guidelines with the media regarding privacy of individual information and what is protected health information.
- Develop talking points, health department statements, and press releases and media statements, during patient notifications to be prepared for media requests.

- Consider notification of other public health jurisdictions in advance of any notifications, as appropriate.
- Acknowledge when investigation is not completed to avoid drawing erroneous conclusions, such as implicating the wrong source and prematurely assigning blame.
- Clarify any misinformation in the public domain.
- Prevent stigmatization of persons/groups affected by the outbreak or investigation.
- Have a plan to communicate updates, frequently if necessary, as knowledge expands.

8.2 Communication Techniques

When information is communicated related to a critical situation or a situation or risk, it is critical that the right information gets communicated in a way that reaches the audience you are trying to reach. In the above sections, notification of patients, persons at risk, healthcare providers, and the public was discussed. Although a full discussion of risk communication is outside the scope of this guidance, the basics of methods of communication is described in this section.

Public health agencies should involve their communication experts and public information officers early as soon as a notification event is considered (which is typically when an outbreak or infection control breach is detected); the assumption throughout this section is that these experts are already involved.

The reader should also consult with two important resources that are reference throughout this section:

- For more information on communication during a crisis, see CDC's Crisis and Emergency Risk Communication (CERC) Manual: emergency.cdc.gov/cerc/.
- For more information to guide health departments and healthcare settings during notification events, see CDC's Patient Notification Toolkit: www.cdc.gov/injectionsafety/pntoolkit/index.html.

8.2.1 Risk Communication Principles

Prior to communication, it is important to understand how the situation might be perceived to help craft effective communication messages. This section does not cover these communication principles and practices in-depth. We would encourage a review of the material on CDC's on crisis risk communication.

People's perception of risk varies depending on the type of information and how that information is conveyed; not all risks are perceived equally. Risks that tend to be more accepted include those that are perceived to be voluntary, be under an individual's control, have clear benefits, be naturally occurring, be generated by a trusted source, be familiar, or affect adults. Less accepted risks include those that are perceived to be imposed, be controlled by others, have little or no benefit, be manmade, be generated by an untrusted source, be exotic, or affect children.⁷ Risk perception variation is not unique to healthcare settings but related to general risk communication principles.

CDC's Crisis and Emergency Risk Communication (CERC) Manual lists five key components of trust and credibility that make up the foundation of risk communication principles.⁷

- Empathy and caring

- Competence and expertise
- Honesty and openness
- Commitment and dedication
- Accountability

A spokesperson should be identified, and chosen early, based on their ability to develop trust and credibility and trained on these risk communication principles. The role of a spokesperson is to communicate the information but should also be involved in determining the information to be communicated and developing key messages.⁸ Refer to the CERC Manual for more information on selection of a spokesperson and risk communication principles: emergency.cdc.gov/cerc/

Applying risk communication principles during notification of patients and others during an outbreak or following an infection control breach, it is important to plan what needs to be communicated in advance. As messages are developed for the target audiences described in the sections above, think about communicating the following three things:

- What happened;
- What you are doing to correct it; and
- What the audience (e.g., affected patients, exposed persons, healthcare providers, the public) needs to know, including any steps they should take to protect themselves.

When considering communications for the news media, it is important to plan as much as possible in advance. Anticipate possible media coverage when there are many patients involved, the condition is new or rare, the persons affected are vulnerable, or there might be an emotional impact. Often public health can help the healthcare setting to anticipate and plan for media coverage. In some circumstances it might be necessary to approach the media, such as when needing to notify a wider audience, but it is not uncommon that the media might be notified through other sources and approach public health agencies or the facility. Considerations for planning for media communications include the following:

- Determining the extent of the information to convey to the news media;
- Determining when to convey that information;
- Determining who to coordinate with to convey that information;
- Being prepared if information is leaked to the media before it is formally announced.⁸

The last item cannot be underestimated. When planning the timing of communication to patients and other affected parties as described in earlier sections of this chapter, it is important to keep in mind that the timelines created for notification (e.g., notification of patients and families prior to public notification) can go awry if information is leaked to the media. Talking points, press releases, media statements, and messaging created ahead of a media leak are a critical piece of notifications. For more information the media, see Section 8.3 below. For more information on conducting a notification, see the CDC Patient Notification Toolkit, found here: www.cdc.gov/injectionsafety/pntoolkit/index.html.

8.2.2 Managing Differing Opinions Between Public Health and Healthcare Facility

It is not uncommon with notification events, which are highly charged and stressful situations, to have different perspectives among public health agencies and healthcare facilities. The focus of public health is disease control and containment of the outbreak, and healthcare facilities and providers often have concerns about the reputation of the facility or healthcare system and potential legal fall-out.⁵ Both entities also have the interest of protecting involved patients and staff, but public health also needs to consider the implications for the public's

health at large. The media also has its own focus, to report information, which does not always match the focus of public health agencies and the involved healthcare settings.

Reasons for not disclosing errors leading to outbreaks or risk of outbreaks include potential for psychological harm among patients when the risk is low, and, as mentioned above, facility concerns for harmed reputation. However, in a study looking at low-risk errors, 94% of patients reported wanting to know about an error, even when the risk of harm was low.⁹ Additionally, when patient notifications are delayed, the perception and trust of the healthcare facility by the public can actually suffer, even if the disclosure is made at a later time. Paradoxically, the very concern about loss of trust and healthcare's reputation are damaged by the rationale to delay or withhold notification for fear of creating distrust or loss of reputation. Disclosure is often the better approach when concerns about public perception and trust are raised as a reason not to disclose.

When there are differing opinions between public health agencies and healthcare facilities or providers about the need to notify patients, others affected or exposed, and stakeholders, it is best practice to come to an agreement and approach the notification jointly. Public health agencies should give best practice information to healthcare facilities, such as the studies described above, to support notification if there are concerns about unduly worrying patients with low risk or if there are concerns about reputation. Public health might be able to provide options that are acceptable to the facility that support public health's goals. When healthcare facilities and public health still maintain different perspectives, ensure that the public health agency is familiar with and is following federal and state guidelines and recommendations. Consider using the opportunity to strengthen relationships; Los Angeles County appointed specific public health/healthcare facility liaisons to improve healthcare outbreak reporting, strengthen surveillance infrastructure, and enhance communication with success.¹⁰ Also consider consultation with experts, such as CDC. In advance of notification events and outbreak investigations, it is important to develop relationships with healthcare facilities, infection preventionists, and other partners (See Chapter 3, CORHA Keys to Success: Developing Relationships Prior to an Outbreak).

When the public health agency and the healthcare setting continue to hold different opinions, an agreement cannot be reached, and the public health agency determines that patients and others affected still need to be notified, the public health agency might need to perform the notification directly or pursue legal orders for disclosure. This will require early and close collaboration with the legal resources available to the public health agency. Considerations the public health agencies need to plan for include:

- The method of notification: When providers and the healthcare facility will not be performing the notification, and the communication will be coming from the health department, methods to consider can include phone calls, letters, press releases, media statements, and combination methods. When possible, notifying in writing can be helpful so patients have information to refer to and take to their healthcare provider.
- Where patients can go for more information: Public health agencies should consider a hotline and a website where patients can receive more information.
- Instructions for follow-up: This information should be communicated to patients when they are notified. This can be more difficult for public health agencies if additional medical care is needed, such as laboratory testing or treatment. Public health agencies can consider setting up an agreement with a laboratory or healthcare provider to provide the service, if they are unable to do so directly, or they can

provide instructions for the patients to take to their own healthcare provider. Logistics need to be carefully considered.

8.2.3 Tailoring Communication to Audience and Setting

When crafting communication messages, consider who you are notifying (the audience), how you will notify (the method), and what information needs to be included (the content).

Before crafting any communication message, it is critical to consider the audience. Knowing who you want to reach will determine the content, method, and wording of the message. Audience characteristics to consider include demographics, language, education level, and cultural considerations. Issues of health equity should be considered; more information can be found here: www.cdc.gov/coronavirus/2019-ncov/community/health-equity/index.html. Apply audience characteristics and health equity considerations when developing a message as well as when determining a spokesperson. When tailoring communications to a specific audience, it is critical to involve the public health communication experts and public information officer for input. Here are some examples situations that demonstrate the importance of considering the audience:

- If the population is highly mobile (e.g., moves frequently with frequent changes of address, persons experiencing homelessness, persons in temporary residential care), a letter might not be the best method of communication.
- Elderly and other patients may have a caretaker or health care proxy who would need to receive the information. Similarly, with younger populations, parents would need to be notified.
- All communication to patients and caregivers should be in plain language at no more than a seventh-grade reading level and easily understandable.
- Information should be provided via channels and in formats and languages suitable for diverse audiences, including people with disabilities, limited English proficiency, low literacy, or people who face other challenges accessing information.
- Information should be provided in a manner that is culturally and linguistically appropriate.
- Consider where patients/caregivers will go to get more information and to have their questions answered, such as a website or a phone number. Include this information in the notification.
- The stress level of an audience may experience stress which may make understanding the notification more difficult.
- Think about how the audience (patient) receives information. Is there a patient portal set up electronically that can help with disseminating information?
- Remember to show empathy in the message as people will be concerned about their risk of infection or may have experienced infection already.

Additional considerations for the method of communication include the following:

- When notifying someone in person or by phone, consider following up with a handout or mailed letter so they have the information in writing to refer back to.
- When communicating in writing, consider including a letter that the patient can take to their primary care provider. This will make it easier for the patient to explain what happened and any next steps their provider might need to take.

- When notifying a demographic that may be difficult to reach through traditional methods, consider engaging with community leaders, religious leaders, and other trusted sources.
- Social media groups can be another avenue to reach certain groups or difficult to reach persons.
- Although not the preferred option, when there is an inability to reach specific groups or specific individuals, or a larger communication is needed to the general public, a press release can be considered.

The content of communication should consider the following components:

- Provide information that allows the audience to understand what happened, as well as how and where. If details are still unknown, communicate that the situation is still under investigation. Often communication is sent out prior to having complete information, and notification should not wait until all information is known.
- Any corrective actions already taken to mitigate the current risk and any planned actions to mitigate risks in the future.
- Information on who is being contacted and why, including assurance that the correct patients are being contacted.
- Any instructions for what the audience needs to do to protect themselves, such as symptoms to watch out for, seeing their provider for an evaluation, or being tested.
 - The audience should understand what symptoms to expect, including any warning signs they might experience that would prompt them to contact their provider.
 - If a provider evaluation is needed, make sure the audience has information to communicate to their provider.
 - If testing is needed, make sure the audience has all of the information they need to be tested, such as going to a specific laboratory or healthcare facility, and whether or not the cost will be covered.
- A method for them to have any additional questions they might have to be answered, such as a website and a 24-hour contact number. Be prepared for many calls during at least the first 1-2 weeks; when calls decrease, the availability of the contact number might be able to be decreased.
- Information on the planned next steps and what the audience can expect,

Often communication might be repeated, either from multiple sources (e.g., the healthcare facility and the public health agency), or via multiple methods. Make sure messaging is consistent; coordination among communicating entities is critical. When preparing reactive messaging, such as talking points in preparation for a media interview, consider the tough questions that patients may have and be prepared to speak to those concerns.

8.2.4 Tools

Similar to developing investigation materials ahead of an outbreak, as described in Chapter 3, it can be very helpful and save time later to develop template materials prior to a patient notification event. See Box 8.2 for a list of materials to consider developing in advance.

<p>Box 8.2. Tools and Materials to Develop when Planning for a Patient Notification</p>
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- Patient notification letters (including disease transmission identified [e.g., outbreak] and no disease transmission identified [e.g., infection control breach]); examples can be found in the CDC Patient Notification Toolkit, Section 1, here: www.cdc.gov/injectionsafety/pntoolkit/section1.html
- Healthcare provider notification of testing recommendations letter; an example can be found in the CDC Patient Notification Toolkit, Section 1
- Patient testing results letter; an example can be found in the CDC Patient Notification Toolkit
- Media talking points (general talking points can be crafted with space to add disease- and situation-specific information; press releases and media statements for previous similar situations also can be recycled and revised)
- Media statement (general media statement with space to add disease- and situation-specific information; press releases and media statements for previous similar situations also can be recycled and revised)
- Frequently asked questions documents for posting on websites or use by hotline operators (disease-specific questions are often reusable across multiple events); examples can be found in the CDC Patient Notification Toolkit, Example Q/A Resources, here: www.cdc.gov/injectionsafety/pntoolkit/section3qa.html

8.3 Media

Patients and individuals affected or at risk should hear about an outbreak, infection control breach, or other situation that places them at risk from their healthcare provider or the healthcare facility involved. Ideally the communication will come from someone they trust. In some situations, notification from a public health agency is necessary, although this might not always be ideal. However, affected patients do not want to initially hear about an issue that may involve or impact them from the media. Hearing about a situation that has placed them at risk from the media can create a feeling of distrust in the facility and of those in authoritative positions. However, this sometimes cannot be avoided depending on the nature of the outbreak. Patients may feel like the facility is trying to hide the issue rather than inform the public. In limited circumstances, informing persons at risk might need to be done via the media, such as very large events or situations where the population at risk cannot be identified by the involved facility or public health agencies; this should be done only when there are no other options available. One example might be when notifying a patient population of a healthcare setting where contact information was not kept. For situations where populations at risk can be notified by the involved healthcare facility or healthcare providers, it is important to notify as soon as possible, for the reasons described in previous sections, as well as ensuring that the media is not the first to inform. In one notable example, patients were not notified of a mucormycosis outbreak until after a publication of the outbreak in a medical journal.^{11,12} Anticipate and prepare ahead of time for media attention.

8.3.1 Media Definitions

Types of media include:

- Traditional media: newspapers, online news platforms, television, radio;
- Social media: communication platforms and applications that allow persons to create and share content and communicate.

Types of media communication:

- Media statement: a response to an inquiry from the media, generally reactive communication;
- Press release: a method of providing information to the media to communicate information you want the public to know, generally proactive;
- Interview: involving a reporter from a media outlet and a spokesperson and the media outlet (reporter) that might be live or recorded (on television or radio) or for print media;
- Press conference: a live statement or series of statements from the spokesperson or others involved given to the media; generally used in high profile situations or very large outbreaks.

8.3.2 Engaging the Media

How you engage the media and your message can either help build trust with the audience and accept the message or can inadvertently result in distrust, suspicion and anger. Some individuals in the media may start out distrustful of government message. It's important to be aware of this perception and not inadvertently contribute to their distrust. Therefore, it's extremely important to involve your communications staff and public information officer (PIO) as early as possible, when a patient notification is first considered. If you don't have a PIO on staff, you should identify an outside consultant to serve in this role when needed. These subject matter experts have the knowledge, relationships with the media, and ability to guide epidemiologists and providers during their interactions with the media.

As described in previous sections, a trained spokesperson with the ability to develop trust and credibility should be identified early. Have a spokesperson who is well-spoken and knowledgeable on the topic. Being prepared and able to answer questions with confidence helps build credibility. For considerations in choosing a spokesperson, refer to the CERC Manual: emergency.cdc.gov/cerc/. When engaging the media through a spokesperson or press releases and media statements, ensure that the information communicated is accurate. Once a story is online in any format, it is difficult to get it changed or edited if there is inaccurate information.

The amount of information shared is variable and depends on a few factors. Personal health information must be protected and Health Insurance Portability and Accountability Act (HIPAA) needs to be followed. Public health agencies need to balance confidentiality with ensuring accurate and complete information, which may necessitate releasing more information than normal.

The method of engaging with the media might vary depending on the circumstances. Considerations include:

- A press release can be used when there is a concern about incomplete notification (e.g., due to an inability to locate), or when there is a concern that the media might release the story ahead of patients being notified. A press release should have the same information as a patient notification letter.
- A media statement is generally a response to an inquiry from the press. Remember that this is also an opportunity to get vital messaging out to the public, even if the specific question is not asked.
- Performing a phone or on-camera interview often depends on the request from the media, severity of the situation, and availability of the spokesperson. Sometimes a

request from the media to do a phone or on-camera interview can be modified to a written response if the severity of the situation does not warrant an interview, or if the spokesperson is unavailable. On-camera interviews can be challenging when the spokesperson is untrained in responding to the media. Note that just-in-time training does not work for on-camera media interviews, and a crisis situation is not the time to provide this training.

- Press briefings are typically only used for rapidly evolving situations (e.g., COVID-19 pandemic, natural disasters). Patient notifications are not generally the best situations to hold press briefings.

8.3.3 Proactive versus Reactive Media

Proactive media refers to contacting the media before they are aware of the story. As described in previous sections, an announcement (e.g., via a press release) should ideally come from the facility (or public health agency when indicated) and include information similar to a patient notification letter. If the disclosure starts with the healthcare facility, public health will likely be contacted for comment, so public health needs to be prepared and ideally coordinating with the health facility in their public messages. Be inclusive with information shared; this provides important information and will decrease the possibility that the public perceives a withholding of information. Benefits of proactive media interactions include the ability to control the message and tell the story and ensuring that accurate information is disseminated.

Reactive media refers to the response to a story that the media is telling. In general, reactive media is not ideal and why disclosure early is often recommended. With reactive media it is difficult to control the message. Inaccurate information or misleading information can be presented which can be difficult to overcome, particularly since it will appear that public health failed to disclose the information early creating a level of distrust with the public

In this chapter, considerations for notification of patients, families and the public were reviewed, as well as methods for conducting a patient notification. For additional information, please see the CDC Patient Notification Toolkit: <https://www.cdc.gov/injectionsafety/pntoolkit/index.html>.

Table 8.1. Framework for Outbreak Notifications: Immediate and Expanded Notifications

STEP 1: IMMEDIATE NOTIFICATION			
Affected patients (or their designated healthcare proxy and if deceased, closest family member)			
How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
<p>Verbally, in person, phone calls if already discharged with the opportunity to ask questions. Written FAQ and descriptive statement should also be given or sent.</p> <p>If unable to reach patients verbally or by phone, a written communication should be sent.</p> <p>Depending on the situation, consider establishing a hotline or other opportunity for questions.</p> <p>With guidance from your legal team, consider establishing a central location such as an easily accessible 508 compliant webpage that provides the same vetted information communicated in other correspondence with FAQs and links to additional resources.</p>	First tier	Applicable counseling and information about potential risk of transmission, infection, clinical illness, testing, treatment and additional care measures may need to be communicated and implemented (e.g., isolation, PPE, cohorting, screening, changes in antibiotics, etc.)	<p>To prevent and control transmission and assist with outbreak investigation activities.</p> <p>To fully inform patients about the event and implications for their health.</p> <p>Allows patients to seek appropriate treatment.</p>
Patients who have been exposed or potentially exposed (or their designated healthcare proxy and if deceased, closest family member)			
How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
<p>Verbally, in person, phone calls if already discharged with opportunity to ask questions. Written FAQ and descriptive statement should also be given or sent. If unable to reach patients verbally or by phone, a written communication should be sent.</p>	After patients who have been infected or colonized, but then as soon as possible.	Applicable counseling and information about potential risk of transmission, infection, clinical illness, testing, treatment, post-exposure prophylaxis and additional care measures may need to be communicated and implemented (e.g., isolation, PPE, cohorting, screening, changes in antibiotics, etc.)	<p>To prevent and control transmission and assist with outbreak investigation activities.</p> <p>To fully inform patients about the event and implications for their health.</p> <p>Allows patients to seek appropriate treatment.</p>

<p>Depending on the situation, consider establishing a hotline or other opportunity for questions.</p> <p>With guidance from your legal team, consider establishing a central location such as an easily accessible 508 compliant webpage that provides the same vetted information communicated in other correspondence with FAQs and links to additional resources.</p>			
<p>Patients who may be at risk for future exposure (or their designated healthcare proxy) including:</p> <ul style="list-style-type: none"> a) Patients undergoing a procedure or admitted to a ward or area in a healthcare setting experiencing an outbreak. b) Immunocompromised and frail elderly patients. 			
How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
<p>Verbally, in person, written posting or phone call. Written FAQ and descriptive statement should also be given or sent where possible. If unable to reach patients verbally or by phone, a written communication should be sent.</p> <p>Postings (e.g., in lobby, patient units, handwashing stations, restrooms, admission packets).</p> <p>Depending on the situation, consider establishing a hotline or other opportunity for questions.</p> <p>With guidance from your legal team, consider establishing a central location such as an easily accessible 508 compliant webpage that provides the same vetted information communicated in other correspondence with FAQs and links to additional resources.</p>	<p>Notify before the potential exposure.</p>	<p>Applicable counseling and information about potential risk of transmission, infection, clinical illness, testing, post-exposure prophylaxis, alternate options for elective procedures, treatment and additional care measures may need to be communicated and implemented (e.g., isolation, PPE, cohorting, screening, changes in antibiotics, etc.)</p>	<p>To prevent and control transmission and assist with outbreak investigation activities.</p> <p>To fully inform patients about the event and implications for their health.</p> <p>Allows patients to seek appropriate treatment.</p>

Patient's Primary Healthcare Provider(s) (as appropriate)			
How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
By confidential institutional email or by phone; public health may consider sending a health alert.	As soon as possible.	Their patient's risk or exposure.	To assist with questions from patients, follow up and support. To assist with contacting patients who are difficult to reach.
Healthcare Personnel (HCP) including: <ul style="list-style-type: none"> a) HCP who need to make behavioral changes at the location/s of the outbreak. b) HCP who have underlying illnesses that make them at risk for complications if infected or colonized. c) Other HCP in the healthcare setting not directly affected by incident including HCP providing care to at-risk patients and employed by the healthcare setting. d) HCP who are exposed or are a case. 			
How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
Verbally, in person, during team huddles/meetings/rounds and written postings (e.g., on patient units, handwashing stations, breakrooms, etc.) Involve Employee Health Services to communicate with staff and offer testing or treatment if necessary.	As soon as possible	Applicable counseling and information about potential risk of transmission, infection, clinical illness, testing, treatment, modification of personal behaviors associated with risk for infections and additional care measures that may need to be communicated and implemented to prevent and control transmission (e.g., isolation, PPE, cohorting, screening, enhanced surveillance, more frequent cleaning/disinfection of surfaces, environmental testing, etc.) HCP may alert internal team and public health if they work in multiple healthcare settings. Healthcare setting may refer HCP to Employee Healthcare Services (especially those who may be at risk due to health complications and underlying illness).	To prevent and control transmission and assist with outbreak investigation activities. To engage Employee Healthcare Services to support HCP. To fully inform and support HCP about the event and implications for their health. Allows HCP to seek appropriate treatment. To inform or alert all HCP about the event so that they are prepared to share accurate information, adequately respond to or direct questions to the appropriate parties.

Visitors including:			
<p>a) Visitors who may have been exposed, are a case, or need to make behavioral changes at the location(s) of the outbreak.</p> <p>b) Visitors who have underlying illness(es) placing them at increased risk from a potential exposure.</p>			
How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
<p>Written postings displayed in areas in proximity of the outbreak and common areas such as the lobby, nurse desk/station, patient units, restrooms, handwashing stations. Note when the location is a non-discretionary area that once in the facility may be needed, public notification prior to seeking entry into the facility itself may be needed.</p> <p>Direct notification through patient visited.</p> <p>Public Notification.</p> <p>With guidance from your legal team, consider establishing a central location such as an easily accessible 508 compliant webpage that provides the same vetted information communicated in other correspondence with FAQs and links to additional resources.</p> <p>Healthcare settings may offer education and demonstrations on safety precautions visitors should take when visiting infected or colonized patients.</p>	<p>As soon as possible in common areas and where appropriate. Upon entry to unit/location(s) of the outbreak, e.g., NICU.</p>	<p>Applicable information about potential risk of transmission, testing, additional care measures, or modification of personal behaviors associated with risk for infections may need to be communicated and implemented to prevent and control transmission (e.g., handwashing, PPE, testing).</p>	<p>To prevent and control transmission and assist with outbreak investigation activities.</p> <p>To prevent the spread of inaccurate information.</p> <p>To fully inform visitors about their healthcare risk.</p>
Other Healthcare Settings Involved in Care of Exposed Patients			
How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>

<p>Patient status should be verbally communicated to appropriate HCP at the healthcare setting (HCS) and documented and flagged in patient transfer documents (e.g., symbol, label, prominently placed on the chart), especially when there is risk for pathogen transmission. Encourage documentation in electronic health records about the presence of a transmissible agent. Public health may consider sending a health alert.</p>	<p>In preparation for and at the time of transfer.</p>	<p>Applicable information about additional care measures may need to be communicated and implemented to prevent and control transmission (e.g., isolation, surveillance, PPE, cohorting, handwashing).</p>	<p>To alert healthcare settings in order to prevent and control transmission and assist with outbreak investigation activities.</p>
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STEP 2: EXPANDED NOTIFICATION

Affected patients newly identified (or their designated healthcare proxy and if deceased, closest family member) or Patients who have been affected and identified as a result of additional case-finding activity.

How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
<p>Verbally, in person, phone calls if already discharged with the opportunity to ask questions. Written FAQ and descriptive statement should also be given or sent. If unable to reach patients verbally or by phone, a written communication should be sent.</p> <p>Depending on the situation, consider establishing a hotline or other opportunity for questions.</p> <p>With guidance from your legal team, consider establishing a central location such as an easily accessible 508 compliant webpage that provides the same vetted information communicated in other correspondence with FAQs and links to additional resources.</p>	<p>Initiate the process within 24 hours once risk is identified, for example, during the outbreak investigation, when updated laboratory results indicate the presence of infection on another floor or unit (e.g., for a respiratory pathogen).</p>	<p>Applicable counseling and information about potential risk of transmission, infection, clinical illness, testing, treatment and additional care measures may need to be communicated and implemented (e.g., isolation, PPE, cohorting, screening, changes in antibiotics, etc.)</p>	<p>To prevent and control transmission, limit any further spread and assist with outbreak investigation activities.</p> <p>To fully inform patients about the event and implications for their health.</p> <p>Allows patients to seek appropriate treatment.</p>

Patients who have been exposed or potentially exposed (or their designated healthcare proxy) but are not known to be infected

How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
<p>Verbally, in person, phone calls if already discharged with the opportunity to ask questions. Written FAQ and descriptive statement should also be given or sent. If unable to reach patients verbally or by phone, a written communication should be sent.</p> <p>Depending on the situation, consider establishing a hotline or other opportunity for questions.</p> <p>With guidance from your legal team, consider establishing a central location such as an easily accessible 508 compliant webpage that provides the same vetted information communicated in other correspondence with FAQs and links to additional resources.</p>	<p>Initiate the process within 24 hours once risk is identified, for example, during the outbreak investigation, when updated laboratory results indicate the presence of infection on another floor or unit (e.g., for a respiratory pathogen). Priority should be given to those who are still in the risk period for exposure.</p>	<p>Applicable counseling and information about potential risk of transmission, infection, clinical illness, testing, post-exposure prophylaxis alternate options for elective procedures, treatment and additional care measures may need to be communicated and implemented (e.g., isolation, PPE, cohorting, screening, changes in antibiotics, etc.)</p>	<p>To prevent and control transmission, limit any further spread and assist with outbreak investigation activities.</p> <p>To fully inform patients about the event and implications for their health.</p> <p>Allows patients to seek appropriate treatment</p>

Patients who may be at risk for future exposure (or their designated healthcare proxy)

Including:

- a) patients undergoing a procedure or admitted to a ward or area in a healthcare setting experiencing an outbreak
- b) immunocompromised and frail elderly patients.

As the outbreak is contained this group will become smaller.

How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
<p>Verbally, in person or phone call. Written FAQ and descriptive statement should also be given or sent. If unable to reach patients verbally or by phone, a written communication should be sent.</p> <p>Postings (e.g., in lobby, patient units, handwashing stations, restrooms, admission packets.)</p>	<p>Notify before the potential exposure.</p>	<p>Applicable information about potential risk of transmission, alternate options for elective procedures, post-exposure prophylaxis additional care measures or modification of behaviors may need to be communicated and implemented (e.g., isolation, PPE, cohorting, screening, etc.)</p>	<p>To fully inform patients about the event and implications for their health; may need testing or treatment.</p> <p>To prevent and control transmission, limit any further spread and assist with outbreak investigation activities.</p>

Depending on the situation, consider establishing a hotline or other opportunity for questions. With guidance from your legal team, consider establishing a central location such as an easily accessible 508 compliant webpage that provides the same vetted information communicated in other correspondence with FAQs and links to additional resources.			Allows patients to seek appropriate treatment.
Patient's Primary Healthcare Provider(s) (as appropriate)			
How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
By confidential institutional email or by phone; public health may consider sending a health alert	As soon as possible.	Their patient's risk or exposure. Applicable information about potential risk of transmission, alternate options for elective procedures.	To assist with questions from patients, follow up and support. To assist with contacting patients who are difficult to reach.
Other Healthcare Personnel (HCP) including: a) HCP who need to make behavioral changes at the location/s of the outbreak (e.g. specific PPE, handwashing). b) HCP who have underlying illnesses that make them at risk for complications if infected or colonized; involve employee health as needed. c) Other HCP in the healthcare setting not directly affected by incident including HCP providing care to at-risk patients and employed by the healthcare setting. Note HCP and non-HCP often work in multiple healthcare facilities.			
How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
Verbal announcement, mass email, notices in break/locker room. Involve Employee Health Services to communicate with staff and offer testing or treatment if necessary.	As soon as possible. Consider actions already taken. Urgency greater if action can be taken.	Applicable counseling and information about potential risk of transmission, infection, clinical illness, testing, treatment, modification of personal behaviors associated with risk for infections and additional care measures that may need to be communicated and implemented to prevent and control	To prevent and control transmission and assist with outbreak investigation activities. To engage Employee Healthcare Services to support HCP. To fully inform and support HCP about their healthcare risk.

		<p>transmission (e.g., isolation, PPE, cohorting, screening, enhanced surveillance, more frequent cleaning/disinfection of surfaces, environmental testing, etc.)</p> <p>HCP may alert internal team and public health if they work in multiple healthcare settings. Healthcare setting may refer HCP to Employee Healthcare Services (especially those who may be at risk due to health complications and underlying illness).</p>	<p>Allows HCP to seek appropriate treatment.</p> <p>To inform or alert all HCP about the event so that they are prepared to share accurate information, adequately respond to or direct questions to the appropriate parties.</p>
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Visitors including:

- a) Visitors who may have been exposed or need to make behavioral changes at the location(s) of the outbreak
- b) Visitors who have underlying illness(es) placing them at increased risk from a potential exposure.

How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
<p>Written postings displayed in areas of proximity of the outbreak and common areas such as the lobby, nurse desk/station, patient units, handwashing stations.</p> <p>Healthcare settings may offer education and demonstrations on safety precautions visitors should take when visiting infected or colonized patients.</p> <p>Direct notification through patient visited.</p> <p>Public Notification</p> <p>With guidance from your legal team, consider establishing a central location such as an easily accessible 508 compliant webpage that provides the same vetted information communicated in other</p>	<p>As soon as possible in common areas and where appropriate.</p> <p>Upon entry to unit/location(s) of the outbreak, e.g., NICU.</p> <p>Consider actions already taken. Urgency greater if action can be taken.</p>	<p>Applicable information about potential risk of transmission, testing, additional care measures, or modification of personal behaviors associated with risk for infections may need to be communicated and implemented to prevent and control transmission (e.g., handwashing, PPE, testing).</p>	<p>To prevent and control transmission and assist with outbreak investigation activities.</p> <p>To prevent the spread of inaccurate information.</p> <p>To fully inform visitors about the event and implications for their health.</p>

correspondence with FAQs and links to additional resources.			
Other Healthcare Settings Involved in Care of Exposed Patients; Note that HCP and non-HCP often work in multiple facilities and settings			
How to Notify <i>(one or more of the following, as appropriate)</i>	When to Notify	What to Notify <i>(Public health to be involved on an ongoing basis to ensure accuracy)</i>	Justification <i>(one or more of the following)</i>
<p>Patient status should be verbally communicated to appropriate HCP at the HCS and documented and flagged in patient transfer documents (e.g., symbol, label, prominently placed on the chart), especially when there is risk for pathogen transmission.</p> <p>Encourage documentation in electronic health records about the presence of a transmissible agent.</p> <p>Public health may consider sending a health alert.</p>	In preparation for and at the time of transfer.	Applicable information about additional care measures may need to be communicated and implemented to prevent and control transmission (e.g., isolation, surveillance, PPE, cohorting, handwashing).	To alert healthcare settings in order to prevent and control transmission, and to assist with outbreak investigation activities.

Box 8.3. Example of patient notification: *Legionella* outbreak in a general medicine ward

An example of notification is presented for a *Legionella* outbreak in a hospital setting. This example can be a model for other conditions and settings, with consideration for how the investigation might proceed, the characteristics of the pathogen and method of transmission, and the specifics of the setting of the outbreak. For infection control breaches, the immediate notification might include all groups listed in the table below, except for affected patients; often in infection control breach investigations there are not yet infected or colonized patients identified.

The situation: The infection preventionist in a large hospital identifies two patients that meet the case definition for hospital-acquired legionellosis within the same month. He calls the epidemiologist at the local public health agency to report a concern that they might have a *Legionella* outbreak. Patient 1 was positive for *L. pneumophila* 1 (Lp1) by urine antigen 21 days after admission. Patient 2 was positive for Lp1 nine days after admission. Both patients had stayed in the same single occupancy hospital room 7 days apart from each other.

Step 1: Immediate Notification

Patients	Patients 1 and 2 should be notified immediately of their diagnosis of <i>L. pneumophila</i> infection and the suspicion that there might be a common source for their infections indicating a possible outbreak. They should be notified that an investigation will occur and the steps that will be taken, including a review and testing of water systems,
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	<p>beginning with the patient room. Ideally notification would be done by the treating provider in person or over the phone if already discharged. Affected patients should be kept informed of major investigation findings, including the final results of the investigation and mitigation measures put into place.</p>
Exposed and potentially exposed patients	<p>All patients who shared same room within a period of time should be notified as soon as possible and given information about <i>Legionella</i>, their risk of infection, and symptoms to watch out for. The time period might depend on information known; for example, if construction was done on the water system supplying the room two months ago, the initial notification might involve patients that stayed in the room over the last two months since construction. Notification of potentially exposed patients will also help with additional case finding, and patients should be asked about any symptoms when notified. Patients might be past the incubation period, but it is possible that patients might have developed the infection previously and recovered. Even patients who are exposed but no longer at risk should be notified for transparency. Ideally notification of exposed patients would be done by the treating provider in person or over the phone if already discharged.</p> <p>If the water supply to the entire unit may be of concern for <i>Legionella</i>, patients on same ward should also be notified using the same method of notification.</p> <p>They should be notified that there is a possible outbreak and an ongoing investigation and kept informed of major investigation findings, including the final results of the investigation, similar to affected patients.</p>
Patients who may be at future risk	<p>Patients that will be admitted to the area of concern (e.g., ward if water supply is shared) should be notified of the investigation and possible outbreak. They should be informed of their risk. Mitigation of this risk, such as closing the ward affected, should be considered; if this is done, there might not be patients at future risk. They should be kept informed of major investigation findings, including the final results of the investigation.</p>
Patients' healthcare providers	<p>Healthcare providers who provide care to the affected patients in the affected area should be notified that there were multiple patients with hospital-acquired Legionellosis identified leading to a suspicion of an outbreak. Information communicated should include where the patients were located, what has been determined so far, initial mitigation measures, and what the facility is doing to investigate.</p> <p>Healthcare providers who provide care to potentially exposed patients should also be notified and given the same information.</p> <p>Healthcare providers can be informed on rounds and via larger communication, such as an email. Providers should be provided information about Legionellosis, including what they should do when the diagnosis is suspected (e.g., diagnostic testing available at the facility, reporting to infection control).</p>
Healthcare personnel	<p>If the water supply might affect multiple locations or it is not clear if there might be other exposed patients in the facility in other areas, healthcare providers at all potentially affected locations in the facility should be notified. Providers should be provided information about Legionellosis, including what they should do when the diagnosis is suspected (e.g., diagnostic testing available at the facility, reporting to infection control).</p> <p>Healthcare providers and staff who need to make behavioral changes at the locations of the outbreak should be notified since patient rooms may be closed, sinks or drinking water fountains may be tested or closed off, or other changes. Decisions might be made to install filters on faucets, and other control measures may be implemented that healthcare providers should be aware of.</p>

	<p>Healthcare providers and staff who might themselves be at risk, such as underlying illnesses that make them at risk for complications (e.g., smokers, chronic lung disease, cancer, diabetes) should be notified to allow them to modify behavior to keep themselves safe, if applicable.</p> <p>Healthcare providers should be notified as soon as possible and can be informed on rounds and via larger communication, such as an email. Keep in mind that healthcare providers and staff might themselves develop the condition under investigation, and messaging should include any case finding for affected providers and staff.</p>
Visitors	<p>Visitors and others who enter the hospital could be at risk until water system control measures are in place. Visitors should be notified as soon as possible, considering the following circumstances:</p> <ul style="list-style-type: none"> • When visitors need to make behavioral changes at the locations of the outbreak. • When visitors need to be aware of room closures, closed drinking fountains, closed ice machines, or other changes that might result in changes to their behavior. • When visitors might have an increased risk of becoming sick with the condition under investigation, which for Legionellosis might include conditions such as smoking, lung disease, cancer, diabetes, etc. <p>Visitors can be informed via information sheets posted in key locations or provided to each visitor. Written posting in lobby and at check-in desk can help to notify those upon entry into the facility. In some circumstances consideration could be given to notifying visitors ahead of a visit, when logistically feasible to do so. Messages should include what visitors should do to keep themselves as safe as possible.</p> <p>Families that are visiting might also need to be informed if patients have requested their health information be shared. Family members might need to know the same information as their ill, exposed, or at-risk family member patient, as well as information provided to visitors.</p>
Other healthcare facilities	<p>When patients exposed or at-risk are transferred, the affected facility should communicate with the receiving facilities directly about the outbreak. Receiving facilities might need to know that Legionellosis should be in the differential diagnosis if the patient is still within incubation period to develop disease and develops signs and symptoms of Legionellosis while in their care. Ideally this is done upon each individual patient transfer by the transferring affected facility during regular report.</p>
Step 2: Expanded Notification	
Patients	<p>During the investigation, it is critical to identify additional cases of hospital-acquired Legionellosis. See Chapter 5 for more information about case detection as part of an outbreak investigation. As cases are identified, patients should immediately be notified with the same information and methodology used in Step 1, Immediate Notification.</p>
Exposed and potentially exposed patients	<p>Additional exposed and potentially exposed patients are likely to be identified over the course of the investigation. For example, a review of building water systems and water sample testing might indicate that other units on the same floor as well as floors above and below where case patients 1 and 2 stayed also have risk for Legionella exposure. When additional exposed patients are identified, they should be immediately notified using the same methodology and information as during Step 1, Immediate Notification.</p>
Patients who may be at future risk	<p>As additional locations are identified that might have Legionella in their water supply, patients that will be admitted to any additional areas of concern should also be notified and informed of their risk. They should be</p>

	kept informed of major investigation findings, including the final results of the investigation as per Step 1, Immediate Notification.
Patients' healthcare providers	As additional patients, exposed patients, and at risk patients are identified, their healthcare providers should also be notified as per Step 1, Immediate Notification. Although these providers might have already been notified during Step 1, it is important to make sure there are no healthcare providers caring for additional patients identified that were not in the original notification.
Healthcare personnel	<p>As additional locations are identified that might place patients, staff, and providers at risk, additional providers and staff will need to be notified.</p> <p>Information provided and methods for notification can be the same as in Step 1. However, if the locations identified are widespread, consideration should be given to notifying providers and staff facility-wide, as in some situations this might be simpler, and there might be confusion among providers and staff over what areas are affected and who might be at risk. Being clear about who is at risk as well as who is not at risk can be helpful to alleviate concerns.</p> <p>Continue to keep in mind that healthcare providers and staff might also be at risk in any new affected areas identified, and messaging to these groups as per Step 1 should continue as new locations are identified.</p>
Visitors	As additional locations at risk for Legionellosis are identified, visitors to those areas should be informed in the same manner as described in Step 1.
Other healthcare facilities	As additional patients at risk are identified during the investigation, additional information will need to be communicated upon those patients' transfer to other facilities. It is important to make sure the transferring facility is communicating with receiving facilities for these patients as well as those initially identified in Step 1.

Box 8.4. Example of patient notification: New Delhi metallo-beta-lactamase-producing carbapenem resistant Enterobacteriaceae (NDM-CRE) in a long-term care facility

An example of notification is presented for an outbreak of NDM-CRE in a long-term care facility setting.

The situation: The epidemiologist at the local public health agency identifies three patients with CRE at the same long-term care facility. All CRE are found to harbor NDM. She calls the director of nursing to notify the facility as well as to get more information. All three patients are in the same unit of the facility and all have wounds for which they are receiving wound care.

Step 1: Immediate Notification

Patients	All patients (in long-term care settings they are called residents) or their healthcare proxies should be notified immediately that they have a positive culture for NDM-CRE. They should be notified that an investigation will occur and the steps that will be taken, including determining commonalities among the patients and an evaluation of infection control practices. Ideally notification would be done by the treating provider in person or over the phone if already discharged or if they have been transferred to another facility. Affected residents or their healthcare proxies should be kept informed of major investigation findings, including the final results of the investigation and mitigation measures put into place.
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Exposed and potentially exposed patients	<p>Depending on the information shared by the Director of Nursing, in some situations it might be possible to quickly identify the initial exposed residents. If it is not possible initially to identify these populations, which is most likely, when exposed and potentially exposed persons are identified they should be notified right away. If an outbreak is suspected based on initial information, consideration should be given to notifying all residents or their healthcare proxies in the unit or in the facility that there might be an outbreak and that the investigation is ongoing. Under most circumstances for an NDM-CRE outbreak, the entire facility should be considered to be potentially exposed since this pathogen is primarily transmitted via contact. Even those who are exposed but no longer at risk should be notified for transparency, which might include former residents of the facility. Ideally notification of exposed residents would be done by the treating provider or a representative of the facility in person or over the phone if already discharged from the facility.</p> <p>They should be notified that there is a possible outbreak and an ongoing investigation and kept informed of major investigation findings, including the final results of the investigation, similar to affected residents.</p>
Patients who may be at future risk	Residents or their healthcare proxies that will be admitted to the area of concern (e.g., affected unit, or facility) should be notified of the investigation and possible outbreak. They should be informed of their risk. They should be kept informed of major investigation findings, including the final results of the investigation.
Patients' healthcare providers	<p>Healthcare providers who provide care to the affected residents in the affected area should be notified that there are multiple residents with NDM-CRE leading to a suspicion of an outbreak. Information communicated should include where the residents are located, what has been determined so far, initial mitigation measures, and what the facility is doing to investigate. Any affected residents should immediately be placed into transmission-based precautions (contact), and healthcare providers should be notified as to their role in adhering to these precautions, with education provided on the rationale for PPE and how to use it appropriately.</p> <p>Healthcare providers who provide care to potentially exposed patients should also be notified and given the same information; this might be providers in the unit or in the entire facility.</p> <p>Healthcare providers can be informed via larger communication, such as an email, as well as in person communication when providers enter the facility. Providers should be provided information about NDM-CRE, including information on infection versus colonization and what they should do when a culture returns a result of NDM-CRE (e.g., reporting to infection control).</p>
Healthcare personnel	For a suspected outbreak of NDM-CRE in a long-term care setting, all providers that provide care in the facility should be notified and provided the same information as the providers that treat affected and exposed residents.
Visitors	Visitors and others who enter the facility that interact with affected residents, including family members, should understand their role in transmission-based precautions. All visitors should be aware that there is a suspected outbreak and informed of any precautions they need to take, such as washing their hands.
Other healthcare facilities	When residents affected, exposed or at-risk are transferred, which for this type of outbreak should be any resident in the entire facility, the long-term care facility should communicate with the receiving facilities directly about the outbreak and if the resident being transferred has an infection or colonization with NDM-CRE. Receiving facilities need to know that transmission-based precautions should be continued.

Step 2: Expanded Notification

Patients	During the investigation, additional cases of NDM-CRE might be identified. See Chapter 5 for more information about case detection as part of an outbreak investigation. As cases are identified, residents should immediately be notified with the same information and methodology used in Step 1, Immediate Notification.
Exposed and potentially exposed patients	Additional exposed and potentially exposed patients might be identified over the course of the investigation. When additional exposed patients are identified, they should be immediately notified using the same methodology and information as during Step 1, Immediate Notification.
Patients who may be at future risk	If additional residents are admitted to the facility, they might also be at risk and should be notified using the same methodology as exposed and potentially exposed residents.
Patients' healthcare providers	As additional residents, exposed residents, and at risk residents are identified, their healthcare providers should also be notified as per Step 1, Immediate Notification. Although these providers might have already been notified during Step 1, it is important to make sure there are no healthcare providers caring for additional residents identified that were not in the original notification.
Healthcare personnel	As additional healthcare providers are notified, other healthcare personnel should also be notified.
Visitors	Visitors should continue to be notified as during Step 1, Immediate Notification.
Other healthcare facilities	Until the outbreak is considered to be resolved, the long-term care facility should continue to notify the receiving facilities when residents affected, exposed or at-risk are transferred, including providing information directly about the outbreak and if the resident being transferred has an infection or colonization with NDM-CRE. Receiving facilities need to know that transmission-based precautions should be continued.

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