Official websites use .gov A .gov website belongs to an official government organization in the United States. Secure .gov websites use HTTPS A lock ( ) or https:// means you've safely connected to the .gov website. Share sensitive information only on official, secure websites. Abbigail J. Tumpey, David Daigle, and Glen Nowak Before an outbreak is recognized and an investigation begins, limited numbers of persons might be exposed to health risks without experiencing illness. As increasing numbers of persons are exposed to the risk or become ill, healthcare providers and others might become aware of the higher than expected number of illnesses and begin reporting the unusually high occurrences to local and state health authorities. This situation is often what prompts an outbreak investigation, and as that outbreak evolves, communications about it must evolve as well (1,2). In today’s 24-hour news and digital media environment, people constantly receive information from many sources, ranging from print media to television to alerts and social media on mobile devices. Immediately after the news media or community learns of a public health–related outbreak investigation, they want to know what is happening and who is affected. When the cause is rare but might cause substantial harm, news outlets often treat the event as breaking news and begin sustained coverage. From the beginning of an event to its resolution and follow-up, public health authorities are expected to provide the news media with timely, accurate information and answers about the outbreak’s effects. Because the ways in which receipt of news is evolving, the ways in which public health authorities communicate with the media and public needs to adapt in similar ways. In 2016, the Pew Research Center reported that approximately 4 in 10 US residents received their news from online sources, and 6 in 10 received their news through social media channels (3). Today, communications strategies during an outbreak response should include a mix of media outreach, partner and stakeholder outreach, and social media engagement (2). Knowing how the public or members of affected groups perceive a risk affects what you, as a field investigator, might communicate and how

you frame the key messages. Many times, persons most affected by a disease outbreak or health threat perceive the risk differently from the experts who mitigate or prevent the risk. Additionally, persons perceive their own risks differently, depending on how likely they think the actual hazard will affect them personally and their beliefs about how severe the harm might be. Perceptions of health risks also are tied to the degree to which persons feel alarmed or outraged—when the event causes a high level of worry or anxiety, the risk is perceived to be at a similarly high level (4). Persons are usually more accepting of risks or feel less outrage when the risks are voluntary, under their control, have clear benefits, are naturally occurring, are generated from a trusted source, or are familiar (Table 12.1). Conversely, persons are less accepting of risks or have greater concern or anxiety when risks are imposed or created by others, controlled by others, have no clear benefit, are human-made, come from an untrusted source, or seem exotic. For example, many persons are more worried about flying in an airplane than driving a car, despite the fact that more car crashes than airplane crashes occur each year in the United States. Flying in an airplane is an event controlled by others and aligns with a risk perceived as less acceptable. The same is true for outbreaks and public health crises. Before communicating during an outbreak, think through how risk perceptions might influence the affected populations and, therefore, how you communicate about those risks. Also, keep in mind that persons will view public health recommendations and advice through a risk–benefit lens, with the same factors affecting whether they adopt a public health recommendation. Source: Adapted from References 4, 5. Trust and credibility can greatly influence your ability to persuade affected persons to follow public health authorities' recommendations during an outbreak or public health response. The ability to contain and stop the outbreak might hinge on established relationships and coordination with key partners and stakeholders. Risk communication literature identifies four factors that determine whether an audience, including journalists, will perceive a messenger as trusted and credible,

including Organizations and spokespersons who issue messages and information that convey these four factors are more likely to maintain and even build trust during a crisis. Examples of messages used in outbreak responses or public health investigations are provided in Box 12.1. These quotations encompass the four factors that foster trust and credibility. We realize that you turn to our medical facility to get better. This event is intolerable to us as well, and we want to work with you to resolve the situation and ensure your safety and well-being. We are taking steps to ensure that this event never occurs again in our facility. — Broward Health Medical Center Patient Notification Letter (October 2009) (8) We want to ensure that every patient who might be at risk is tested. Thanks to the diligent work of our team [. . .], we are confident that we are at a point where we've identified the vast majority of patients who were put at risk. Mayo Clinic will do whatever is necessary to support the needs of its patients. Patient safety is central to the trust the organization shares with its patients. Mayo Clinic is working to ensure that this doesn't happen again. — Media quotation from Mayo Clinic's chief executive officer (Jacksonville, FL, September 2010) (9) I want to acknowledge the importance of uncertainty. At the early stages of an outbreak, there's much uncertainty, and probably more than everyone would like. Our guidelines and advice are likely to be interim and fluid, subject to change as we learn more. We're moving quickly to learn as much as possible and working with many local, state, and international partners to do so. I want to recognize that while we're moving fast, it's very likely that this will be more of a marathon than a sprint. I want to acknowledge change. Our recommendations, advice, and approaches will likely change as we learn more about the virus and we learn more about its transmission. I want to acknowledge that we're likely to see local approaches to controlling the spread of this virus, and that's important; that can be beneficial; that can teach us things that we want to use in other parts of the country and that other people in other places may find useful. Because things are changing, because flu viruses are unpredictable, and because there

will be local adaptation, it’s likely that [at] any given moment there will be confusing—or may be confusing or conflicting information available. We are very committed to minimizing where we find that, clearing up any of that misconception. — Press briefing by the Centers for Disease Control and Prevention’s Acting Director Richard Besser, MD, during the early stages of the influenza A(H1N1) outbreak (April 2009) (10) The early stages of an outbreak investigation can be a seemingly overwhelming challenge of tasks, long hours, and concerns. Will the situation evolve into a broader public health crisis? Will the outbreak be short or long term? Which population groups will be most at risk? To communicate effectively in this time of uncertainty, multiple components need to be in place. Early in a public health investigation, the roles and responsibilities of the persons and organizations involved should be defined clearly; it is particularly important to determine who has primary responsibility and authority for communicating each aspect of the investigation to healthcare providers, the media, and the general public. Each entity’s domain of expertise should be stipulated, including who will speak with the public and news media about each topic. If the outbreak response is domestic, the roles and responsibilities among the entities involved (e.g., federal, state, or local) should be clarified. If the response is international, that country’s ministry of health will determine communication plans and responsibilities and serve as the communication lead within that country. The field investigator and, if part of the investigation team, the health communication specialist should foster effective collaboration and coordination among all of the agencies and organizations involved. At the start of an investigation, you will need to assess the situation (11). The following steps will help you perform this task quickly: During an outbreak response, you might work with a team of communications experts, possibly including public affairs (media) specialists, risk communication experts, digital or social media experts, and other health communication staff. The communications team will solidify the communications strategy and develop

communication resources aimed at reaching the affected (target) populations and partners who might influence them (e.g., healthcare providers or community leaders). These health-related messages should focus on behaviors that can contain or stop the outbreak. Box 12.2 lists communication resources often used during outbreak responses. Depending on where the outbreak is located and what populations are affected, the communications team might tailor additional resources to the investigation needs (e.g., posters for low-literacy readers or text-messaging alerts). The communication strategy most likely will evolve and adapt as the situation evolves and more is learned about the perceptions of your targeted audience and scope of the outbreak (1). Source: Adapted from Reference 13. Messages must resonate with affected populations before those persons will follow prevention recommendations. Box 12.3 outlines these key messaging development components in seven steps. Emphasize a commitment to the situation. Convey a sense of urgency for bringing the situation under control. Let the audience know where it can access more information (e.g., an Internet site or call center) and when more information will be provided; for example, “Our next update will be tomorrow at noon.” Source: Adapted from Reference 14. Remember to follow risk communication best practices as outlined previously (e.g., recognize the affected populations are worried, concerned, and seeking guidance). Box 12.4 provides examples of how to convey risk communications messaging when speaking with an audience about an outbreak. box12-4 Source: Adapted from Reference 14. Being a spokesperson is challenging, especially during investigations or a response that involves considerable media attention. If you are asked to be a spokesperson, take time to prepare and practice. Media interviews are the principal way in which reporters obtain their information from subject-matter experts and other sources. Learning how to navigate an interview is crucial. You often can determine the overall communication objectives by answering the following two questions: For most news reports, you will have only one direct quotation; therefore, make it count. Write

down your primary message point, often called the Single Overriding Health Communication Objective, or SOHCO (pronounced sock-O). You want your audience to remember this one key point because it is the most important message about the topic. A communications expert can help you refine the SOHCO and make sure it resonates. Say the SOHCO at the beginning of the interview. At the end of the interview, the reporter most likely will ask you if you have anything else that you have not covered. Take that opportunity to repeat the SOHCO; say, for example, “Thank you for your interest in this topic. The most important thing for your audience to remember is [repeat the SOHCO].” Never provide an interview when first contacted by the media. When a reporter calls you directly, ask him or her for five pieces of information—name, contact information, a list of topics planned for discussion, how the interview will be conducted, and the deadline. Tell the reporter you will call back within a specific timeframe. Even if the reporter says the information is needed urgently, tell him or her you will call back promptly (e.g., in 5– 10 minutes). A 5-or 10-minute delay will give you time to gather your thoughts, locate helpful or needed information, and identify key messages. Reviewing the common questions asked during a media interview will help you prepare your response (14,15). You will need permission from the health authorities in the jurisdiction where the outbreak is occurring before you speak directly with any media. Unless you have that permission, you should direct anyone requesting an interview to the health authority in charge. Also, ensure you know your organization’s policies regarding communications with the media (e.g., how to frame statements related to your organization’s policies or official recommendations) and stay within the scope of your responsibilities when talking with reporters. Consult a communications expert assigned to the outbreak investigation about policies and prior clearances needed. Know your boundaries. If questions come up during an interview that fall under the purview or responsibility of other agencies or authorities, refer reporters to those entities or their spokespersons. Including a member of the communications team

during the interview can help with obtaining follow-up information for the media. Challenging situations and questions often occur during interactions with the news media or the public about an outbreak response or a public health investigation. Table 12.2 provides Do’s and Don’ts for being a media spokesperson and avoiding possible communication traps. Source: Adapted from References 1, 6. Multiple techniques can help you handle difficult questions. The two that most likely will be most helpful are bridging and hooking and flagging. When you flag messaging, you verbally cue the reporter and audience to the key public health information they need to remember; for example, Additional tips are included here for managing media interviews; these tips can vary on the basis of the type of media and format of the interview (Table 12.3). Tips for mastering media interviews a Bridging: Acknowledge the reporter’s question and then use a bridging phrase to transition to the crucial information you need to convey. Hooking and flagging: A hook provides the messaging in bite-sized chunks that help the audience retain more information, and a flag verbally cues the reporter and audience to the key public health information they need to remember. SOHCO, Single Overriding Health Communication Objective. Source: Adapted from References 1, 6. To the extent possible, try to assess the effectiveness of media interactions. Review news stories and media coverage to learn how reporters are using the information you provided. Assess whether the key messages (SOHCO) are being used and how—and whether the headlines approximate the ones that you were striving to convey. Each interview is an opportunity to learn and improve. If a reporter publishes inaccurate information, or the information you provided to reporters changes, work with a communications or media specialist to call the reporters back and update them with the new or corrected information. In an ideal situation, the story will be published, and you will be satisfied with the headline and messages conveyed. As technology and media evolve, the public will continue to adapt and get information in new ways. Public health officials communicating about risks must evolve as well so that they can reach target audiences

with important and timely health-related information by using the audience's preferred communication mechanisms. The communication strategies outlined in this chapter have proved effective during outbreak responses and risk communication events and can be tailored and adapted to fit any public health event. During an outbreak, public health officials must quickly determine the communication purpose, the persons and populations most in need of information and guidance, ways to engage with news media and the public, and ways to gauge the effects of messages and materials. Knowledge of how the news media and journalists operate, as well as the ability to use risk communication principles and best practices, increases the likelihood of success during public health events. Katherine Lyon-Daniel and Sue Swenson, Centers for Disease Control and Prevention, provided assistance and technical review of the chapter. < Previous Chapter 11: Developing Interventions Next Chapter 13: Legal Considerations > The fellowship application period and host site application period are closed. For questions about the EIS program, please contact us directly at EISApplication@cdc.gov.