



Communicating During a Public Health Crisis

Social media is now a part of the public health communications toolbox. From the CDC down to local departments of health, public health, and safety officials are using social media to push out vital and useful information to the public and to monitor and respond to public comments. But social media is also being used for a broader range of public health purposes—from collecting data to track the spread of diseases to sending calls for help—and the public health system is still figuring out how to adapt.

“The use of social media has proven a valuable asset for adaptation and improvisation related to the public health and medical consequences of disasters. These tools are especially valuable for saving lives during a disaster’s impact phase and especially during its immediate aftermath, when traditional disaster management capabilities are not available.... The need remains for fusion of social media into existing institutional programs for crisis informatics and disaster-risk management” (Keim and Noji, 2011).



HEALTH DEPARTMENTS AND SOCIAL MEDIA USE

The Center for Disease Control and Prevention is actively using social media, but social media use by public health agencies is still considered to be in the “early adoption stage” (Thackeray et al., 2012). Even though the majority of state health departments (60%) report using at least one social media application, they are “using social media as a channel to distribute information rather than capitalizing on the interactivity available to create conversations and engage with the audience” (Thackeray et al., 2012).

According to a 2012 report on the use of social media by state health departments, 86.7 percent of the state health departments reported they had a Twitter account, 56 percent a Facebook account, and 43 percent a YouTube channel; but, “On average, state health departments made one post per day on social media sites, and this was primarily to distribute information; there was very little interaction with audiences. SHDs have few followers or friends on their social media sites. The most common topics for posts and tweets related to staying healthy and diseases and conditions” (Thackeray et al., 2012). The report recommends, “Because social media use is becoming so pervasive, it seems prudent for state health departments to strategically consider how to use it to their advantage. To maximize social media’s potential, public health agencies should

develop a plan for incorporating it within their overall communication strategy. The agency must identify what audience they are trying to reach, how that audience uses social media, what goals and objectives are most appropriate, and which social media applications fit best with the identified goals and objectives” (Thackeray et al., 2012).

There are examples of health departments and associations using social media to augment their communications efforts:

- In Shelby County, Tennessee, the health department is using Twitter to increase its media coverage. They tweet out their press releases which are retweeted by reporters—expanding the department’s public reach.
- In Philadelphia, the Department of HIV Planning uses Twitter to increase participation in their community workshops. They tweet out the meeting’s content to people in the large nine-county area they serve and use Twitter to “extend the conversation beyond the room.”
- The American Public Health Association (@PublicHealth) took advantage of the 2013 Super Bowl to promote related health messages using the #SuperBowl hashtag. They tweeted about healthy snacks, drinking and driving, and flu vaccination. When the half-hour blackout hit, they took advantage of the unexpected opportunity with the tweet in Figure 11.1, which was widely retweeted.

At the 2013 annual meeting for the National Association of County and City Health Officials (NACCHO), additional examples of health departments’ use of social media were highlighted (New Public Health, 2013):

- The Kansas City Health Department uses Twitter and Facebook to push information on extreme heat safety during the summertime. The messages and reports of suspected or confirmed heat-related deaths resulted in coverage of health department activities and partnerships on national news channels including the Weather Channel and CNN.



Figure 11.1 Tweet from the American Public Health Association during the Super Bowl blackout.

- The Boston Health Commission used social media to promote its Youth Media campaign on sugary beverages. The campaign received close to 30,000 views, and close to 23,000 clicks on their Facebook ads.
- In Contra Costa, California, a recent campaign included a podcast by the public health director that was promoted on Twitter and Facebook. Parts of the podcast were picked up by local radio which allowed the public health department to most accurately get their message across.

The CDC, which has been a pioneer in the integration of social media tools into public health communications, including their multichannel “Zombie”-themed emergency preparedness public education campaign (CDC, 2012), has developed and is distributing a social media toolkit for health communicators. The CDC’s “SocialMediaWorks” toolkit was designed to help “health communicators integrate social media strategies and technologies into their communication plans.” The kit features tools to develop a better social media strategy, learn how social media tools work, plan, implement, and manage all in one place including “calendar and dashboard features that allow you to schedule and manage your social media initiative,” and hosts a community forum to enable health professionals to “engage with colleagues on social media strategy, share lessons learned, and learn what works” (CDC, 2013).

Integrating Social Networks and Disaster Response

In a *New England Journal of Medicine* article, “Integrating Social Media into Emergency-Preparedness Efforts,” the reason given by the three authors to the pervasiveness of social media is “it makes sense to explicitly consider the best way of leveraging these communication channels before, during, and after disasters.... Engaging with and using emerging social media may well place the emergency-management community, including medical and public health professionals, in a better position to respond to disasters” (Merchant et al., 2011). Specifically, they suggest:

- Actively using networking sites such as Facebook to help individuals, communities, and agencies share emergency plans and establish emergency networks. Web-based “buddy” systems, for example, might have allowed more at-risk people to receive medical attention and social services during the 1995 Chicago heat wave, when hundreds of people died of heat-related illness.
- Linking the public with day-to-day, real-time information about how their community’s health care system is functioning. For example, emergency room and clinic waiting times are already available in some areas of the country through mobile-phone applications, billboard Really Simple Syndication (RSS) feeds, or hospital tweets. Monitoring this important information through the same social channels during an actual disaster may help responders verify whether facilities are overloaded and determine which ones can offer needed medical care.

- Using location-based service applications (such as Foursquare and Loopt) and global positioning system (GPS) software to allow people to “check in” to a specific location and share information about their immediate surroundings. With an additional click, perhaps off-duty nurses or paramedics who check in at a venue could also broadcast their professional background and willingness to help in the event of a nearby emergency.
- Increasing the use of social media during recovery. The extensive reach of social networks allows people who are recovering from disasters to rapidly connect with needed resources. Tweets and photographs linked to timelines and interactive maps can tell a cohesive story about a recovering community’s capabilities and vulnerabilities in real-time. “Organizations such as Ushahidi have helped with recovery in Haiti by matching volunteer health care providers with distressed areas. Social media have been used in new ways to connect responders and people directly affected by such disasters as the *Deepwater Horizon* oil spill, flash floods in Australia, and the earthquake in New Zealand with medical and mental health services” (Merchant et al., 2011).



TRENDS IN SOCIAL MEDIA USE IN PUBLIC HEALTH

Disease Surveillance

In late 2002, there was a strange increase in emergency room visits in Guangdong Province in China for acute respiratory illness and a number of local news and Internet reports about a respiratory disease affecting healthcare workers. Several long weeks later, the government announced the cause was severe acute respiratory syndrome, or SARS. According to Dr. John Brownstein, one of the developers of HealthMap, an online platform that mines informal sources for disease outbreak monitoring, “If this data had been harvested properly and promptly, this early epidemic intelligence collected online could have helped contain what became a global pandemic” (Brownstein, 2011).

“We are now in an era where epidemic intelligence flows not only through government hierarchies but also through informal channels, ranging from press reports to blogs to chat rooms to analyses of Web searches. Collectively, these sources provide a view of global health that is fundamentally different from that yielded by disease reporting in traditional public health infrastructures,” Dr. Brownstein explained. “They also provide a process that dramatically reduces the time required to recognize outbreaks” (Brownstein, 2011).

More recently, the explosion of online news and social media has brought a new era of disease surveillance. Today, the websites healthmap.org and *Outbreaks Near Me* deliver real-time intelligence on a broad range of emerging infectious diseases for a diverse audience, which includes local health departments, governments, clinicians, and international travelers.

Healthmap.org states they “bring together disparate data sources, including online news aggregators, eyewitness reports, expert-curated discussions and validated official reports, to achieve a unified and comprehensive view of the current global state of infectious diseases and their effect on human and animal health. Through an automated process that updates 24/7/365, the system monitors, organizes, integrates, filters, visualizes and disseminates online information about emerging diseases in nine languages, early detection of global public health threats” (Healthmap.org, 2013).

HealthMap is part of a growing landscape of government and nongovernment organizations mining Internet and social data to determine the spread of viruses and the rate of infection. Some organizations are also asking the public to self-report how they are feeling, according to Kim Stephens, the lead blogger of iDisaster 2.0, who outlines several tools being used to aggregate data to fight the flu and other diseases.

Google Flu Trends is a site that provides geographically based information about the spread of the influenza virus. Their data is aggregated from the search terms people are using versus self-reporting. In fact, the graph of the tracked searches (see below) related to the flu compared to the actual reported cases of the virus is so close that they almost overlap.

Google explains how this works:

Each week, millions of users around the world search for health information online.... But can search query trends provide the basis for an accurate, reliable model of real-world phenomena?

We have found a close relationship between how many people search for flu-related topics and how many people actually have flu symptoms. Of course, not every person who searches for “flu” is actually sick, but a pattern emerges when all the flu-related search queries are added together. We compared our query counts with traditional flu surveillance systems and found that many search queries tend to be popular exactly when flu season is happening. By counting how often we see these search queries, we can estimate how much flu is circulating in different countries and regions around the world.

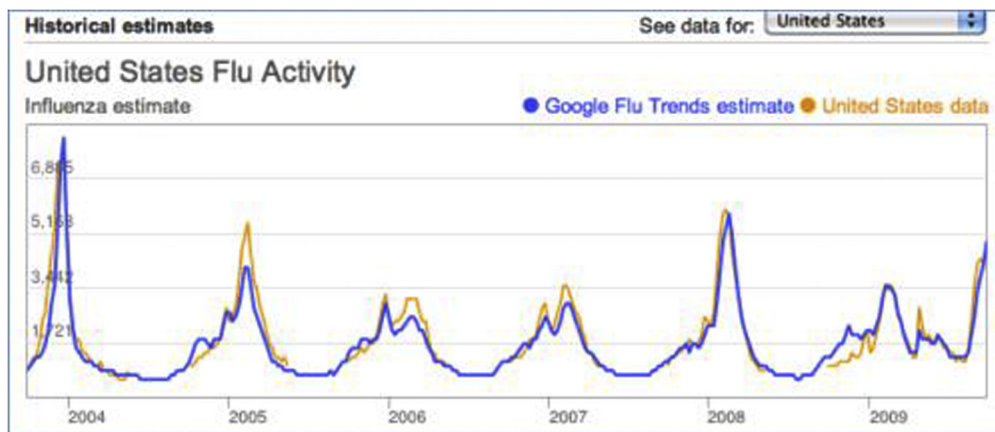


Figure 11.2 Historical estimates of U.S. flu activity.

Google's results have been published in the journal *Nature* (Stephens, 2013).

MappyHealth is another tool that tracks keywords related to health but instead of using data from searches in Google, this system uses the Twitter data stream. Their stated reason for the site: "It is hypothesized that social data could be a predictor to outbreaks of disease. We track disease terms and associated qualifiers to present these social trends." Although this blog post is focused on influenza, the MappyHealth site tracks 27 different categories of illness (Stephens, 2013).

FluNearYou is a tool that allows the public to participate in tracking the spread of flu by filling out a survey each week. The survey is quite simple and asks the respondent if they have had any symptoms during the past week and whether or not they have had the flu shot either this year or last year. Respondents can include family members and the questions are asked about each person individually. This user-contributed data is then aggregated and displayed on a map with pins that are either green for no symptoms, yellow for some, and red for "at least one person with Influenza-like" symptoms. The pins are clickable and display the number of users in that zipcode that have reported their condition, but no personal information whatsoever. The number of participants in the state is displayed (1294 in Massachusetts) as well as locations and addresses where people can get vaccinated. Links to local public health agencies are also provided. People can also sign up to receive location-based disease alerts via email. Social sharing of the site and its content is encouraged by the addition of prominently placed social media buttons (Stephens, 2013).

Consumer-oriented applications also are being developed such as Sickweather, which tracks social media posts that reference illnesses and displays trends by location. Sickweather also shows illness patterns over time and allows members to report their illness directly and share information with friends through social networks (Newcomer, 2013).

The Department of Homeland Security (DHS) is also mining Social Media for biosurveillance. DHS is testing whether scanning social media sites to collect and analyze health-related data could help identify infectious disease outbreaks, bioterrorism or other public health and national security risks. The 1-year biosurveillance pilot involves automatically scanning social media sites, such as Facebook and Twitter, to collect and analyze health-related data in real-time (Sternstein, 2012).

The social media data analytics technology will "watch for trends," such as whether new or unusual clusters of symptoms in various geographic regions are being reported on social networking sites. The project is the latest in a series of DHS data analysis efforts for biosurveillance. For example, DHS is already analyzing data that is collected by the CDC from public health departments nationwide. Also, it is collecting and analyzing air samples in several cities for signs of bioterrorist chemicals, such as anthrax (Sternstein, 2012).

News Organizations Are Using Their Presence on Social Media to Increase Public Health Awareness

News organizations are providing the public with information about the effects of the influenza virus and some are also using social media to increase public awareness. At the height of the 2013 flu season a #FluChat was sponsored by @USATodayHealth.

“Health based Twitter chats offer the public the opportunity to post questions that are addressed by healthcare professionals or researchers. The CDC, for instance, has conducted many chats on a wide variety of topics. Watching the questions that are posted in these chats offers local public health organizations an opportunity to “hear” the concerns of the public. Knowing this information can help with message formulation and coordination” (Stephens, 2013).

Here are a few questions posted to the #fluchat:

@USATODAYhealth how long after the flu shot are you actually prevented from getting the flu? #fluchat— Taylor Yarbrough (@SellOrElse) January 10, 2013

@USATODAYhealth what % of Americans have gotten the flu each of the last 10 years?—Bob (@sgt1917) January 10, 2013

(Stephens, 2013)

Increasing Reliance on Social Media for Real-Time Rescue

Finally, a trend that will once again change the way public health and safety agencies and organizations operate during disasters—the increased use of Facebook and Twitter to call for help or rescue. More and more people are turning to social media as their first choice of communications during a crisis.

Public polling by the Red Cross in 2011 and 2012 documents the public’s large and growing expectation that disaster officials monitor social media sites and respond quickly to distress calls on Facebook, Twitter, and other platforms. According to Red Cross surveys:

- 80 percent expect emergency responders to monitor social sites—and to respond promptly for calls for help.
- 20 percent would try an online channel to get help if unable to reach Emergency Medical Services (EMS).
- At least a third of the public expects help to arrive in less than an hour if they posted a request for help on a social media website—and more than three out of four (76%) expect help within 3 hours—up from 68 percent in 2011 (American Red Cross, 2012).

Clearly meeting this challenge and responding to these expectations must be a priority for the public health and safety community.

The Centers for Disease Control and Prevention (the CDC)'s Best Advice for Communicating During a Public Health Crisis

Communicating to the public and media during a public health or safety emergency is different in several aspects than other disaster communications. In a serious crisis, all affected people take in information differently, process information differently, and act on information differently. In recognition of those differences, the CDC has published its own, highly recommended “Crises and Emergency Risk Communications Manual.” Highlights from the 2012 edition of the CDC manual follow below.

The purpose of an official response to a public health crisis is to efficiently and effectively reduce and prevent illness, injury, and death, and return individuals and communities to normal as quickly as possible. Specific hazards under CDC emergency preparedness and response include:

- **Infectious disease outbreaks**—The spread of viruses, bacteria, or other microorganisms that causes illness or death. This includes cholera, *E. coli* infection, pandemic flu, and other infections.
- **Bioterrorism**—The deliberate release of viruses, bacteria, or other germs (agents) used to cause illness or death, including anthrax and the plague.
- **Chemical emergencies**—The intentional or unintentional release of a chemical that could harm people's health including chlorine, mercury, nerve agents, ricin, or an oil spill.

The CDC also has a role in responding to natural disasters, nuclear accidents, and radiation releases and explosions. So what is the public's response to one of these disasters?

- **Fear, anxiety, confusion, and dread**—These are emotions that need acknowledging.
- **Hopelessness and helplessness**—Part of the job of a crises communicator is to help the community manage its fears and set them on a course. Action helps reduce anxiety and restores a sense of control, even if it is symbolic, put up the flag, or preparatory—donate blood, or just as simple, check on an elderly neighbor.
- **Uncertainty**—People dislike uncertainty. The not-knowing can seem worse than a bad result. People can manage uncertainty if you share with them the process you are using to get answers. “I can't tell you what's causing so many people in our town to get so sick. But I can tell you what we're doing to find out....” The situation may obviously be uncertain and acting otherwise creates mistrust.
- **Not panic**—Panic during a crisis is rare. Contrary to what we see portrayed in the movies, we seldom act irrationally when faced with a crisis—and we seldom panic. People nearly always behave in a rational way during a crisis. In the face of the 9/11 attacks, people in lower Manhattan became simultaneously resourceful and responsive. When told what to do by those in authority, people followed instructions.
 - The panic myth is one of the most pervasive misconceptions about crises. Many government leaders are concerned about causing public panic. When facing a

crisis, they may mistakenly withhold information in an effort to prevent panic and protect the public—at the very time they should be sharing their concerns.

Conditions that are likely to create heightened anxiety and severe emotional distress are silence or conflicting messages from authorities. People are likely to be very upset when they feel:

- They cannot trust what those in authority are telling them.
- They have been misled or left without guidance during times of severe threat.
- If authorities start hedging or hiding the bad news, they will increase the risk of creating a confused, angry, and an uncooperative public.
- The faster you give bad news, the better. Holding back implies mistrust, guilt, or arrogance.

In general, the public wants access to as much information as possible. Too little information enhances the psychological stress. If information is incomplete or not present at all during a crisis, this will increase anxiety and increase a sense of powerlessness. It will also lower trust in government agencies.

The CDC has found that people may receive, interpret, and act on information differently during an emergency than during a normal period. Four factors that change how we process information during a crisis:

1. We simplify messages—Under intense stress and possible information overload, we tend to miss the nuances or importance of health and safety messages by:

- Not fully hearing information, because of our inability to juggle multiple facts during a crisis.
- Not remembering as much of the information as we should.
- Confusing action messages, such as remembering which highway is blocked for safety

To cope, many of us may not attempt a logical and reasoned approach to decision making. Instead, we may rely on habits and long-held practices. We might also follow bad examples set by others, and engage in irrational behaviors like unfairly blaming leaders or institutions.

2. We hold on to current beliefs—Disaster communication sometimes requires asking people to do something that seems counterintuitive. Examples include the following:

- Getting out of a safe car and lying in a ditch instead of outrunning a tornado.
- Evacuating even when the weather looks calm.

Changing our beliefs during a crisis or emergency may be difficult. Beliefs are very strongly held and are not easily altered.

3. We look for additional information and opinions—We remember what we see, and tend to believe what we've experienced. During crises, we want messages confirmed before taking action. You may find that you or other individuals are likely to do the following:

- Change television channels to see if the same warning is being repeated elsewhere.
 - Try to call friends and family to see if others have heard the same messages.
 - Check in on their social media networks to see what their friends and family are doing.
 - Turn to a known and credible local leader for advice.
 - In cases where evacuation is recommended, we tend to watch to see if our neighbors are evacuating before we make our decision. This confirmation first—before we take action—is very common in a crisis.
- 4. We believe the first message**—During a crisis, the speed of a response can be an important factor in reducing harm. In the absence of information, we begin to speculate and fill in the blanks. This often results in rumors. The first message to reach us may be the accepted message, even though more accurate information may follow. When new, perhaps more complete information becomes available, we compare it to the first messages we heard. Therefore, messages should be simple, credible, and consistent. Speed is also very important when communicating in an emergency. An effective message must:
- Be repeated.
 - Come from multiple credible sources.
 - Be specific to the emergency being experienced.
 - Offer a positive course of action that can be executed.
- People should also have access to more information, through other channels, such as through websites, and old and new media.
- Good communication can reduce stress, harmful human behavior, and prevent negative public health response outcomes. Trained communicators will do the following:
- Reduce high levels of uncertainty.
 - Use an effective crisis-communication plan.
 - Be the first source for information.
 - Express empathy and show concern.
 - Exhibit competence and expertise.
 - Remain honest and open.
 - Coordinate with other response officials.
 - Commit and remain dedicated to the response and recovery after the immediate crisis has passed.



HOW AUDIENCES ASSESS MESSAGES IN A CRISIS

Audiences receive, interpret, and evaluate messages before they take action. Expect your audience to immediately judge the content of your message for speed, factual content, and trust and credibility:

Speed of Communication

Was the message timely without sacrificing accuracy? One of the primary dilemmas of effective Crisis and Emergency Risk Communication is to be speedy in responding but maintain accuracy even when the situation is uncertain.

Being first to communicate establishes your organization as the primary source of information. The public may judge how prepared your organization was for the emergency based on how fast you responded. Speedy responses suggest that there is a system in place and that appropriate actions are being taken.

Remember that if agencies are not communicating, audiences will turn to other, less credible sources. First impressions are lasting impressions, and it's important to be accurate. Responding quickly with the wrong information or poorly developed messages damages credibility. This does not necessarily mean having all the answers; it means having an early presence so the public knows that agencies are engaged and that there is a system in place to respond.

Trust and Credibility of the Message

Research shows there are some basic elements to establishing trust and credibility through communications, and you will notice they repeat the important elements in executing a successful crisis communication plan:

Empathy and caring—This needs to be expressed in the first 30 seconds. According to research, being perceived as empathetic and caring increases the chances your message will be received and acted on. Acknowledge fear, pain, suffering, and uncertainty.

Competence and expertise—The public will be listening for factually correct information, and some people will expect to hear specific recommendations for action. Therefore, you should do the following:

- Get the facts right.
- Repeat the facts often, using simple nontechnical terms.
- Avoid providing sketchy details in the early part of the response.
- Ensure that all credible sources share the same facts. Speak with one voice. Inconsistent messages will increase anxiety, quickly undermining expert advice and credibility.

Honesty and openness—This does not mean releasing information prematurely. It means being transparent—admitting when you do not have all the information, telling the public you do not, and why.



CRISIS COMMUNICATIONS TACTICS

The perception of risk is not about numbers alone and communicators should consider the following rules for raising the public's comfort level during a crisis. These

are adapted from the Environmental Protection Agency's *Seven Cardinal Rules of Risk Communication*.

1. Accept and involve the public as a legitimate partner—Two basic tenets of risk communication in a democracy are generally understood and accepted. First, people and communities have a right to participate in decisions that affect their lives, their property, and the things they value. Second, the goal should be to produce an informed public that is involved, interested, reasonable, thoughtful, solution-oriented, and collaborative. You should not try to diffuse public concerns and avoid action. Guidelines:

- Show respect for the public by involving the community early, before important decisions are made.
- Clarify that decisions about risks will be based not only on the magnitude of the risk but on factors of concern to the public.

2. Listen to the audience—People are often more concerned about issues such as trust, credibility, control, benefits, competence, voluntariness, fairness, empathy, caring, courtesy, and compassion. They are not as interested in mortality statistics, and the details of a quantitative risk assessment. If your audience feels or perceives that they are not being heard, they cannot be expected to listen. Effective risk communication is a two-way activity. Guidelines:

- Do not make assumptions about what people know, think, or want done about risks.
- Listen. Monitor social media and comments on your website. Make an active effort to find out what people are thinking and feeling.
- Involve all parties who have an interest or a stake in the issue.
- Identify with your audience and try to put yourself in their place.
- Recognize people's emotions.
- Let people know that you understand their concerns and are addressing them. Understand that audiences often have hidden agendas, symbolic meanings, and broader social, cultural, economic, or political considerations that complicate the task.

3. Be honest, frank, and open—Before a risk communication message can be accepted, the messenger must be perceived as trustworthy and credible. So the first goal must be to establish trust and credibility. Short-term judgments of trust and credibility are based largely on verbal and nonverbal communications. Long-term judgments are based largely on actions and performance. Once made, trust and credibility judgments are resistant to change. In communicating risk information, these are your most precious assets. Once lost, they are difficult to regain. Guidelines:

- Express willingness to follow up with answers if the question cannot be answered at the time you are speaking.

- Make corrections if errors are made.
 - Disclose risk information as soon as possible, emphasizing appropriate reservations about reliability.
 - Do not minimize or exaggerate the level of risk.
 - Lean toward sharing more information, not less, to prevent people from thinking something significant is being hidden.
 - Discuss data uncertainties, strengths, and weaknesses, including the ones identified by other credible sources.
 - Identify worst-case estimates and cite ranges of risk estimates when appropriate.
4. **Coordinate and collaborate with other credible sources**—Allies can be effective in helping communicate risk information. Few things make risk communication more difficult than public conflicts with other credible sources. Guidelines:
- Coordinate all communications among and within organizations.
 - Devote effort and resources to the slow, hard work of building bridges, partnerships, and alliances with other organizations.
 - Use credible and authoritative intermediaries.
 - Consult with others to determine who is best able to answer questions about risk.
 - Try to release communications jointly with other trustworthy sources, such as:
 - University scientists.
 - Physicians.
 - Local or national opinion leaders.
 - Citizen advisory groups.
 - Local officials.
5. **Meet the needs of the media**—The media are primary transmitters of risk information. They play a critical role in setting agendas and in determining outcomes. The media generally have an agenda that emphasizes the more sensational aspects of a crisis. They may be interested in political implications of a risk. The media tend to simplify stories rather than reflect the complexity. Guidelines:
- Remain open with, and accessible to, reporters.
 - Respect their need to “feed the beast”—to provide news for an audience that is eager for information 24/7.
 - Provide information tailored to the needs of each type of media, such as sound bites, graphics, and other visual aids for television.
 - Agree with the reporter in advance about specific topics and stick to those during the interview.
 - Prepare a limited number of positive key messages in advance and repeat the messages several times during the interview.
 - Provide background material on complex risk issues.
 - Do not speculate.

- Say only those things that you are willing to have repeated. Everything you say in an interview is on record.
 - Keep interviews short and follow up on stories with praise or criticism, as warranted.
 - Establish long-term trust relationships with specific editors and reporters.
- 6. Speak clearly and with compassion**—Technical language and jargon are barriers to successful communication with the public. In low-trust, high-concern situations, empathy and caring carry more weight than numbers and technical facts. Guidelines:
- Use plain language.
 - Remain sensitive to local norms, such as speech and dress.
 - Strive for brevity, but respect people's needs and offer to provide more information if needed.
 - Use graphics and other pictorial material to clarify messages.
 - Personalize risk data by using anecdotes that make technical data come alive.
 - Acknowledge and respond to emotions that people express, such as anxiety, fear, anger, outrage, and helplessness.
 - Promise only what can be delivered.
 - Understand and convey that any illness, injury, or death is a tragedy.
 - Avoid distant, abstract, unfeeling language about deaths, injuries, and illnesses.
 - Do not discuss money—the magnitude of the problem should be in the context of the health and safety of the people—loss of property is secondary.
- 7. Give people things to do**—In an emergency, simple tasks will:
- Give people a sense of control.
 - Keep people motivated to stay tuned to what is happening.
 - Prepare people to take action if and when they need to do so.
- 8. Do no harm**—The odds of a negative public response increases when poor communication practices are added to a crisis situation. Potentially harmful practices to avoid include the following:
- Inaccuracy.
 - Mixed and conflicting messages from multiple sources.
 - Late release of critical information.
 - Failure to address or correct rumors.
 - Overly reassuring and unrealistic communication.
 - A lack of empathy.
 - Public power struggles, conflicts, and confusion.
 - Perception that certain groups are getting preferential treatment.
- (CDC, 2012)

A mix of new social communications tools and best practices learned over time will help public health officials inform and support the public during times of crises.

The CDC has produced a series of manuals, toolkits, and trainings that are helping integrate social media into the disaster communications planning and operations of public health officials at every level and are helping speed up the adaption of these tools for saving lives.

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