

CRISIS+EMERGENCY RISK+COMMUNICATION

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CERC: Social Media and Mobile Media Devices

Last Updated: 2014



**U.S. Department of
Health and Human Services**
Centers for Disease
Control and Prevention

CERC: Social Media and Mobile Media Devices

This chapter will discuss the following topics:

- Social media's relationship with mainstream media
- Social media forums, attributes, and users
- Working with social media before and during a crisis
- Writing for social media during a crisis
- Keeping up with social media during a crisis
- Mobile media and its role during a crisis
- Responding to social media regarding serious errors, myths, and misperceptions

Understanding the Use of Social Media in Crisis and Emergency Risk Communication (CERC)

Disasters can become media events. Today, they can also become social media events. Major public health emergencies will cause those who use social media to immediately become involved, especially if the events are exotic, catastrophic, or the first of their kind. For example, if a public health emergency involves terrorist activity, social media forums will likely engage at higher levels. User-generated content will often be the first publicly provided material. For example, some users will provide large amounts of content through narratives and related videos on YouTube, pictures on Flickr, and posts to Twitter and Facebook. This information can be picked up and repeated by mainstream media outlets.

Social media use has grown quickly, constantly changing and evolving. Users develop new applications and social media companies, such as Google and Facebook, are continuously innovating. Today, audiences are more segmented, yet many people rely on social media as their first source of news.¹ Social and new media outlets include, but are not limited to the following groups:

- Social networks
- Blogs
- Microblogs
- Podcasts
- Forums
- Photo and video sharing

"The social web is creating a fundamental shift in disaster response—one that will ask emergency managers, government agencies, and aid organizations to mix time-honored expertise with real-time input from the public. . . We need to work together to better respond to that shift."

*Gail McGovern,
President,
American Red Cross*



Responders to a public health emergency may think of social media as a distraction from serious efforts to respond to the event. For them, the distraction may seem uncontrollable, unmanageable, and full of misinformation (intentional or not). Many feel that social media have questionable credibility and reliability. Many see social media as little more than an annoyance.

In reality, social media are now a constant presence, like traditional media. Today, social media sources play a critical role in informing and, in some cases, misinforming the public during any crisis or emergency. Traditional media outlets routinely use social media sources for content. Social media users, by co-creating audio, picture, video, and multimedia information about public health event crises and emergencies, drive some of the Web-based and traditional media content.

No one source of information can be expected to reach everyone. At the same time, it's impossible to maintain a dialogue on every social media platform and with all social media content generators and distributors. Added to this challenge is the expanding number and types of social media sites that are integrated into public health conversations, especially when it comes to crises and emergencies.

Social Media's Relationship with Mainstream Media

What Is Social Media?

Social media can be defined as interactive online media that make it easy for users to participate and contribute content. Social media combine a wide range of online tools that enable interactive communication. Social media allow users to interact, engage in dialogue, and create and share experiences. Interaction might include the following:

- Sharing of opinions
- Participating in polls
- Giving personal recommendations or ratings

Social media involve two-way communication. They allow users to share what they have on their minds and promote communication among like-minded people. According to one of the most published writers on the subject, Brian Solis, "Social Media is much more than user-generated content. It's driven by people in the communities where they communicate and congregate. They create, share, and discover new content without our help right now. They're creating online cultures across online networks and using the 'social tools' that we learn about each and every day to stay connected."²

In a crisis, interactions might range from sharing photos of the public health emergency, to sharing information with follow-up discussions on social network sites. For example, these interactions may augment how a virtual community can be better protected during an outbreak or crisis or to encourage donations in response to an emergency. This level and kind of online interaction is what makes social media different.



- Web 1.0 is used for pushing content in one direction, such as traditional organizations' static websites.
- Web 2.0 is different. It is used for two-way information sharing, such as the following:
 - Social interaction
 - Relationship sharing and community building
 - Discussing and interpreting news and information
 - Creating and sharing information and emotions with people on a local and global scale

Technological Advances

Technological advances have transformed how crisis managers view, interact with, and disseminate information to affected communities in a crisis situation. Crisis and emergency risk communicators must consider how to make the most effective use of new communication technologies in response to public health disasters facing individuals, organizations, communities, and society. New communication technologies have transformed simple text messaging services into multimedia messaging services. For example, a person can take a picture or record video on a smart phone, type in commentary, and send that content directly to another person's phone, or to an Internet service. Users may also use services that allow them to directly stream live video from their smart phones to the Internet.

Converged Media

Mainstream media outlets are connecting with social media.³ For example, a majority of the content on Twitter comes from the mainstream media, either through media posts or through user reposts. Therefore, social media and mainstream media are increasingly converging.

During a crisis, if the response agencies and organizations are not engaged, the media will find other sources via social media to comment on the crisis. Thus, when it comes to being accessible to the media, not engaging with social media can have the same effect as not returning a reporter's call. Using social media in CERC also means changing the definition of media contacts to include backpack journalists, bloggers, and other key online influencers.⁴

Mainstream media organizations are increasingly using social media as a way to generate content. They may monitor social media, such as Facebook pages or Twitter feeds, for information. They may solicit news tips, pictures, or video. Today many federal agencies use Twitter and Facebook accounts as a way to provide timely information, including updates for the media.



Organizations evaluating social media should consider the following:

■ **Advantages of Using Social Media:**

- Provides immediate information
- Can create rapid connections and build relationships with the public
- Helps build and maintain dynamic relationships with the media
- Helps dispel rumors by immediately providing accurate information
- Incorporates website links where media outlets and the public can obtain more detailed information
- Works in support of a broader communication strategy

■ **Examples to help conceptualize these advantages:**

- Text-based 9-1-1 system
- Twitter-like feeds to report emergency department waiting times
- Photo sharing of disaster sites capturing progress and recovery efforts
- Mobile applications to provide new preparedness tools
- Interactive mapping

■ **Disadvantages of Using Social Media:**

- Some people mistrust social media. They may also not know how to use them.
- Personnel and technology are required to maintain and monitor social media services.
- Continual monitoring and following up are needed to update information and dispel rumors.
- Social media are limited in terms of how much information can be included.
- Some audiences do not use social media.
- Some people may post to create controversy, to start online fights, or to advocate their side of an issue or event.



Social Media Forums, Attributes, and Users

Social Media Forums

A 2010 survey of the U. S. population over age 18, conducted by the American Red Cross, showed that nearly three out of four participate in at least one online community or social network, with Facebook being the most popular (58%), followed by YouTube (31%), MySpace (24%), and Twitter (15%).⁵

According to the survey, one in six has used social media to get information about an emergency, including Facebook (14%), mobile apps (7%), Twitter (6%), text alerts from local governments (6%), and Flickr (2%). However, television news (66%) and radio (43%) continued to be the main source for emergency information during an event.⁵

The survey also showed approximately half of the respondents would sign up for the following:

- E-mails
- Text alerts
- Applications to receive emergency communication, including the following:
 - Location of food and water (53%)
 - Evacuation routes (52%)
 - Shelter locations (50%)
 - Road closures (50%)
 - Location of medical services (50%)
 - How to keep yourself safe during an emergency (48%)⁵

About half of those who use social media also said they would repost emergency information on their sites. More than half would send a text message to a responsible agency if someone they knew needed help. Nearly half would use social media to let loved ones know they are safe. More than two-thirds agree that response agencies should regularly monitor and respond to postings on their websites. Three out of four would expect help to arrive in an hour.⁵

An ever-growing list of social media forums is available. One of the challenges of social media is the accelerated pace of change as well as evolving technology, with new social media platforms coming online daily. It is important for public health communicators to understand today's technology:^{6,7}

- Stay informed about new social media platforms.
- Be aware of who is using what types of social media regarding the crisis event.



- Use new social media platforms that are deemed important by CERC communicators and those who bear risk during a public health event.
- Recognize where the largest audiences reside and put resources where they exist.

The following are the major social media categories with direct implications for public health emergency communicators (as of the writing of this book):

- **Social Networks:** These are individual websites where people sign in as members. They allow users to share content with friends or organizations for various reasons:
 - Develop friendships
 - Advance a career
 - Build emotional support
 - Purchase products or services

Websites such as Facebook and MySpace allow users to create personal profile pages, add friends, meet new people, comment on the activities of others, join groups with similar interests, and participate in online discussions.

Specialized social networks are also used. For example, LinkedIn, a business-related site, can be used for professional networking.

- **Blogs:** Blogs are well-known forms of social media. These are online journals that provide a platform for individuals and organizations to write and share content where readers can comment on the content as well as share that information with others. Popular websites for blogging are Blogger and WordPress.
- **Microblogs:** These are social media sites that allow people to share limited amounts of information through posts, often with links to additional information. One good example of a microblog is Twitter, which allows sharing of bite-sized (140 character) content. Microblogs play an increasingly important role during public health emergencies, much like forums and content communities.
- **Wikis:** Wikis are Web pages where people work together as a community to create and edit content. For example, Wikipedia, is an online encyclopedia that allows participants to add content or edit the information provided in articles. Wikis are also used by government and other organizations to manage projects, conduct research, and brainstorm.
- **Podcasts:** These are a series of digital media files that are released periodically. They are often distributed through a subscription-based service, but many are also available for free online. They can include both audio and video, or multimedia formats.
- **Forums:** Internet forums are online discussion groups focused on particular interests and topics. They have diverse topics of interest available for discussions. They can be powerful and popular elements of online communities during a public health emergency.
- **Content Communities:** Members use content communities to share photos, videos, and other multimedia content. These platforms are organized around specific content that people create,

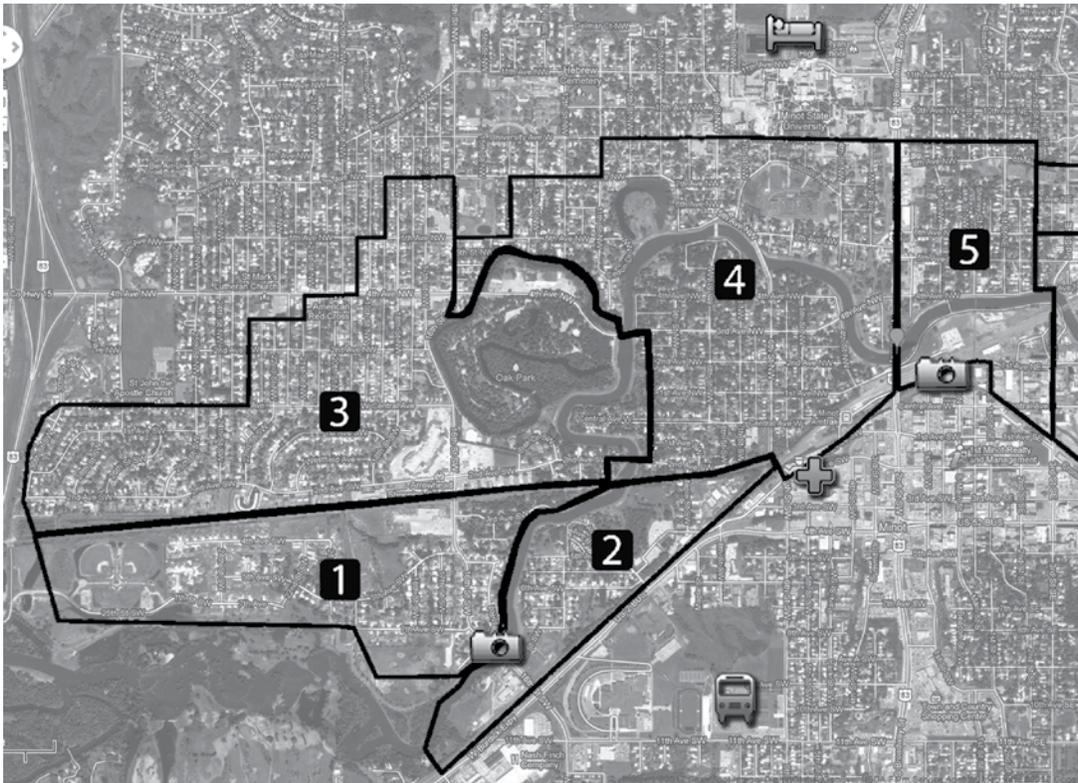


share, and discuss. Some examples of online content communities include YouTube and Flickr. The visual nature of these sites can play a positive or negative role in communication during a public health emergency.

- **Aggregators:** These are social media tools that collect content from different sites into one site. Their content includes news stories, blogs, and any other specific information available on the Web. The information they provide is frequently ranked by popularity and can include comments from users. Examples of aggregators include Google Reader and Magnify.net, a video aggregator.
- **Social Bookmarking:** Users share and rate online content through social bookmarking sites. Online bookmark management services are generally organized by subject matter. The full resources themselves aren't shared, merely bookmarks (links) that help to reference where they can be found. Examples of social bookmarking sites include Delicious and Digg.
- **Crowdsourcing Content:** Crowdsourcing is the act of outsourcing a task traditionally performed by an employee or contractor to an undefined, large group of people or community through an open call. Crowdsourcing social media sites have been used successfully in response to emergencies:
 - Managing traffic following natural disasters
 - Tracking food radiation contamination following the 2011 Japanese earthquake and tsunami
- **Livecasting:** This encompasses Internet radio and other applications that are streamed through a live broadcast to your social network or audience.
- **Virtual Worlds:** Computer-generated worlds, such as Second Life, allow users to interact with one another inside a virtual community.
- **Multi-User Online Games (MOGs):** A number of online communities of gamers provide virtual worlds in which users play together and socialize. They share information and experiences with other players around the world.
- **RSS (Really Simple Syndication):** This type of Web content is constantly being created and updated. RSS automatically feeds current content from key websites to subscribers as it is published.
- **Digital Mapping:** Data from many disasters such as fires, floods, and even disease outbreaks are compiled and turned into real-time, interactive visual images or digital maps (See Figure 9-1). Google Maps and Ushahidi⁸ are examples of mapping programs used by the public. Programs such as ETEAM and WebEOC also use digital mapping to improve coordination and share information among crisis response organizations. These also support situational awareness for your emergency operations center or EOC.
- **Pinterest:**⁹ This is a content sharing service that allows members to “pin” images, videos, and other objects to their “pinboard.” It also includes standard social networking features.



Figure 9–1. Google Map of 2011 Minot, North Dakota, Flooding (Otis & James, 2011)



Google Attribution for Figure 9–1 (<http://maps.google.com/maps/ms?ie=UTF8&source=embed&t=h&oe=UTF8&msa=0&msid=210936661488428171865.0004a488925fb9508a017>)

(Shortened URL: <http://tinyurl.com/3svvd74>)

The above digital map provides locations for critical resources that could be used by people affected by the flood. Certain locations are marked with icons, which indicate that more information is available about access to this location and the resources available there. Examples of icons and resource information are listed below:

 **Minot Auditorium/Evacuation Center**
The Minot Auditorium will be made available to evacuees as needed.

 **MSU Dome Evacuee Shelter**
The MSU Dome is still accepting and housing any evacuees.

 **Temporary Re-Entry Zone**
From the Minot Flood Emergency Operations Center: Residents living on the East side of 1st Street NE and the North side of 7th Ave NE are allowed back to their homes during the hours of 8 am to 8 pm, beginning today.



Broadway Partially Open

6.29.2011: Broadway will be open for North/South traffic between the hours of 7AM-10AM and 4PM-7PM. No entrance into evacuation zones is permitted, and the road will only be operated as a two-lane for the time being.



KXMC Live Camera

CLICK HERE for a live camera view of the Souris River at the Broadway bridge.



Jim Hill RV Parking

The Jim Hill Middle School parking lot has been opened up for RV parking - they have about 80 spots open for parking. There are no services available (electricity/water/sewer.)



EVAC ZONE 1

6.22.2011: SIRENS HAVE SOUNDED/AREAS MUST BE EVACUATED IMMEDIATELY/ MANDATORY EVACUATION IS IN EFFECT.



EVAC ZONE 2

6.22.2011: SIRENS HAVE SOUNDED/AREAS MUST BE EVACUATED IMMEDIATELY/ MANDATORY EVACUATION IS IN EFFECT.

Social Media Attributes

Social media are a collection of online communication platforms that share five major characteristics or attributes, including participation, openness, conversation, communities, and connectedness.¹⁰ Other attributes include reach, accessibility, usability, immediacy, permanence, and education and entertainment. These attributes create unique communication opportunities when compared to older media channels:

- **Participation:** Anyone who has access to the Web can share information and provide commentary and feedback on a crisis through dialogue and information push or by creating and altering content.
- **Openness:** An opportunity for transparency concerning management of the crisis and crisis communication is at the core of social media. Most social media platforms are built on community discussions that require posting content and providing feedback.
- **Conversation:** CERC is reliant on both information push, such as for a product recall or boil water notice,

“There are two great advantages for using social media for emergency communications and those two advantages revolve around speed, it’s really fast and it’s direct.”

*Ali Khan, M.D., M.P.H.,
Director,
Office of Public Health
Preparedness and Response,
CDC*



and two-way communication. It is also a give and take of information and perspectives, such as community discussions about risks of environmental contaminants.

- **Communities:** During a crisis, single-issue groups and groups with similar interests can arise quickly. These groups may have already gathered in chat rooms and on discussion boards, Facebook, and Twitter. They may be more engaged during a crisis. Social media enables the creation of communities that are temporary in nature until the crisis event is over. However, these communities may continue into the crisis resolution, follow-up, remediation, and compensation stages.
- **Connectedness:** Social media involve sharing content with people and organizations known or unknown. Participants often provide and use links to other content for information or emotional support. During crises, those bearing the risk have used social media as an emotional outlet, especially when the crisis isolated them from friends and family.

Additional Attributes

- **Reach:** While social media do not reach everyone, a diverse range of the public, including minority communities and older people, increasingly uses it.¹¹ A digital divide remains in the sense that some people will be more connected than others. Therefore, communicators must also use traditional forms of crisis and risk communication to make sure they reach the widest possible audience. Social media do not replace other forms of communication; they enhance the overall package of communication tools.
- **Accessibility:** Social media are accessible through many handheld devices. This means that information will be more accessible to a large number of users. A disaster may disrupt service and accessibility. If electricity is not available, but cell towers are still working, handheld devices may enable people to continue using social media channels.
- **Usability:** Social media are increasingly user-friendly, allowing users to quickly and easily view and generate content.
- **Immediacy:** One of the most important attributes of social media is the speed with which information can be distributed.^{12,13,14} In fact, many crises and disasters are likely to be reported first via social media.
- **Permanence:** A record of an event can be maintained through social media postings. This information, which may be in the form of text, audio, images, or multimedia, can be used to assess additional risks during the crisis event. It may also be used for crisis resolution, follow-up, fixing the problem, and compensation.
- **Education and Entertainment:** Social media are used for both education and entertainment. Many elements of social media can be used to more dynamically engage the public information



process. At the same time, much of social media dialogue and sharing is about entertainment and can help engage audiences. An appreciation for the complex nature of social media is important when communicating during public health emergencies.

Social Media Users

Social media users are diverse and can be put into five categories.¹⁵ Each category of users has implications for public health communication during an emergency:

- **Lurkers:** These are users on the outside looking in. They observe the community and look at content, but do not comment or contribute. While these users are not engaged in social media, they may look to gather information about the crisis. This way they experience the crisis, but are not directly responding to the event.
- **Novices:** Novices are just beginning to get engaged in the social media community. They are more active observers and create a limited amount of content. They may post photos or participate in a few threads of conversation. During a crisis, novices are likely to get more involved in creating and sharing content.
- **Insiders:** These users are consistently engaged in dialogue and content creation. They interact with other members and make an effort to comment, rate, and use materials from other organizations and people. During a crisis, insiders will seek risk information from social media. They expect response organizations to be engaged with social media and provide information quickly and accurately.
- **Leaders:** Leaders are users who are recognized as veteran participants. They will cross-link information, often comment on newly posted material, and correct misinformation or misbehavior as needed. During a crisis, leaders are followed as sources of information for traditional media as well as those bearing the crisis. Leaders are also more likely to self-correct misinformation about the crisis.
- **Elders:** These are users who have stopped using social media for a variety of reasons. They may have a problem with time or have acquired other interests. During a crisis they might re-engage in various capacities as needed.

When you engage with social media users, keep two other unique characteristics in mind:

- Social media users bypass traditional media and other information gatekeepers by posting their thoughts, images, and multimedia messages directly. However, this does not mean that social media users are not consumers of traditional media.
- Social media users also use traditional media by posting and reposting media content and linking RSS feeds.

Communicating with social media users is quite different from providing press updates and press conferences with traditional media personnel. For most social media users, the creation and



dissemination of content is not their job. There is little to no formal training or an apprenticeship period for social media users.

The technology, and application of the new technology, is constantly evolving at a pace that makes it very difficult to keep up with changes. Health communicators are challenged to do the following:

- Learn how to use it and use it routinely prior to an event.
- Understand who is using it and why.
- Know the proper formal and informal protocol for sharing information and engaging in dialogue.

Working with Social Media Before and During a Crisis

Before a Crisis

Social media have changed how crisis and risk information is handled prior to, during, and after a public health emergency. This information may be in the form of text, audio, visual, or multimedia. Social media have affected every step in the process of handling crisis information, including how it is created, manipulated, processed, shared, and disseminated.

Developing relationships with audiences before a crisis occurs builds trust. Using social media before a crisis can also help promote preparedness and educate audiences about risks. Organizations need to be regular users of social media before a crisis. Establish your social media relationships early. If not, social media users will go to other sources and groups with whom they already have relationships for information.

Following are some best practices for using social media for risk communication before a crisis:¹⁶

- Determine social media engagement as part of the organization's risk and crisis management policies and approaches. Every crisis communication plan should have a section for communicating with stakeholders and working with the media. Social media can be used to communicate directly with stakeholders and the media at the same time. More importantly, social media provides a built-in channel for stakeholders to communicate directly with organizations. Incorporating social media into the plan ensures that social media tools will be analyzed and tested before the crisis. It also requires regular updating of the communication plan as social media evolves.
- Incorporate social media tools into environmental scanning procedures to listen to audience concerns. One important use of social media is the opportunity it provides, if used well, to listen to the concerns of the public and others who may be bearing risks. When users create and manage their own content, external and internal social media monitoring becomes even more critical. In addition, tracking issues through social media and reporting the results to the crisis management team can increase the potential that a crisis will be addressed sooner. It will also demonstrate to the team why social media needs to be embraced in the crisis response.



- Use social media in daily communication activities. Individuals may have information that is crucial to handling the crisis. However, they probably will not share that information if they do not trust the organization or know where to find it online. Do not wait until you are in the middle of a crisis to try using social media. To build partnerships and build trust, the discussion with members of the public should already be taking place. Internally, using social media like Wikis on day-to-day projects can streamline communication within the organization and increase efficiency.
- Follow and share messages with credible sources. Collaborating with trustworthy and supportive sources can enhance the credibility of the organization and increase its reach. By cross posting and retweeting messages among partner organizations, a coalition of credible sources is established and more individuals are reached through shared networks.

Preparedness 101: CDC's Zombie Apocalypse Venture

When CDC was looking for a way to draw new attention to emergency preparedness messages, they used zombies to provide a witty yet educational guide for their Public Health Matters blog. Using existing resources and social media savvy, CDC's Office of Public Health Preparedness and Response harnessed the power of popular culture and created a viral campaign that caught national and international attention.

Buzz started to grow about the blog and it went viral two days after @CDCemergency tweeted, "Prepared for a #zombie apocalypse? If so, ur prepared for any emergency. Learn more: CDC Public Health Matters blog <http://go.usa.gov/jRH>."

The blog, which usually receives around 3,000 visitors a month, was overwhelmed with users and crashed 48 hours after 30,000 readers rushed to see what had caused all the commotion.

Within one week, the blog post received over 2 million page views. Comments about the blog on CDC's Emergency Preparedness and Response page (on Facebook) sparked discussions about what people are doing to prepare. In some cases users sought advice from other users.

Catherine Jamal, Lead for the Emergency Web and Social Media Team, summed up the experience of using social media for risk communication by stating the following: "It was exciting to make a campaign that was directly tailored to what users told us they were interested in, and then have that campaign resonate with all of our target audiences—the general public, public health professionals, health-care providers, emergency responders, and even the media. Sharing the message of general preparedness via social media channels like Twitter, Facebook, widgets, and badges enabled us to reach people of all ages around the world in about a day."



During a Crisis

While social media are important before a crisis occurs, the immediacy of social media is a particularly important feature during a crisis. Public health emergency managers and communicators are challenged with the demand for delivering accurate information rapidly. It must be done in a manner that can be altered and shared through diverse social media channels.

The various forums discussed earlier can be expected to play a role during a crisis. The most immediate forms, such as microblogging (Twitter) and social media (Facebook), will be prevalent in the earliest stages. For example, within one week of the 2010 earthquake in Haiti, “more than one in 10 Americans (13%)—including 24% of those younger than 30—say that they’ve gotten or shared information about the Haiti earthquake through Facebook, Twitter, or another social networking site.”¹⁷ Social media should also be accessible during a crisis from a multitude of digital handheld devices.

These highly mobile communication devices have created additional access to social media and are particularly useful for transmitting hazard and risk warnings to those members of the public who principally rely on these devices for news and communication. The rapidly evolving Commercial Mobile Alert System (CMAS) communicates alerts and warnings to handheld devices.¹⁸ Later in this chapter mobile media are discussed in more detail.

With social media, everyone has the potential to be watchdogs, citizen journalists, photo journalists, and caring or nosy neighbors who can constantly survey the world around them and share what they find online. Stakeholders on the ground of a crisis event are generally the ones with first-hand knowledge. They become key sources of information and facilitators of a broader understanding of the event. They may do the following:

- Provide information that is critical for situational awareness
- Distribute information
- Create content and visuals
- Assist in connecting people and information via social media

They may not intend to help CERC communicators but the information they provide inherently does.

“You have to figure out what it is you are trying to do, what is the mission, the effects you’re trying to achieve, and what enhances your ability to do that. For the majority of the population and the complex problems we’re dealing with today, it takes you to social media.”

*RADM Thad Allen, Retired,
Former Commandant,
United States Coast Guard*



Some best practices for using social media during crisis events are described below. These can be helpful in determining a social media strategy for an organization:¹²

- **Join the conversation, help manage rumors by responding to misinformation, and determine the best channels to reach segmented audiences:** Health communicators can do more with social media than track issues. It is essential that they interact with their audience to address misinformation and establish the organization as a credible source. Responding to posts demonstrates that the organization cares what stakeholders think. It also demonstrates that the organization is engaged and able to address their concerns. Reaching specific audiences with a key message is a foundation of targeted communication. However, in CERC, communicators often resort to the standard mass media push to reach everyone at once. Health communicators must still consider how messages will be interpreted and who will not be reached. After all, those who face the greatest risks are often those with the least access to information. Determining the best communication channels for specific audiences online or in the community should be incorporated in communication plans.
- **Check all information for accuracy and respond honestly to questions:** Inaccurate information that is shared and retweeted, or passed on through other social media outlets, not only makes the organization look bad, it can also look bad for the user who passes on the information. It is easier simply to skip over a post you do not want to address than it is to ignore a pointed question from the media. However, the public, like the media, will turn to other sources if the organization stonewalls on key issues. If you do not know the answer to a question, it is better to communicate the uncertainty of the situation and explain what you are doing to find out the answer than to answer incorrectly or not answer at all.
- **Recognize that the media are already using social media:** The crisis will likely be discussed through social media, and traditional media will be part of that discussion. If the organization is not engaged, the media will find other sources through social media to comment on the crisis. Thus, when it comes to being accessible to the media, not engaging in social media can have the same effect as not returning a reporter's call.
- **Remember social media is interpersonal communication:** Social media allow for human interaction and some degree of emotional support, and have been shown to be important to stakeholders dealing with crises.¹⁹ If communicators use social media to send out messages that come across as generic marketing blurbs, these messages will be seen as cold, callous, and impersonal. They will not encourage the relationship building and mending needed in a crisis. Organizations should be ready to pull messages, such as advertisements or campaigns, in case of a crisis. It took 2 days after September 11, 2001, for advertisers in Times Square to change their billboards to messages of sorrow, charity, or patriotism. Two days is a lifetime online, especially as it relates to social media. Incorporating and responding to emotional appeals are ideal uses of social media, but organizations have to be ready to move to that message exchange instantly.



- **Use social media as the primary tool for updates:** Organizations often promise to follow up with the media and public as soon as they have new information, but then wait to release that information until a press release can be drafted, refined, cleared, and sent out. Generally, it's posted to the organization's website after the release. Sometimes, organizations will wait until the next scheduled press conference to provide their updated information; this allows them to have a spokesperson deliver the information while also displaying the appropriate emotions. Using social media allows organizations to keep their promise of providing timely updates to the media and public.
- **Organizations have another option:** They can use social media for updates in the crisis response and recovery. This allows them to humanize the response and continue to be a reliable source without requiring all the exact details and time needed to fill a press release or hold another press conference.
- **Ask for help and provide direction:** Giving people something meaningful to do in response to a crisis helps them make sense of the situation. As a partner in the crisis response, the public can provide essential information, especially if they are directly affected by the event. By providing that information, social media users are taking action. When an organization requests useful information via social media, it helps both the organization and the stakeholders who respond in managing the crisis. If there are actions individuals can take to reduce risks or assist in the recovery efforts, social media are an ideal forum for reaching stakeholders with the directions needed. Even more, by simply forwarding, cross-posting, or retweeting the directions, users are taking action.
- **Web 2.0 is not a solution to all communication problems:** Social media remains a channel or tool with its technological advancements, rapid access to information, large numbers of users, low cost, and ease of use. The power to communicate remains with the behaviors of the communicating organization and the content they produce, not in the technology. The real value in communicating through social media comes from the quality of the content being disseminated. That content needs to explain the actions of the organization while demonstrating compassion and empathy for those affected. Thus, using social media is not a best practice in CERC. Social media are a tool that can assist practitioners in following best practices.

Reality Check

During a public health emergency, community information is often difficult to gather. Social media are a great way to scan and monitor the environment, getting glimpses and anecdotal evidence about how a community is responding to the crisis.

- Gain insight into areas of misinformation.
- Understand emotional response issues for first responders.
- Gather an informal impression about what risk bearers are thinking, perceiving, feeling, and sharing.



Writing for Social Media during a Crisis

Unlike working with journalists, there is not a generally agreed upon writing standard for social media. The pressure is to move the process along at the accelerated pace of the online world.

The public's belief that an emergency response was effective is related to how much access to information they had during the crisis. The fundamental challenge is have speed and accuracy. Both are crucial:

- If information is accurate and released after the public has moved on to another issue, it has little value.
- If information is out fast, but inaccurate, it's a mistake. The best-case scenario is to admit errors and move on. The worst case scenario is that the inaccuracy causes harm to the public and damages your organization's credibility.

When writing for social media, keep the following points in mind:

- **Provide adequate scientific expertise:** During a public health emergency or any event involving technology, most social media users will not have the scientific background to quickly grasp new information or the nuances of that information:
 - Prepare to fill in the blanks without talking down to your audience.
 - Do not assume that everyone knows technical jargon.
 - Engage in dialogue with social media users.
 - Start with the basics regarding new information.
 - Bring reporters along in their understanding of technical issues. Reporters will appreciate not being made to feel stupid, and their reports will be more accurate.
 - Link to other credible Web resources.
 - Explain points from using plain language as social media are a user-driven medium.
 - Engage your technical experts with social media early.
- **Provide messages of self-efficacy:** Social media are about dialogue, participation, connectedness, and other social attributes. It relies on people to engage in communication and take responsibility for both communication and action during a public health emergency. For example, when an F5 tornado devastated the town of Joplin, Missouri, in 2011, FEMA immediately posted messages on their blog, Twitter, and Facebook pages.²⁰ They also created a video featuring FEMA Administrator Craig Fugate communicating to the public how they can help tornado survivors as well as how to keep safe during a tornado.²¹



■ **Use social media to provide emotional support:**

- Communicate with compassion, concern, and empathy.
- Be present but understand that some of the dialogue can be frustrating.
- Prepare for emotionally charged reactions to the crisis event and how the situation is being managed.

■ **Establish trust with social media users:**

- Identify yourself and your organization if you are providing information in chat rooms, posting videos on YouTube, or making comments on Facebook groups that have been set up specifically for the crisis event.
- Communicate with honesty, candor, and openness.

■ **You are not necessarily able to control what messages are being sent:**

- Be prepared for all types of messages about your brand, partners, stakeholders, and audiences.
- Have a strategy about when and how to respond.

■ **The public is increasingly diverse in terms of which medium they are using to get information:** This is a huge barrier for public information officers and public relations professionals seeking to manage a crisis.

■ **Use social media to listen to the public:**

- Listen to concerns and understand the audience.
- By engaging in social media dialogues, you can address rumors early and correct misinformation more easily and quickly.

■ **Collaborate and coordinate with credible sources:** Feel free to repost or retweet effective messages from credible sources such as other public health, emergency management, or disaster relief agencies, or even influential bloggers who are supporting your organization.

■ **Partner with the public via social media:**

- Stay transparent by providing enough information for people to know what is happening.
- Update your social media profiles regularly.
- Include information on how the situation is being handled and how decisions are being made.
- Include information on decisions about how to communicate with the public during the crisis



- **Accuracy is always important but so is speed of response:** Concerns about accuracy may be why some emergency managers avoid social media. While this may be problematic at times in both traditional and social media, anecdotal evidence during a crisis suggests that social media are generally accurate because they are self-correcting. People who are experiencing the crisis or public health emergency will often correct misinformation, provide more timely information than emergency managers have, and provide more detail than officially provided. In this manner, the advice to accept uncertainty and ambiguity is ever more necessary in social media.

The core principles of crisis and emergency risk communication, “Be First, Be Right, Be Credible,” apply to social media. Throughout this manual, it has been emphasized that effective CERC means being quick, accurate, consistent, and credible—being the first and best source for information. Social media are one of the tools to help you achieve these goals.

Using Social Media during the H1N1 and the Seasonal Flu Outbreak

During the 2009–2010 H1N1 and seasonal flu outbreak, CDC and the U.S. Department of Health and Human Services worked together to create social media tools that provided the public and partners with credible, science-based information. A comprehensive set of tools was developed and utilized to encourage participation and achieve the overall goal of communicating key messages to influence health decisions.

By using multiple formats to disseminate messages, users had the option to participate based on their knowledge, level of access, and engagement with social media. A variety of tools was made available to partners to ease their sharing and promotion of H1N1 and seasonal flu information. Tools with portable content, such as widgets and online video, allowed users to share messages and become health advocates.

The CDC Facebook page was used to share H1N1 and seasonal flu updates and provide social media tools, such as the following:

- Badges and widgets, for users to download and share
- Links to CDC.gov for additional information
- Posted blogs from CDC subject matter experts
- Promotions about CDC’s text messaging campaign

By using Facebook to share H1N1 and seasonal flu information, CDC reached a younger audience than they reach with their main website, www.CDC.gov.⁶



Providing Links to Other Key Information Sources

Social media can be used to link directly to other credible sources of information about a disaster or crisis. This allows users to select the kind and amount of information they want.

Advantages of providing links within social media posts:

- Links can be used to direct readers to information presented using other methods, such as the following:
 - Video, audio, or both
 - Telephone news conferences or webcasts
 - Text from press releases
 - Satellite media tours
 - Commercial press release services
 - E-mail distribution and broadcast faxes
 - Website content
 - Websites, video streaming, and webinars
 - Press conferences or media opportunities
- The linked content can provide additional information, include background information that may help provide context for the social media post.
- Links give traditional media organizations both tangible and electronic items to use.
- Providing links allows for the simultaneous release of paper and electronic (e-mail and Web) forms.
- Links can be disseminated through multiple social media channels, directing readers to go to a single source for the content. This ensures consistent information is distributed to all social media users. It also makes it easy for mainstream media outlets to get the right information.
- This method provides a historical record.

Disadvantages of providing links from social media posts:

- Releases take considerable time to write, and information may be changing while a release is being written. Communicators must be willing to update releases to provide the most current and accurate information. This means they must also communicate the uncertainty of the information they are providing.
- Releases may be difficult to clear through all layers of official command.
- Reporters and social media users will expect more information in that same form; be prepared to consistently release information this way.
- If the release is not organized through your command post or joint information center, competing press releases can and will occur. This is especially true if press releases cover information that spans response areas. This is particularly problematic if there is lack of clarity about who is responsible for collecting and releasing what information.



As discussed here and in earlier chapters, mainstream or traditional media functions differently during a crisis. This same statement can apply to social media. During an unfolding emergency, the behavior of social media users will be mixed and varied. During the early stages or phases of a crisis you can expect the following:

- **Diminished information verification:** Tentative information, sometimes incorrect, will be posted without the usual practice of confirmation from multiple sources. Social media, however, tend to be self-correcting as users fix content errors.
- **Diminished adversarial role:** Reporters will want to help by providing important messages. Most media outlets contribute in their way to public health and safety. Mainstream media may even see themselves in partnership with response officials in the early stages. Media professionals are generally more likely to adopt an independent stance as the event progresses. With social media, the users are the content providers, and “us versus them” is less of an issue.
- **For major crises, expect the national media to dominate:** Most people will get their news from the national media. Ideally, local media will likely feed information to the national media, coordinating their coverage. Messages meant for local audiences will compete for airtime with national coverage. Social media increasingly offset traditional media dominance and are a mainstream national media resource. Social media are a direct source of local news and can help provide important information and updates to people affected by the event.
- **Person-on-the-street interviews:** These interviews are common. Today, the use of cell phones and cameras is routine during the first moments of a crisis. Social media users are often the first to report and provide visual content of a crisis situation, often via handheld devices. During a crisis, social media allow everyone to serve as a reporter. Every cell phone becomes a photojournalist’s camera. Pictures, videos, and tweets can be posted almost instantaneously.
- **Media interviewing media:** Reporters interviewing other media personnel will be commonplace during the first moments of an event. Until official news sources are available, the media will use informal sources to fill time. This will include significant content from social media. Layperson and citizen journalist reports and content will be common. This will include advice, updates, requests, and status reports. Some of these reports will come from people who are directly affected by the crisis.
- **Information that cannot be easily found might as well not be published:** Structured hierarchies and predetermined groupings for sorting information are standard within many organizations. However, social media users don’t think along those lines. User-defined tags, and Google-inspired index-driven searches are the design patterns for social media. For example, if you only communicated or “tagged” your 2009 pandemic flu prevention information as H1N1,

Reporters will want to help by providing important messages.

Media professionals are generally more likely to adopt an independent stance as the event progresses.



you would have missed your key audiences. Social media people were mostly searching for “swine flu” on Facebook and Twitter.²²

- **Employees want information first:** Internal audiences are important and should generally be targeted as one of the first to receive information. Doing so helps ensure collaboration is occurring and that employees have the ability to be on the same page.

Keeping Up with Social Media during a Crisis

How to Keep Up

One key concern about social media during a crisis is how to keep up with and process all the messages. It’s a legitimate concern but one that isn’t unique to social media. Crisis management and communication has and will always be about processing and communicating information quickly. The difference is that the conversation is now even more immediate and disseminated more widely. Make sure that you do the following:

- Don’t miss vital information being shared via social media.
- Enhance situational awareness of the event.
- Respond in a timely manner to those bearing the risk if they ask direct questions through social media platforms.

Two things can you help manage these concerns:

- One option is to outsource computer processing or geospatial monitoring to collect, categorize, sort, and analyze social media content for quick feedback during a crisis.
- A second option is to outsource social media crisis communication specialists to assist in managing the social media dialogue during and after a crisis. Such an option does relinquish control over messages and should be approached carefully.

Using Social Media for Internal Organizational Communication

One group that is sometimes overlooked is your internal audience. Social media can have a significant impact on internal communication in organizations and agencies during a crisis. Using social media for internal communication are an excellent strategy for organizations involved in public health disasters.

When implementing your internal social media strategy during a health disaster, the following factors are important:

- Have a social media policy that defines the types of boundaries your agency may require for maintaining confidential information.
- The culture of your organization may need to adapt to allow for the proper use of social media.
- Create only those social media services that will benefit the agency, stakeholders, and partners.



These challenging tasks might best be initiated through conversations with key managers and communication professionals. Also review and use the Social Media Communications Strategy Worksheet located at the end of this chapter.

Some questions to ask when using social media internally include the following:

- Would people in your organization be more effective if they could communicate more quickly and accurately with each other?
- Would your organization, and the people working and volunteering for you, be more productive if they were able to work in a more collaborative environment?
- Could the environment of your organization be improved by using a communication tool that brings about quick communication and collaboration?

If you answered yes to any of these questions, consider using social media inside your organization before, during, and after a crisis event.

The following suggestions can help integrate social media into your current internal websites and move your organization's approach from using Web 1.0 to Web 2.0. This will be especially helpful in managing a public health emergency:

- **Planning is fundamental and essential for success:** Create a vision and a plan that is based on a thorough assessment of employees' or members' needs and expectations, as well as those of management.
- **Leadership must set the tone:** Senior management must lead by example and spearhead the dialogue, by establishing the culture of social media use within your organization. Sanitized "organizational speak" from communication specialists posing as executive voices does not work. It runs the risk of hurting trust among employees or members who want honest, direct, and simple messages.
- **Policies and training are necessary:** What can and can't be done needs to be defined. Anonymous postings should not be allowed. Everyone needs to take ownership of their contributions.
- **Everything is about conversation and dialogue:** Co-creating content for solutions to challenges is important. Everyone can and should participate. Actively encourage employee and member comments and contributions to blogs and wikis.
- **Social media content has to be relevant and up-to-date:** A blog that is updated once a month isn't serving a purpose. Don't start a social media site and just leave it, hoping it will take off.



Mobile Media and Its Role during a Crisis

Mobile Devices

Web 2.0 offers an excellent opportunity to use mobile handheld communication devices for transmitting hazard and risk warnings to the public. These devices include the following:

- Mobile phones
- Smartphones
- Personal digital assistants (PDAs)
- Wireless tablets
- Mobile collaboration devices that extend the capability of video conferencing in real time over secure networks

In the past, mobile devices were designed for news and personal communication. Today, these devices are used for many CERC functions, including the following:

- Information sharing
- Real-time coverage of events
- Dissemination of crisis information to family and friends
- Location and safety updates of family members and other loved ones
- Directions away from disaster areas

Using Mobile Devices

Community members who experienced the 2007 southern California wildfires sought information using mobile phones to contact friends and family, including by using the following:

- Information portals and websites advertised in traditional media
- Individual blogs
- Web forums
- Photo sharing sites, such as Flickr and Picasa
- Microblogs, like Twitter

Residents used mobile technology devices to fill the information void and get details that weren't available in traditional media.¹² They also used it to inform themselves and each other about their safety. The benefit of mobile devices is that they are small, smart, and portable. People will stay connected, as long as channels are available.



The mobile telephone, once only used to communicate by voice with others, has evolved into a powerful communication tool. This includes smart phones that come with a wide variety of applications, commonly referred to as “apps.” These apps can empower responders and the public to perform a number of tasks, while staying mobile:

- Communicate by voice with others
- Take photographs
- Make videos
- Send text messages
- Perform powerful computing functions
- Organize tasks
- Take notes on site
- Send press releases in the form of text messages to the media, stakeholders, partners, or the public
- Manage location-based applications and systems through the global positioning system (GPS)

GPS technology is a satellite-based navigation system that allows users to identify their geographic locations. These devices are rapidly becoming more popular.

Mobile phones offer a number of pathways for effective communication. Traditional one-to-one verbal communication has been augmented with other variations. In one-to-many communication, a sender can broadcast information directly to a large segment of the population or to a large stakeholder group. The information can be disseminated in various forms, such as photos, videos, short message service (SMS) text messages, and short press releases.

In many-to-many communication, the mobile device is used to connect groups of people using mobile wireless Internet capabilities including social networking sites like Facebook, Twitter, and foursquare.²³ The latter is particularly well-suited to the mobile device, because it combines location-based features such as geographical information with social-networking capabilities. The foursquare app, like many social media systems, raises questions about privacy.

Handheld devices provide a number of advantages to professionals in a disaster or crisis situation, including the ability to maintain continuous communication and to better manage the flow of information. Continuous connectivity, however, often creates information overload and creates the expectation of always being in touch. One of the primary benefits for public health communicators and emergency managers is access to on-the-ground information from those affected by the crisis, including the following:

- Location of casualties
- Overcrowded health facilities
- Blocked access points
- Sources of food contamination

Along with these advantages, however, come risks that must be anticipated and managed. Technologies allow the entire online community to obtain information that can potentially create problems for those tasked with managing a crisis. For example, officials might experience impromptu reporting in which



bystanders use their phones to record video or take photos of emergency personnel who may not appear to be acting professionally. Under the stress of a crisis, the immediacy of digital communication might result in false information being communicated to stakeholders.

In addition, social media users can take advantage of these technologies to create and disseminate their own influence, decentralizing the dissemination of information, and reducing official control. For example, following a school shooting at Virginia Tech University on April 16, 2007, the school could not officially release the names of dead and injured students to the media until all relatives had been notified. However, students were sharing this information through social media because people wanted to know if their friends and family were safe.²⁴

Mobile devices do more than enhancing the communication individuals have with their personal contacts. The technology also forges mobile connectivity with an entire online virtual community. With mobile devices, users can do the following:

- Receive information through their devices.
- Create their own content or forward content immediately to others while in the field.
- Contribute directly to the media by providing eyewitness perspectives through video, photos, or texted accounts of an event.
- Bypass the professional reporters on the scene and providing unfiltered views of what is happening in the world.

Reality Check

A Morgan Stanley analyst suggested that the world is currently in the midst of the fifth major technology cycle of the past half-century, predicting that within the next five years more users will connect to the Internet over their mobile devices than on desktop PCs.²⁵

Mobile Devices Used in Disasters

Globally, mobile devices have become more affordable and integrated into everyday life. This has changed the way people communicate with each other in a disaster situation. For example, people in a disaster zone can communicate more quickly over the mobile network, including searching for loved ones. Journalists can literally walk around as a mobile television or radio studio covering the event. Analyses of disaster situations occurring since 2000 illustrate the opportunities and challenges of using mobile devices in a crisis. Mobile technologies have played a prominent role in several crises and disasters:



- **Southeast Asia tsunami catastrophe in 2004:** Photo sharing capabilities and features were used to document events and to provide dramatic visual eyewitness accounts, including a poignant and frightening video of an incoming wave taken from the abandoned camera of one of the victims.¹⁵ This disaster also saw the initiation of the use of mobile technologies to solicit and receive donations for relief efforts.
- **2005 London subway terrorist attack:** Mobile devices played key communication roles during these terrorist attacks in the London subways. Despite some challenges, mobile devices were useful tools for coordinating the dissemination of information during this event to affected populations. In this particular case, the initial use of mobile devices was to communicate information in the form of text followed by visual information. Mobile devices were soon used to forward pictures of the impact of the bombings on train stations to the London community, the media, and the rest of the world.
- **Virginia Tech shootings of 2007 and Northern Illinois University (NIU) shootings of 2008:** Shootings occurring on university campuses, including Virginia Tech and NIU, provided further insight into the impact of mobile media use on disasters. People were beginning to use mobile media more extensively to communicate with others and give real-time accounts on what was going on during these traumatic events.¹⁵ Researchers analyzed online communication that occurred during the Virginia Tech and NIU shootings and found that people used virtual communities (e.g., social networking sites) to interact with others, seek information regarding the crisis, share experiences, form online relationships with others, and build community and awareness of the tragic events.²⁴ In the aftermath of these shootings, many colleges and universities instituted cellular phone services to communicate safety alerts to students, faculty, and staff.
- **Mumbai terrorist attacks of 2008:** Mobile phones also played a significant role in the Mumbai terrorist attacks in 2008 by raising awareness through eyewitness accounts. On November 27, 2008, a series of coordinated terrorist attacks across the city of Mumbai hit several hotels, a cafe, train station, and a Jewish center. Several people were killed. What was unique in this particular case was the fact that the traditional news media were obtaining most of their information from sources on the ground in Mumbai. Citizen journalists were reporting events during the 60-hour terrorist ordeal using tweets, Flickr pictures, and videos posted on YouTube from their mobile devices for the world to see.²⁶
- **Haiti earthquake of 2010:** Following the earthquake, mobile devices allowed people from all over the world to donate to relief efforts using text messages. This type of fundraising effort, first seen following the 2004 tsunami disaster in Southeast Asia, increased the awareness of the power of nonprofit organizations as a communication channel in a disaster situation. The Haiti earthquake disaster highlighted the use of SMS text messages to communicate first response aid to individuals needing immediate medical attention or who were trapped under buildings and other fallen structures. Mobile phones were used to communicate first aid information and to provide information about where to go for shelter, food, water, and other health assistance.

Some of the messages that were being sent via these mobile devices included information such as the following:



- **An offering of medical care:** “Hospital Sacre-Coeur in Milot says it has capacity for patients and asks people to make their own way there”
- **An announcement concerning search and rescue:** “Though the government says the search and rescue phase is over, SAR teams are still available. If you know someone is trapped call + 870 764 130 944, e-mail haiti.opc@gmail.com, or contact MINUSTAH”

Response personnel also sent general advisories on other issues of relevance.^{27,28} The growing prevalence of mobile phone ownership and use, even in very poor countries like Haiti, makes rescue efforts possible that would have been unthinkable in 2000.

- **Japanese earthquake and tsunami of 2011:** Social media use in response to the disasters that hit Japan in 2011 highlighted the growing importance and evolution of social media and mobile device use during a crisis event. In addition to uses described in the previous crisis events, crowdsourcing websites were used for monitoring traffic patterns out of affected regions and for tracking radiation contamination of food in the affected region and beyond. In addition, Google’s Crisis Response site was one of the most visited social media sites used for sharing information on the crisis. It provided access to the company’s Person Finder search program, which helps people reconnect after a disaster, using both personal descriptions and photos. People could post if they had been identified as missing as well as search for missing friends and family. They could make donations to multiple agencies. They could connect with missing persons phone lines and emergency voicemail message boards. They could also receive alerts and statuses from world health agencies, Japanese utility companies, government agencies services, and real-time updates of RSS feeds.

People use social media tools often through mobile devices during a crisis. These tools can help determine the whereabouts and well-being of their friends and family, process information in real time, and serve as a way to post corrections when users conclude that information is not accurate.

Opportunities

Mobile devices provide many opportunities for more effective communication in disaster situations.²⁹ With their immediacy and nearly universal prevalence, mobile technologies allow rapid and proactive disaster relief responses. Professionals operating in disasters have greatly improved remote access to information, along with the ability to communicate with their home base or others onsite.

- **Valuable Resource for the Community:** Mobile communication channels also serve as a valuable resource for the community. They do the following:
 - Provide information
 - Contribute to a sense of normal life
 - Afford many ways to be occupied until the situation returns to normal
 - Help to reduce fear and anxiety by allowing people the means to quickly obtain the information they need



Prior to the advent of mobile devices, people experienced uncertainty and anxiety in addition to the challenges resulting from a particular disaster.

Along with CDC, FEMA emphasizes the importance of communicating with the public through mobile devices. FEMA created a mobile version of their website so it is easier to navigate from smartphones and other handheld devices “allowing the public to receive localized information during a disaster.”²¹

In 2011, FEMA, along with the Federal Communications Commission and the cellular industry, launched PLAN (CMAS), so emergency managers can provide location-based alerts and warnings directly to a person’s cell phone.¹¹ Some people call this a reverse 9-1-1 system because users don’t have to sign up for the service and there is no cost to receiving the messages.

- **Community self-efficacy:** Mobile devices have empowered people to establish connections with others during a disaster situation while obtaining access to the information and knowledge they must take action for themselves. Stakeholders can collaborate and assist each other, enhancing their personal sense of control, and further reducing the load on official emergency responders.

The use of mobile technology has the potential to facilitate two-way communication between responders and large groups of people affected by a disaster or crisis. The combination of mobile telecommunications devices and the Internet has the potential to provide higher capacity and more effective service. Together, they can create interactive communication mechanisms that can enable just-in-time messages and encourage collaboration among large numbers of residents and responders.

Web 2.0 media have provided increased access to emergency response information. They have also increased the ability of those facing risks to share information. Social media help build networks among groups related to a crisis. This form of communication also allows participants to witness debates, participate in chat rooms, and access other sources for more information and expert opinions.

Challenges

In spite of the many advantages provided by social media and their use on mobile devices in an emergency, the history of responses to disasters in the era of new technologies demonstrates that this is a rapidly changing landscape requiring constant analysis and proactive planning. Recognizing the challenges to planners, responders, and victims posed by the use of mobile media during a disaster or crisis will allow crisis managers to anticipate problems and maximize performance.¹⁹

- **Lack of Training:** Although personal use of mobile media is quite common, leading to relatively high levels of competence, emergency planners should not assume that all personnel have the knowledge and training to use the technology appropriately during a disaster situation. Training is needed for those using one-to-many or many-to-many features of mobile technology.



Otherwise, these beneficial features could be misused or underused. All personnel working on the disaster scene, such as team leaders and dispatchers, should be equally skilled in the use of this technology. This will make the users of the devices interchangeable in the field. Training should also minimize the likelihood that unskilled users will consume available bandwidth and other wireless resources, which might be stretched very thin during an emergency. Responders cannot control the wireless resources used by victims. However informative messages suggesting ways victims should use their technology might be helpful.

- **Investment of Time:** A social media strategy requires considerable human resources for managing and updating. Staff requirements must include creating, managing, and monitoring the various forms of social media. The skill set necessary to use social media effectively can be daunting.
- **Resilient Infrastructure:** A sound and resilient infrastructure for mobile devices supports all new features, allowing for the exchange of photos, videos, and data among responders on the disaster scene, as well as with others in relevant organizations. The information that is shared on these devices should be duplicated in both online and offline platforms. A critical aspect of a resilient mobile infrastructure is the need to make security a top priority.
- **People With Limited Access:** CERC professionals and emergency managers should remember that not everyone in the population will have access to a mobile device. Additionally, having access does not mean it's regularly used. While many senior citizens own cell phones, they are not as frequent users as others. Alternate means for reaching these individuals must be included in any crisis plan. Efforts are being made to ensure a broader reach for these technologies.
- **Information Overload:** Among the challenges facing victims of a disaster is the risk of information overload caused by the extensive coverage available in both traditional and mobile media.

Responding to Social Media Regarding Serious Errors, Myths, and Misperceptions

The media have a good record of getting facts correct during crises. Unfortunately, social media-generated content sometimes gets basic facts wrong, reports rumors, or perpetuates false information. Blog posts, tweets, and Facebook status updates are in most cases unfiltered and have included inaccurate and conflicting information. These mistakes may not only harm the public, they can undermine the credibility of your organization. While media rumors, myths, and errors in press reports are usually self-correcting, the correction sometimes does not happen fast enough.

Mobile communication allows stakeholders to communicate with each other while bypassing gatekeepers in agencies and traditional media. Today's stakeholder groups expect to be informed rather than controlled or commanded. This raises significant challenges. Individuals supplying official messages must be completely transparent, operating with a 24/7 mentality, and recognizing their role in the international digital business community.



The perception of reduced official control of information due to mobile devices and social media raises the following problems for your organization, especially during a disaster:

- Stakeholders might receive false information regarding the situation.
- Information sent from mobile devices can spread virally in seconds.
- Disseminating rumors or false information during a disaster can be catastrophic.
- Mistakes or inappropriate behaviors from responders can be communicated widely and instantaneously to a world audience.
- News stories can spread incredibly fast and negative online comments can fan the flames, which can damage your organization's reputation.

Suggestions for Using Mobile Devices for Social Media

The primary issue facing emergency managers and communicators is a gap between expectations for the performance of social media and new mobile technologies on one side, and the needs and expectations of those impacted by the disaster on the other side. These challenges must be considered based on previous disasters and risks.

Taking full advantage of the opportunities provided by mobile devices while avoiding the potential pitfalls requires careful, thoughtful analysis long before any disaster emerges. Emergency managers and responders must be proactive instead of reactive to take full advantage of the immediacy provided by mobile media:

- Establish crisis communication plans that plan for the use of mobile devices.
- Conduct research on potential audiences that use mobile devices to access trusted sources of information.

Information supplied by emergency managers and first responders should be consistent. It should provide people with what they need to know to reduce uncertainty and receive necessary help, without producing overload. Emergency managers must build a mobile communications and online community. In this community, stakeholders can engage with others and obtain contact information for media outlets and other crisis communication representatives. Empowering stakeholders in a crisis situation can work to everyone's advantage.



Conclusion

For health communicators seeking ways to educate the public about risk, risk management, health, safety, and for those cases where information must be disseminated quickly about a crisis, social media are invaluable tools. They are so widely used that any effective communication plan must include a social media strategy.

Technology is a tool and not always the answer, but social media create new, flexible, timely, and interactive channels of communication that convey information about risks and crises. Use of mobile devices allows communicators to take social media with them. While social media and traditional media are converging, there are unique considerations in using this form of communication.

The basic principles of CERC, including the need to be right, be first, and be credible, still apply. Through social media it is possible to add “be interactive.” The interactive nature of social media has shifted the traditional emphasis of CERC from the sender (the management agency or organization) to the receiver (those experiencing the crisis or risk). In fact, in many cases, the receiver has become the sender.



Worksheet 9–1: Social Media Communications Strategy Worksheet

Use this worksheet to help you strategize about your audience, and the potential social media tools and channels you may want to use for your campaign or communication activity.

1. Determine your target audience.

- a. Describe the person(s) you want to reach with your communication; be as specific as possible.
- b. More than one audience may be listed. Include a primary and secondary (influencers) audience if appropriate. (Examples: mothers of children younger than two years old living in Atlanta, pediatricians practicing in Nevada)

- I.
- II.
- III.

2. Determine your objective(s).

- a. What do you want to achieve through your social media outreach and communication? This could include something you want your target audience to do as a direct result of experiencing the communication.
- b. Objectives may include (but are not limited to) the following:
 - a. Provide information
 - b. Highlight a campaign
 - c. Encourage a health behavior
 - d. Reinforce health messages
 - e. Encourage interaction
 - f. Obtain feedback/exchange ideas
 - g. Collaborate with partners (Example: Increase awareness of immunization campaign.)

- I.
- II.
- III.



c. Restate your objectives in SMART terms:

Specific: Explain, in concrete, detailed, and well-defined terms, what exactly you are going to do for whom?

Measurable: Your objectives should be quantifiable, with the source of measurement identified.

Attainable/Achievable: Can the objective be achieved in the proposed time frame with the resources available?

Relevant/Realistic: Is the objective directly related to the overarching communication goal from your communication plan?

Time-bound: have deadlines been set?

(Example: By December 2012 (time-bound), there will be a 5% increase (measurable) in recognition of the immunization campaign name (specific), as measured through surveying, by moms of children under two in the Metro Atlanta area (specific).

Additional information on writing SMART objectives can be found at <http://www.cdc.gov/healthyyouth/evaluation/pdf/brief3b.pdf> and http://www.cdc.gov/phcommunities/resourcekit/evaluate/smart_objectives.html

3. Define audience communication needs.

People access information in various ways, at different times of the day, and for different reasons:

- a. If possible, define your audience needs by using market research and other data. You can use the following resources:
 - a. “Organize Content Based on Audience Needs” from Webcontent.gov: http://www.usa.gov/webcontent/managing_content/organizing/audience_viewpoint.shtml
 - b. Pew Internet and American Life Project: <http://www.pewinternet.org/>
 - c. CDC eHealth Data Briefs: <http://www.cdc.gov/socialmedia/Data/Briefs/index.html>
- b. Describe your audiences and their health information needs.

- I.
- II.
- III.



4. Integrate your communication goals with your overall objectives.

- a. Describe how your social media objectives support your organization’s mission and overall communication plan.
- b. How does it support other online or offline components? What events, either national, state, or local, present communication opportunities?

- I.
- II.
- III.

5. Develop key messages.

Develop the key messages based on the target audience and objectives identified. (Example: for moms of young children to encourage late season flu vaccination, “It’s not too late to vaccinate.”)

- I.
- II.
- III.

6. Determine resources and capacity.

Determine who in your organization will be responsible for implementation and the number of hours they can allocate for content creation and maintenance.

- I.
- II.
- III.

7. Identify social media tools.

Determine what tools will effectively reach your target audience. Match the needs of the target audience with the tools that best support your objectives and resources. (Example: Because Facebook has a large population of young women who have children, is free, and requires minimal technical expertise, it may be a good tool for a mom-centered program while only requiring a small amount of funding for social media activities.)

- I.
- II.
- III.



8. Define Activities.

Based on all of the elements above, list the specific activities you will undertake to reach your communication goals and objectives. (Example: Develop and promote Facebook fan page for diabetes education program.)

- I.
- II.
- III.

9. Identify your key partners and their roles and responsibilities.

10. Define Success for Evaluation.

What are your measures of success? Your measures of success may be different depending on your goals and objectives.

- I.
- II.
- III.

11. Evaluate.

Create an evaluation plan; see the Social Media Evaluation Plan for more information.

- I.
- II.
- III.



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