Social Media in Emergency Response
Topic Collection
2/26/2018
Topic Collection: Social Media in Emergency Response

The use and impact of social media platforms (e.g., Twitter, Facebook, LinkedIn, Snapchat, and YouTube) has skyrocketed over the past decade and has significantly supplemented—if not nearly replaced—more traditional means of communication in many areas of the U.S.. There are two primary ways that emergency managers engage in social media: posting information for public knowledge (e.g., road closures, shelter locations, and weather updates) and gleaning information to help allocate resources. Recent disasters have highlighted the level to which survivors and responders use social media to communicate about issues such as: their status and location, the effect of the disaster on their surroundings, where and how to locate shelter and supplies, how to report to areas that need volunteer support (and how to make donations over the internet), and strategies for obtaining medical care. In addition to building community relationships and setting expectations pre-disaster, planners can use social media to identify and monitor potential threats to public health, and communicate with residents about threats (e.g., infectious disease), pending incidents (e.g., severe weather), and the location and availability of services (e.g., shelters and points of distribution). Tools such as crowdsourcing (collecting information from a large group of people via the Internet) and data mining bolster these efforts. Because the nature of social media changes so frequently and is used for a wide variety of purposes, the ASPR TRACIE Team narrowed our search results to include lessons learned and promising practices from incidents within the past decade and actionable resources specific to our audience.

We understand that lessons are still being collated from recent events (e.g., mass violence incidents, hurricanes, and wildfires). We encourage you to share your resources with us for consideration; we will update this Topic Collection as new resources are published.

Access the following ASPR TRACIE Topic Collections for additional, related information: Communication Systems; Cybersecurity; Emergency Public Information and Warning/ Risk Communications; Information Sharing; and Virtual Medical Care.

Each resource in this Topic Collection is placed into one or more of the following categories (click on the category name to be taken directly to that set of resources). Resources marked with an asterisk (*) appear in more than one category.

Must Reads
Education and Training
General Guidance
Lessons Learned: Boston Marathon
Lessons Learned: Floods
Lessons Learned: General
Lessons Learned: Hurricanes
Lessons Learned: Infectious Diseases
Lessons Learned: Mass Violence
Lessons Learned: Tornadoes
Lessons Learned: Wildfires
Plans, Tools, and Templates
Agencies and Organizations

Must Reads


The authors researched and developed a case study on the impact of the group "Occupy Sandy" (which grew from the Occupy Wall Street movement), the Twitter handle "@OccupySandy" and hashtag "#SuperStormSandy" used to share information about the storm via social media. Overall, the group helped mobilize volunteers, identify community needs in near real time, and share information; recommendations for future use of social media as a tool in emergency management are provided.


This basic checklist can help emergency planners create a social media plan. It includes steps to take before, during, and after a disaster and links to social media platform pages for more information.


The author uses infographics to help provide an overview of social media use (in general) and during the Joplin tornado, Hurricane Sandy, and the Boston Marathon bombing. A list of lessons learned and best practices close the presentation.


The author explains how crowdsourcing, social media monitoring, and other tools can help disaster responders quickly collect information and tailor their on-ground response. These tools can also help volunteers contribute online or help onsite. Links to several tools are provided.


This hour-long webinar can help emergency responders tailor their social media messages to ensure they are reaching community members with disabilities. Links to transcripts, PowerPoint presentations, and audio and video files are provided.

Emergency planners can access and customize sample messages and posts for the following categories/populations: Natural Disasters, Infectious Diseases, Accidental Disasters, Intentional Disasters, and Individuals with Access and Functional Needs. Sample messages are provided in three main categories: general updates, response, and recovery.


This interactive, web-based course covers best practices, tools, techniques, and a basic roadmap that can help participants in emergency management build their social media capabilities.


The authors analyzed tweets disseminated by New York State and City agencies during two storms (Superstorm Sandy and winter blizzard Nemo) to determine which were retweeted most frequently. The most retweeted tweets used simpler wording and shared general tips or photos versus actionable information. These findings suggest that emergency managers consider sharing a variety of information via social media in the event of a disaster.


The authors examined more than 15,000 tweets to understand how public health professionals used Twitter. Messages were broken into four themes: 1) inform and educate, 2) monitor health statuses and trends, 3) communicate about social justice, and 4) increase professional development.


The authors reviewed the literature on the use of social media in emergencies between 2007 and 2014. They highlight how various tools are used by the public, emergency organizations, and academic institutions.

Several case studies (and figures and statistics) highlight how social media was used by
government organizations, news outlets, charity organizations, and community members
to share information during disasters.


Readers must click on the “Research Highlights” tab to access this article that describes
how Twitter was used in the week after the Boston Marathon bombing (while the
suspects were at large and the city was on lockdown).

into Exercises: Social Media Working Group for Emergency Services and Disaster
Management and DHS (Department of Homeland Security) S&T (Science and
Technology) First Responders Group*.

This course teaches emergency planners about best practices for integrating social media
into exercises and explains why social media should be a part of all aspects of disaster
planning. It also highlights challenges associated with integrating social media into
exercises and training.

Awareness and Decision Support*. Virtual Social Media Working Group and DHS First
Responders Group.

Emergency planners can use the guidance in this document to better understand the use of
social media in developing situational awareness (e.g., monitoring, crowdsourcing, and
intelligence gathering), and analyzing data (e.g., baseline vs. event detection, and trend
analysis). Other sections discuss challenges associated with technology (e.g., the use of
third-party platforms, lapses in time and space) and information (e.g., aggregating and
filtering, verifying, and integrating).

Social Media for Preparedness, Response and Recovery*. Virtual Social Media Working
Group and DHS First Responders Group.

The authors explain how responders can use social media to facilitate decision making
during fast-paced disaster responses. Sections on operationalizing social media into
incident command, the long-term use of social media, and challenges associated with
using social media can help planners form their agency’s policies. Case studies are
provided at the end of the report.

Williams, R., Williams, G., and Burton, D. (2012). *The Use of Social Media for Disaster
Recovery*. University of Missouri Extension.

The authors share lessons they learned from creating and maintaining the "Joplin
Tornado Info" and "Branson Tornado Info" Facebook pages. The guidance in this
document can help emergency managers set up their own social media platforms and draft messages before an incident occurs.

**Education and Training**


This five-module course provides an overview of social network analysis, how it differs from standard approaches, and what some of the misconceptions are. It also looks at basic terms and concepts that underlie social network analysis.


Emergency planners can use the guidance in this document to: learn about social media; understand their audiences; write for Facebook and Twitter; develop text messages; and base social media on existing web page content. Sample “hands-on” activities are provided, where readers have the chance to revise draft messages. A checklist, glossary, and links to helpful resources are also included.


CDC’s Crisis and Emergency Risk Communication (CERC) manual provides an integrated model for public health professionals to communicate effectively during an emergency. The chapter on social media and mobile devices covers social media’s role with mainstream media, its role in a crisis, and responding to social media regarding serious errors, myths, and misperceptions.


This hour-long webinar can help emergency responders tailor their social media messages to ensure they are reaching community members with disabilities. Links to transcripts, PowerPoint presentations, and audio and video files are provided.


This list can help emergency planners learn more about these social media platforms: blogs, microblogging (e.g., Twitter), common social media sites (e.g., Facebook), media sharing sites (e.g., Flickr) wikis, monitoring and aggregating sites, and social media influence ranking sites. Information on costs, main features, and important notes are provided for each platform.


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**TRACIE**

Healthcare Emergency Preparedness Information Gateway
This interactive, web-based course covers best practices, tools, techniques, and a basic roadmap that can help participants in emergency management build their social media capabilities.


This hour-long webinar provides a summary and strategies that can help emergency responders and charitable agencies use social media to engage disaster survivors. The web page includes links to a question and answer document and other related resources.


This presentation can help public information officers (PIO) understand and prepare to use social media in an emergency situation. The speaker provides an overview of crisis communication and the role of a PIO, explains to role of social media and associated challenges, and shares actual examples of PIOs using social media to inform the communities they serve.


This webpage provides links to the center’s free courses on social media and related articles, reports, and tools.


This 8-hour instructor-led course teaches participants how to use social media to recognize warning signs, disseminate messages, and monitor and analyze social media traffic.


This 8-hour course builds upon PER-304 and helps participants develop messages for different audiences and understand the benefits of crowdsourcing and data mining.


This 8-hour, instructor-led course prepares participants to engage individuals and volunteer organizations through social media, especially in the context of disaster preparedness and response.
This report teaches emergency planners about best practices for integrating social media into exercises and explains why social media should be a part of all aspects of disaster planning. It also highlights challenges associated with integrating social media into exercises and training.

**General Guidance**

  The author uses infographics to help provide an overview of social media use (in general) and during the Joplin tornado, Hurricane Sandy, and the Boston Marathon bombing. A list of lessons learned and best practices close the presentation.


The authors interviewed local health departments to better understand their experiences using social media. They identified the main factors influencing use of social media and listed recommendations for local health practitioners and policymakers.

  Emergency planners can use the guidance in this document to: learn about social media; understand their audiences; write for Facebook and Twitter; develop text messages; and base social media on existing web page content. Sample “hands-on” activities are provided, where readers have the chance to revise draft messages. A checklist, glossary, and links to helpful resources are also included.


This book provides a summary of conference proceedings where risk communications experts discussed the public response to mobile alerts.

Facebook. (n.d.). *Prepare & Respond, Tips for Individuals, Groups and Communities to Get the Most Out of Facebook Before, During and After Disasters*. (Accessed 2/21/2018.)
Information is split into four categories: tips for response and relief organizations, tips for first responders and government agencies, tips for individuals and communities, and Facebook crisis response products.


The FCC states that this report has two goals: to advocate for complementary alerting via social media and emphasize the potential opportunity and advantages for social media platforms in emergency alerting. Section 5.2 highlights the advantages of using social media and 5.3 explains challenges and opportunities.


This webpage provides links to the center’s free courses on social media and related articles, reports, and tools.


This resource describes how the National Institute of Standards and Technology is working with the National Fire Protection Association on: “1) the use of outdoor siren systems as alerts; 2) the use of “short messages” as alerts provided via social media and other short message service (SMS) platforms, and 3) the use of social media for warning in disaster response and providing updates during disaster recovery.”


This report summarizes presentations made at a 2012 workshop organized by the Committee on Public Response to Alerts and Warnings Using Social Media. Chapters cover the fundamentals of alerts, warnings, and social media, how social media has been used in emergencies by local agencies, the dynamics of social media, message credibility, privacy and legal issues, and research gaps and other challenges.


Health professionals and members of the communities they serve can use the guidance in these documents to learn more about the intersection of national health security and community engagement. The section on social media activities explains the utility of social media, ways to use video to highlight local activities, and how to optimize community-based platforms.
Emergency planners can use the guidance in this document to better understand the use of social media in developing situational awareness (e.g., monitoring, crowdsourcing, and intelligence gathering), and analyzing data (e.g., baseline vs. event detection, and trend analysis). Other sections discuss challenges associated with technology (e.g., the use of third-party platforms, lapses in time and space) and information (e.g., aggregating and filtering, verifying, and integrating).

The authors explain how responders can use social media to facilitate decision making during fast-paced disaster responses. Sections on operationalizing social media into incident command, the long-term use of social media, and challenges associated with using social media can help planners form their agency’s policies. Case studies are provided at the end of the report.

This report can help emergency planners learn more about best practices for integrating social media into exercises and explains why social media should be a part of all aspects of disaster planning. It also highlights recent examples and challenges associated with integrating social media into exercises and training.

Project Responder can help prioritize capability needs for emergency response to critical incidents. The fifth iteration of this series is based on lessons learned by responders who worked some of the largest disasters in the U.S. over the past several years. The benefits, challenges, and lessons learned from resident and responder use of social media are interwoven throughout the document.

The authors share lessons they learned from creating and maintaining the "Joplin Tornado Info" and "Branson Tornado Info" Facebook pages. The guidance in this
document can help emergency managers set up their own social media platforms and draft messages before an incident occurs.

Lessons Learned: Floods


The author discusses the strengths and challenges of social media use after the floods that struck Louisiana in 2016. Based on a small survey he conducted, he found that the use of social media increased while more traditional communication channels were compromised. Survey respondents were neutral or dissatisfied with the level of federal government engagement via social media.


The authors analyzed Facebook and Twitter posts made by federal, state, and local government agencies (including public health and emergency management) before, during, and after the flooding events. They scored each post using accessibility and dissemination scales and found that most posts were related to situational awareness and recovery.

Lessons Learned: General


Web-based platforms have increased in use and utility when it comes to mining data for disease outbreaks. The author provides an overview of the use of these platforms to collect information and quickly identify areas of need. The author also presents several challenges associated with collecting this type of information (e.g., privacy, skewed data, and identifying the key words to include while monitoring).


Several examples of how a Department of Defense project used crowdsourcing data to provide tailored, quick disaster aid are presented in this article. Transformative Innovation for Development and Emergency Support, or TIDES, collects data from its network of federal, military, and civilian contacts, international counterparts, and private, public, and non-government-sector organizations, start-ups and individuals.

Analyzing tweets from the day of select recent U.S. mass casualty events through seven days post-event revealed that a 200 tweets/minute threshold was reached fastest after the Napa earthquake, followed by the Boston Marathon bombing and the San Francisco plane crash. The authors explained that this threshold could have been used as a signaling mechanism to place local hospitals on standby for possible large scale events, since the messaging preceded patient arrival in all cases they studied.


This book provides a summary of conference proceedings where risk communications experts discussed the public response to mobile alerts.


The author reviews Patrick Meier’s book which begins by sharing how a “crisis map” was used by “digital volunteers” to mark the hardest hit areas in Haiti after the 2010 earthquake. This allowed U.S. search and rescue teams to be more timely and efficient. Meier also highlights the downsides of post-disaster social media, including users with large followings sharing false information, the lack of access to social media, and lack of disaster survivor privacy (associated, for example, with the increase in drone usage).


The authors reviewed literature on disasters across the globe from 2003-2016 to determine the best social media practices that could encourage health protection and dispel rumors. They emphasized that governmental agencies should use social media (especially Twitter and Facebook) daily and during emergencies. They also noted a dearth of research pertaining to who is reached by social media versus who needs to be reached by other communication channels.


The authors examine the public’s use of social media (in general and during disasters), including what encourages and deters its use. They discuss how to evaluate the use of
social media and explain the difference between active and passive use. Examples from recent incidents are included throughout the report.


This volunteer-driven project produced a crisis map after a devastating earthquake struck Haiti in 2010. The authors share lessons learned and recommendations for improving data collection and the use of social media.


This report summarizes presentations made at a 2012 workshop organized by the Committee on Public Response to Alerts and Warnings Using Social Media. Chapters cover the fundamentals of alerts, warnings, and social media, how social media has been used in emergencies by local agencies, the dynamics of social media, message credibility, privacy and legal issues, and research gaps and other challenges.


According to the authors, a 2014 survey indicated that only half of the county-level U.S. emergency managers who participated in a survey reported using social media. Many did not have formal social media policies; a quarter of the agencies who had policies were forbidden from using social media. The authors discuss these and other barriers, how social media is used by other agencies, and steps for improving its use.


The authors reviewed the literature on the use of social media in emergencies between 2007 and 2014. They highlight how various tools are used by the public, emergency organizations, and academic institutions.


Several case studies (and figures and statistics) highlight how social media was used by government organizations, news outlets, charity organizations, and community members to share information during disasters.

The author shares several actual examples of social media posts, highlighting how they address three key areas of communication: “coordination with response partners, managing public expectations, and being creative enough to get the public’s attention.”


Project Responder can help prioritize capability needs for emergency response to critical incidents. The fifth iteration of this series is based on lessons learned by responders who worked some of the largest disasters in the U.S. over the past several years. The benefits, challenges, and lessons learned from resident and responder use of social media are interwoven throughout the document.

Lessons Learned: Hurricanes


The authors researched and developed a case study on the impact of the group "Occupy Sandy" (which grew from the Occupy Wall Street movement), the Twitter handle "@OccupySandy" and hashtag "#SuperStormSandy" used to share information about the storm via social media. Overall, the group helped mobilize volunteers, identify community needs in near real time, and share information; recommendations for future use of social media as a tool in emergency management are provided.


Can non-traditional data (e.g., tweets) supplement traditional data reporting during hurricane response? The authors examined tweets, news reports, press releases, and federal situation reports during the Hurricane Isaac response in 2012 to measure “Essential Elements of Information.” Their findings highlighted the utility of non-traditional data sources in disaster response.


The author uses infographics to help provide an overview of social media use (in general) and during the Joplin tornado, Hurricane Sandy, and the Boston Marathon bombing. A list of lessons learned and best practices close the presentation.


The authors analyzed tweets disseminated by New York State and City agencies during two storms (Superstorm Sandy and winter blizzard Nemo) to determine which were
retweeted most frequently. The most retweeted tweets used simpler wording and shared
general tips or photos versus actionable information. These finding suggest that
emergency managers consider sharing a variety of information via social media in the
event of a disaster.


The authors used “advanced sentiment analysis” to examine tweets posted over an 11 day period before, during, and after Hurricane Sandy to highlight basic emotions and
determine if they could map excess risk of these emotions. Their analysis revealed spatial clusters and they encourage further study that could help quickly identify community areas where behavioral health assistance is most needed.


Social media facilitated emergency communications during Hurricanes Harvey and Irma. The authors highlight how residents used it to request rescue and how responders used it to stay connected when more traditional means of communication were temporarily unavailable.


The authors explain how the use of a Twitter list combined with Boolean searches helped the U.S. Department of Health and Human Services’ (HHS) Office of the Assistant Secretary for Preparedness and Response increased situational awareness and improved the HHS response to Hurricane Sandy.


The authors analyzed Twitter activity before, during, and after Hurricane Sandy and found that physical disaster effects and real and perceived threats can be observed by studying the intensity and makeup of Twitter’s streams. Emergency managers could use social media data to quickly assess disaster-related damage in their jurisdictions.


Clicking on the tab “Research Highlights” takes readers to this article with graphics that illustrate how social media was used before, during, and after Superstorm Sandy. Graphics show the number of tweets per hour, a word cloud, how 103 professional organizations tweeted during the event, and how the number of followers increased for
seven specific accounts (e.g., the American Red Cross North Jersey Region, conEdison, and FEMA Region 2).


The author comments on analyses of Fairfax County Virginia’s Office of Public Affairs social media posts (and public reception) during Hurricanes Irene (2011) and Sandy (2012). Links to related resources are provided.


This report shares how social media was used before, during, and in recovery from Hurricane Sandy. It includes best practices, lessons learned, gaps, and issues for further consideration identified by the first responder community.

**Lessons Learned: Infectious Diseases**

Al-Surimi, K., Khalifa, M., Bahkali, S., et al. (2017). *The Potential of Social Media and Internet-Based Data in Preventing and Fighting Infectious Diseases: From Internet to Twitter*. (Abstract only.) Advances in Experimental Medicine and Biology. 972: 131-139.

The authors describe the role social media can play in tracking, communicating about, and reporting emerging infectious diseases (e.g., Severe Acute Respiratory Syndrome, Ebola, and Zika).


A study of zika-related social media found that while most posts are in English, Facebook posts are more likely than tweets to be in a study author’s primary language. The authors of this article suggest Facebook is a more effective way to communicate in native languages of affected countries.


The authors describe how they used social media monitoring during public health emergency responses in New York City, including Ebola and Legionnaire’s responses and for planned events. They offer concepts and implementations that can be applied to other agencies who want to build a social media monitoring team.

This article highlights how the New York City Social Media Monitoring Team (SMMT) coordinated the 2016 Zika planning and response efforts. The authors encourage local health departments leading or supporting emergency response to dedicate staff to monitoring social media to improve real-time situational awareness and understanding of public perception.


The authors examined more than 15,000 tweets to understand how public health professionals used Twitter. Messages were broken into four themes: 1) inform and educate, 2) monitor health statuses and trends, 3) communicate about social justice, and 4) increase professional development.


The author shares information gathered from the 2015 Disneyland measles outbreak and highlights pros and cons associated with using social media to measure and track vaccine acceptance/doubt and anticipate disease peaks.


The authors examine the miscalculation of Google Flu Trends in 2013 and explain the challenges and potential associated with using Big Data to predict and monitor disease.


Public health organizations used a mix of social media and traditional channels to communicate with the community during the 2009 H1N1 pandemic. Researchers found that while social media linked to traditional media, the reverse was not true. They also found that traditional media was still relied on more to provide more comprehensive information.


The authors describe how they aggregated and filtered Twitter data to identify “events”—data with an unusual count that is then assessed by an analyst. They then used this method to analyze social media surrounding the Boston Marathon bombing, New Year’s festivities, and the Ebola outbreak.

The authors used data derived from Twitter to track two things: public sentiment specific to H1N1 (swine flu) and actual disease activity. They found that their estimates of influenza-like illness matched reported disease levels.


Health officials in Brazil sponsored the development of Guardiões da Saúde, an app (available in seven languages) that monitored the health of participating citizens and visitors to the Olympics. Users would answer questions about their health on a daily basis and the app provided information about care and prevention.


The study team collected all Ebola-related tweets sent by nearly 300 local health departments (LHDs) across the U.S. from September 3 to November 2, 2014 and analyzed their characteristics. The majority of Ebola tweets provided information, and the rest shared information on preparedness or shared news or promoted events. The authors recommend that LHDs use Twitter during public health emergencies “to ensure timeline dissemination of critical information.”

**Lessons Learned: Mass Violence**


The author provides an overview of social media use during the Joplin tornado, Superstorm Sandy, and the Boston Marathon bombing. A list of lessons learned and best practices are also provided. A local reporter’s Twitter handle’s following grew by more than 2000%; the Boston Police Department’s handle following grew by 500%.


This comprehensive report describes the unified response the City of Orlando carried out during and after the Orlando Pulse nightclub attack. While slightly more focused on law enforcement, the report shares numerous lessons learned from several perspectives, including: leadership and relationships; media and public information (e.g., the use of
social media and the importance of having one organization responsible for sharing information via one platform); and community engagement and relationships.


Clicking on the tab “Research Highlights” takes readers to this article which focuses on guidance provided via Twitter after the Boston Marathon bombing. Guidance is grouped into themes (e.g., evacuation/shelter and advisory) and graphed by which of the seven organizational sectors tweeted about it (crisis, health, environment, law enforcement, government/elected officials, transportation, and other).


Readers must click on the “Research Highlights” tab to access this article on Twitter was used in the week after the Boston Marathon bombing (while the suspects were at large and the city was on lockdown).


This article provides a short overview of the feature and describes how it was used after the Orlando Pulse nightclub shooting.

**Lessons Learned: Tornadoes**


The author uses infographics to help provide an overview of social media use (in general) and during the Joplin tornado, Hurricane Sandy, and the Boston Marathon bombing. A list of lessons learned and best practices close the presentation.


Social media was used after the tornado to: document the event, enable survivors to list themselves as safe (and find their loved ones), provide survivors with information on getting assistance, and help survivors locate lost items (e.g., pets and medical records).


The authors share lessons they learned from creating and maintaining the "Joplin Tornado Info" and "Branson Tornado Info" Facebook pages. The guidance in this document can help emergency managers set up their own social media platforms and draft messages before an incident occurs.
Lessons Learned: Wildfires


Clicking on the tab “Research Highlights” takes readers to this article which focuses on how social media was used during one of the most expensive fires in Colorado’s history. Animated figures illustrate communication to and from official government organizations by date, and other graphics show how tweets were retweeted before and during the event (most organizations used Twitter to communicate).


The authors describe an automated technique for real-time tracking of wildfire perimeters based on publicly available crowdsourced data collected from telephone calls to emergency services. This data allowed them to detect and track perimeters in real time, accurately, in two wildfires years apart.

Plans, Tools, and Templates


This voluntary standard—developed with input from law enforcement, fire, and medical emergency responders—describes how social media can and should be used during disasters. Planners can access Chapters 6 and 8 for specific guidance on creating a social media policy for their organization.


This basic checklist can help emergency planners create a social media plan. It includes steps to take before, during, and after a disaster and links to social media platform pages for more information.


The author explains how crowdsourcing, social media monitoring, and other tools can help disaster responders quickly collect information and tailor their on-ground response. These tools can also help volunteers contribute online or help onsite. Links to several tools are provided.

This policy document includes sections that emergency planners can use as guidance when creating their own policies. Information on personal use of social media, employee participation in social media, and review steps and levels associated with social media channels are included, as are a list of responsibilities by role, references, and an abbreviations list.


This toolkit (published in 2011) can help emergency managers develop a social media program. It includes guidance on topics such as tools, creating buttons and badges, podcasts, RSS feeds, and widgets. Links to sample accounts and other helpful resources are also provided.


This collection provides public service announcements to help communicators respond to a wide variety of public health emergencies, including earthquakes, floods, hurricanes, wildfires and more. Topics also include messaging around common all-hazards topics, such as the needs of at-risk populations, safe cleanup, and safe use of medication after a disaster. The PSAs are available in a variety of formats, including text message, short scripts for broadcast use, short videos for use on social media and more.


Using an automated process (updated continuously based on surveillance and user feedback), this app aggregates disease outbreak data and displays it in an interactive manner in nine languages. HealthMap runs healthmap.org and “Outbreaks Near Me,” both of which deliver real-time intelligence on a variety of infectious diseases. Emergency planners can use this data to identify early outbreaks, monitor trends from several levels, and access resources related to specific diseases. Links to several “Alert Sources” from which data are collected are also provided on the home page.


This webpage includes links to many tools first responders and other emergency healthcare providers can use on scene and in facilities to care for disaster survivors.


Emergency planners can access and customize sample messages and posts for the following categories/populations: Natural Disasters, Infectious Diseases, Accidental Disasters, Intentional Disasters, and Individuals with Access and Functional Needs.
Sample messages are provided in three main categories: general updates, response, and recovery.


This webpage can be used as a checklist and includes lists of actions emergency planners can take before and during a disaster to ensure their social media messages are as helpful, timely, and informative as possible.


This platform allows users to create their own dashboards and schedule and manage social media (through various accounts and platforms while tracking mentions, hashtags, and the like).


This non-profit organization is “driven by digital volunteers” who help with disaster preparedness and use “social listening” to identify and connect survivors to disaster assistance. Their website includes a “Situation Reports” tab where users can access timely reports about incidents by year, by country, or by clicking on an interactive map.


This highly visual report is structured around three key stages about monitoring social media before, during, and after an emergency. Each phase includes suggestions for implementation, key lessons learned, and examples.


The speakers in this 17 minute video share how local health departments can use social media platforms like Facebook to identify pandemics or other illness outbreaks in communities, allowing them to more quickly address threats and care for and communicate with residents.


Pages 20-23 of this toolkit provide an overview of using social media before, during, and after an event and include checklists sample posts (based on a pandemic influenza outbreak).

Users can search and view live video via desktop or mobile devices. Results are grouped into channels, but users can also search by hashtags.


TweetDeck allows users to customize their Twitter experience (e.g., build and organize collections), track specific topics, events, and hashtags, and manage multiple accounts.


In addition to listing the benefits and challenges associated with implementing social media for public safety (including public health, emergency management, fire, and law enforcement), this document includes links to examples for each type of platform (e.g., mobile texting, Twitter profiles, Facebook, LinkedIn, photo and video sharing).


This report can help emergency planners learn more about best practices for integrating social media into exercises and explains why social media should be a part of all aspects of disaster planning. It also highlights recent examples and challenges associated with integrating social media into exercises and training.


This web-based application searches open source Twitter data for health topics, notably infectious disease outbreaks, and delivers analyses of that data for both a specified geographic area and the national level.


This tool (mainly used internationally at this time) collects and analyzes photographs of disaster-affected areas, allowing responders and relief organizations the opportunity to customize their response. Volunteers are given a tutorial for locating, contributing, and analyzing photos that are grouped into projects.

Agencies and Organizations

Note: The agencies and organizations listed in this section have a page, program, or specific research dedicated to this topic area.
Centers for Disease Control and Prevention. The Health Communicator’s Social Media Toolkit.

Disaster Response on Facebook.

Hazards, Emergency Response, and Online Informal Communication (HEROIC).

HealthMap.

Humanity Road.

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response. NowTrending.


This ASPR TRACIE Topic Collection was comprehensively reviewed in February 2018 by the following subject matter experts (listed in alphabetical order):

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