Risk Communicator

the RC

Issue 3

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Emergency and risk communication groups are using multiple ways to reach their audience, whether it's through high technology like the Web or YouTube, or through low-tech methods like those employed by the Sierra County Department of Health. No matter what the budget and the available technology, risk communicators are finding creative ways to reach their audiences. In this third issue of ***The Risk Communicator (RC)***, we explore the use of technology and creativity in emergency communication responses.

In this issue's feature story, "Emergency and Risk Communication on the Web," we explore principles and strategies for communicating on the Web's interconnected platforms. Emergency and risk communicators are encouraged to:

- Blend emergency risk communication principles with Web usability principles.
- Seek out and embrace opportunities to educate the public.
- Aim [their] Web channels at [their] audiences.

This issue's research summary, Judit Bar-Ilan and Ana Echerman's "The anthrax scare and the Web: A content analysis of Web pages linking to resources on anthrax," explains that during the anthrax scare in 2001:

- Anthrax was Google's fifth overall search in 2001.
- The Centers for Disease Control and Prevention (CDC) had an 118% increase in anthrax -related Web page views from the week before.

"Pan Flu Preparedness: A rural health department's plan to communicate with the public during a public health threat" discusses:

- Rhonda Grandi and the Sierra County Health Department use of an inexpensive, low-tech solution for small communities using one of the most fail-safe systems of all.

In our second interview from the field, "YouTube is Your Friend: Kerry Shearer of the Sacramento County Public Health (SCPH) Division discusses using video technology to expand SCPH's communications activities:"

- Kerry Shearer talks about production and dissemination ideas using new technology while still maintaining official protocols.

In our Additional Resources section, you can find a link to The WHO Outbreak Communication Planning Guide—that John Rainford discussed in the last issue of ***The Risk Communicator***.

The RC's Mission

Providing information and resources to help emergency risk communicators prepare and effectively respond in the event of a crisis.

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emergency and risk communication on the web

The Internet is indispensable to emergency communication in the 21st century. Based on lessons learned from emergencies over the past decade (ranging from anthrax to SARS to hurricanes to foodborne outbreaks), CDC's Emergency Communication System (ECS) Web Team has developed a three-pronged strategy that can be applied by other emergency risk communication practitioners:

- Blend emergency risk communication principles with Web usability principles
- Seek out and embrace opportunities to educate the public
- Aim your Web channels at your audiences

1) Blend Emergency Risk Communication Principles with Web Usability Principles

Emergency.CDC.gov is a broad site covering many types of public health emergencies. Nevertheless, the strategy of combining emergency risk communication principles with Web usability principles is applicable to all types of public health emergencies and threats.

This strategy has been crucial for the winter weather section (http://emergency.cdc.gov/disasters/winter). The highlight boxes added to the top of each content page on the winter weather website showcase the core messages of those pages in an effort to achieve several emergency risk communication principles and Web usability principles at once.

Another area of emergency.CDC.gov where this strategy has been important is the hurricane section (http://emergency.cdc.gov/disasters/hurricanes). By using a hurricane homepage design that focuses more on messages and less on documents, the pages' setup reflects risk communication principles.

Risk Communication principles for the Web:

- Emphasize the agency's plan for emergencies, and where it can be found
- Don't over-reassure
- Acknowledge uncertainty
- Acknowledge people's fears
- Give people things to do in the moment
- Give anticipatory guidance

Usability principles for the Web:

- Users don't read; they scan
- Users have tunnel vision
- Users are impatient and want instant gratification
- Users will leave if they don't quickly find what they're looking for

2) Seek Out and Embrace Opportunities to Educate the Public

Every public health emergency requires communication with the affected populations. But emergencies also provide opportunities to reach out to those who are not at risk.

In February 2008, a man accidentally poisoned himself with the deadly biotoxin ricin. This incident led to an immediate spike in the traffic on the ricin section of the emergency.CDC.gov website (http://emergency.cdc.gov/agent/ricin). Though there was no new public health information to post in response to the incident, and no

emergency and risk communication on the web *continued*

affected population to reach, ECS redesigned the page in order to take advantage of the public's interest in the topic. By adding prominent links to the "Emergency Preparedness and You" section of the site (http://emergency.cdc.gov/preparedness), visitors who came to the website were encouraged to learn more about general preparedness and response.

Another important component of this strategy is the "Recent Outbreaks and Incidents" http://emergency.cdc.gov/recentincidents.asp. This page is consistently one of the most popular pages on the entire CDC site. The page provides in-depth information about public health topics currently receiving public attention; more than 85,000 people receive an email update whenever this page is updated. With each new topic added, a surge in traffic to that subject's website follows. These visitors are more than just curious; users who have shown enough interest or concern about a topic to visit a related website represent a captive audience that is eager for information.

3) Aim Your Web Channels at Your Audiences

Web-based channels can be used in emergency communication to reach any audience. The two most common misconceptions about using the Internet for emergency communication are 1) that posting information on a website is the only dissemination method and 2) that visitors to that website are the only audience. A communication strategy built on these misconceptions will have only limited success.

The visitors to a website are just the beginning of a potentially unending network of online and offline audiences. In short, remember that your audiences have audiences . For example, a clinician might visit a website and then post information from that website on her blog. Another clinician might visit the same website to print off fact sheets to distribute to high-risk patients without Internet access in his community. ECS takes this into account when it provides materials on emergency.CDC.gov for its audiences to pass on to their audiences (e.g., low-literacy disaster recovery fact sheets for health educators).

A website is just one of many important Web-based channels available for emergency communication. The emergence of so many new Web channels is one of the most important developments in emergency communication since 2001. The typical online user on 9/11 was forced to sit at a computer and wait for the web pages of one of a few online news media sites to slowly load (if it loaded at all).

Today, the Internet is a very different world, with new channels such as blogs, podcasts, RSS feeds, wikis, Twitter feeds, and social networking sites like Facebook. Being an online user no longer means sitting at a computer workstation; mobile phones provide their owners easy access to the

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emergency and risk communication on the web *continued*

Web. These new channels provide emergency risk communicators a way to more actively engage their audiences by sending the message to the point of contact rather than waiting for the user to come to a website.

With the advent of these new tools, ECS has greatly expanded its emergency communication outreach capacity:

- **RSS:** the use of RSS feeds allows for instant dissemination of messages to users' RSS readers (with more than 25,000 messages currently downloaded on a typical day).
- **Building an Email Community:** more than 100,000 people are signed up to receive regular email updates about emergency.CDC.gov.
- **Mobile Phone Outreach:** in addition to email updates about the website, mobile phone text message updates are also available. A special text-only version of certain sections of emergency.CDC.gov can now be accessed by mobile phone at http://m.cdc.gov.
- **Twitter:** the launch of the CDCemergency Twitter feed in 2009 allows ECS to quickly send emergency messages to the more than one million followers of the feed. The two-way communication that Twitter offers allows for greater interaction with affected persons during public health emergencies.
- **Podcasts**: ECS provides many preparedness podcasts through emergency.CDC.gov, iTunes, and other podcast outlets. In addition, in a public health emergency, CDC often releases new podcasts that describe the response to the current situation and provide health guidance to the public.

more from emergency.CDC.gov

To join the emergency.CDC.gov community, sign up for email updates at http://www.cdc.gov/emailupdates, subscribe to one of the RSS feeds (http://emergency.cdc.gov/rss), or follow the CDCemergency Twitter feed (http://twitter.com/CDCemergency).

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research summary : judit bar-ilan and ana echerman's

the anthrax scare and the web: a content analysis of web pages linking to resources on anthrax

The Internet makes finding information fast and easy , particularly in the workplace. Yet few people fully understand how subject-related content is presented on the web. By understanding how the public uses search results on a specific topic, risk communicators can improve the way they craft and share both online and other messages.

Judit Bar-Ilan and Ana Echerman of Bar-Ilan University and The Hebrew University of Jerusalem conducted a study focused on developing "a method for characterizing the page and linking patterns related to dramatic events on the Web." For the purposes of this study, the authors focused on the anthrax attacks which occurred in the United States shortly after 9/11.

The study found that during the timeframe of the attacks people increasingly turned to the Internet for anthrax-related information. Anthrax was Google's fifth overall search in 2001, reaching first place during October 2001. There was a corresponding increase in traffic to the anthrax pages on the Web site of the Centers for Disease Control and Prevention (CDC). These CDC pages received 515,000 unique visits during the week of October 14, 2001, a 118% increase from the week before.

With this increase in anthrax-related Web traffic, the authors sought to identify trends among pages that link to authoritative Web sites on anthrax (i.e. CDC, Office of the Secretary of Defense, Journal of the American Medical Association, etc.). They classified pages by the following categories: page type, page topic, topic of the source section where the link is located, content producer. Links were also included, and sorted into the categories of link type and link placement. Other information about each page was also captured, such as language, most recent update, and domain name.

The results of this study indicate that the anthrax attacks increased the number of anthrax-related searches and news coverage, but it did not have a statistically significant impact on the amount of factual information available on the Web. The study found that "content producers often preferred to compose lists of links to resources on anthrax rather than produce their own original content." Content producers also tended to link to U.S. government resources more than they linked to other pages.

The most common page type was news items, which are briefings posted on websites other than where the original news story appeared. It should be noted that this finding indicates that consumers may be relying on second and third-hand sources for information, rather than upon an original or authoritative source.

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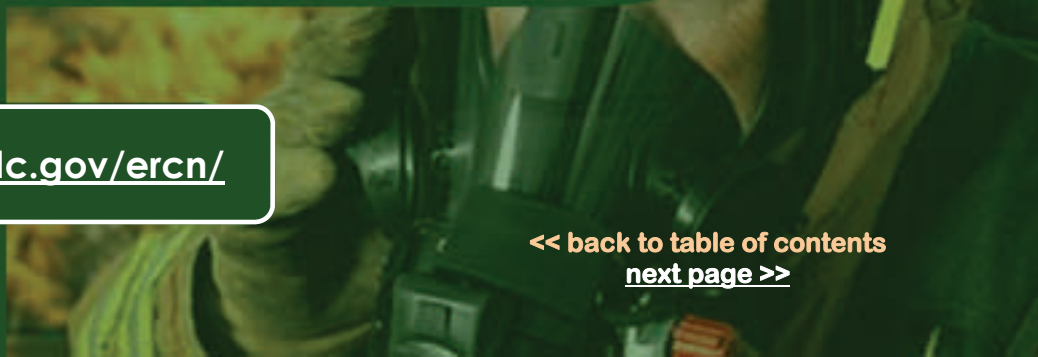
research summary : judit bar-ilan and ana echerman's

the anthrax scare and the web: a content analysis of web pages linking to resources on anthrax continued

While the results of this study will be interesting to a variety of readers, the methods employed by the authors may be of the most use to risk communicators because they outline a process for determining how consumers are encountering a particular topic on the Internet. This process includes such questions as: What types of pages are providing links to the topic? What types of links are being provided? The answers to these questions could prove useful to a risk communicator in determining how and where to post information online.

Reference

Bar-Ilan, J., Echerman, A. The anthrax scare and the Web: A content analysis of Web pages linking to resources on anthrax. Scientometrics 2005; 63(3); 443-462.



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pan flu preparedness

a rural health department's plan to communicate with the public

When the public's health is threatened, either by an outbreak, natural disaster, or terror event, it can be difficult to predict the severity and duration of the threat. However, proper preparation at the local level can lessen its effects and help protect the public's health.

Preparing the public for any hazard poses a tremendous challenge to health officials and risk communicators. This is particularly true of communicable disease threats and pandemics. The Sierra County Health Department in California has devised a low cost, proactive, and easily-instituted way of communicating with its constituents during an emergency event. At a subcommittee meeting of the pandemic influenza planning group, local EMS personnel suggested the idea of distributing color-coded door hangers to everyone in the county.

The hangers serve as a two-way communication tool during an outbreak. Health officials use the hangers to distribute information regarding the outbreak to residents. Residents then hang a different color hanger on the front door to indicate the health status of those inside the home.

"The hangers serve our purpose of providing people in the county with health and safety information and meeting their needs without exposing our minimal pool of responders to a potentially contagious outbreak," says Rhonda Grandi, Sierra County Health Department Public Health Educator and Emergency Preparedness Coordinator.

Three double-sided door hangers made of card stock are placed in a bag along with instructions on how to use the hangers and information about the potential outbreak. Each side of the hanger is a different color, signifying the status of those inside the home for law enforcement on patrol. In addition to the hangers, residents are provided with instructions on how to make a sanitizing agent to help prevent the spread of disease inside the home.

"The hangers come with instructions for residents. If everyone is okay inside the home, then residents should display the

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pan flu preparedness *continued*

a rural health department's plan to communicate with the public

green side on even days and the white side on odd days," says Grandi. Even and odd days are defined on the tags.

This method allows responders to know that everyone is healthy within a particular home on a day-to- day basis; because a resident has to consciously make the decision to display the correct color each day, responders can be confident that someone inside the house is well enough to do so.

"The yellow side is to say 'I need something' and it has an area to write what is needed. If law enforcement sees yellow, they notify whatever agency would be responsible for fulfilling that need," Grandi concludes. "The red side indicates that someone needs help or emergency medical assistance."

The Sierra County Health Department collaborated with the sheriff and coroner to determine the appropriate language for the black hanger, which indicates that someone inside the home has passed away. This was the most sensitive and difficult part of the process, but Grandi says that it was also the most crucial. Preparing for all eventualities is a key component of any preparedness plan, and death is no exception.

One of the advantages of this system is that it costs relatively little to implement, which is a major benefit for local health departments working with a limited budget. "The cost was very minimal. It was just a matter of time, really. We made about 1,500 hangers to cover our county, and the only out-of-pocket cost was the card stock and printing," says Grandi. Grandi says this system might prove too labor-intensive and difficult to track if implemented in a major metro area. However, in rural areas or areas with low density populations, the Sierra County Health Department's door hanger system could serve as a low-cost model for local health departments looking for a low-tech way to communicate during a public health threat.

Reference

For more information on the project, please contact Rhonda Grandi at rgrandi@sierracounty.ws.

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youtube is your friend

kerry shearer, of the sacramento county public health division, talks about using video technology to expand his organization's communications activities

During a public health emergency the media can either be a help or a hindrance in getting accurate information to the public. With the use of video technology and online tools like YouTube, public health officials can quickly create videos to get precise information to the public on immediate health risks. YouTube is a free, online video streaming service; anyone can open an account. When an account is set up, it includes a free YouTube channel.

In the fall of 2007 several schools in California reported unrelated cases of methicillan resistant staphylococcus aureus (MRSA), which caused a media frenzy. "In order to get accurate information to the public, we set up a YouTube site," said Kerry Shearer, Communications and Media Officer for the Sacramento County Public Health Division. "Using YouTube, videos are exposed to a much wider audience, whereas you may not have a large audience coming to your individual home page."
The video they created featured the deputy health officer speaking about MRSA. This video link was also sent out to the Sacramento County Office of Education and the School System web site. (The channel for Sacramento County Public Health can be accessed at www.youtube.com/saccountyph.)

Within days there were hundreds of hits on the school system's web page and within weeks there were thousands. The County was able to track these numbers because YouTube's website automatically updates the number of times a video has been viewed after the play button is clicked. Because Shearer had access to this information, it was easy to draw attention not only to the capabilities of YouTube and online reach, but also to provide quantitative data about how many audience members were getting the message.

Most government organizations have strict guidelines and firewalls controlling what can and cannot be posted to their intranet and/or internet sites. Shearer figured out a legitimate way to bypass these restrictions by creating a video section on the county's website called PHTV (Public Health Television.) This page looks like it has a video player on it, but in actuality, it is just a graphic. When you click on the graphic it redirects you to another site where the videos are saved.

Shearer notes that YouTube provided a unique opportunity during another recent public health emergency. Not long after

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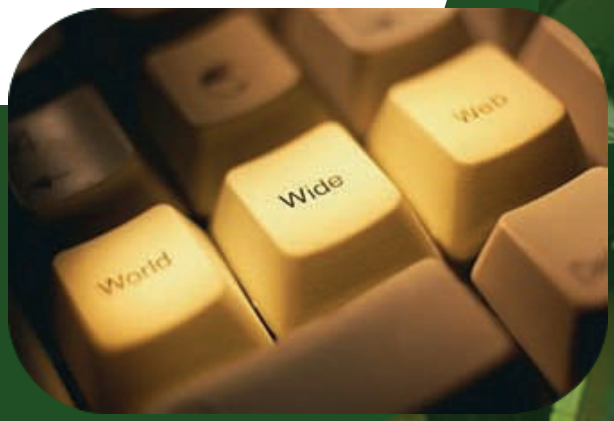
youtube is your friend *continued*

kerry shearer, of the sacramento county public health division, talks about using video technology to expand his organization's communications activities

the MRSA scare, in the summer of 2008, the Sacramento County area was inundated with thick smoke from wildfires, coupled with a heat wave. "We did a real quick turnaround video—we put it together in about three hours and posted it to YouTube and our page," says Shearer. The Division also partnered with the Sacramento Metropolitan Air Quality Management District, which posted the video on their www.sparetheair.com web page. This site received up to one million hits per day during this period.

It's useful to note that these videos were created with very basic equipment. In Sacramento, the Division uses a Sony digital camera with professional microphone adapters which cost about $2000. During the interviews a wireless microphone was used. Videos were edited using Adobe Premier Pro. Once a video is converted to a .wmv file (Windows Media Video) it can be uploaded on YouTube. After the initial equipment purchase, there are no ongoing costs associated with this equipment.



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additional resources

In the last issue of ***Risk Communicator***, we heard from John Rainford, the Team Leader for Communications for the Assistant Director General's Office of Health Security and Environment, about the new WHO international communication guidelines.

The WHO Outbreak Communication Planning Guide, 2008 edition, has now been released. The Guide, developed in collaboration with more than 120 experts and practitioners, provides detailed capacity building recommendations for national public health authorities. To receive an electronic copy, please contact Ms Tiffany Domingo at domingoc@who.int.

With the H1N1 threat still lingering, the importance of risk communication during an outbreak is paramount. It is important that the general public maintain adherence to safe habits and for public officials to promote a sense of trust. The re-affirmation of solid risk communication fundamentals for the sake of outbreak communication is the primary theme in the Outbreak Communication Planning Guide. The Planning Guide is currently available in English, French, and Spanish, with plans for future translations in Chinese, Arabic, and Russian.

A printer friendly PDF version in English only can be found at:

http://www.searo.who.int/LinkFiles/CDS_WHO_Outbreak_Comm_Planning Guide.pdf

From the WHO Planning Guide

"Focusing on the outbreak communication principle of **planning,** this document attempts to respond to these requests and is a guide to help Member States to build the required capacity for effective outbreak communication. . . . Experience has shown that transparency in communication is essential if the public is to trust the authorities in charge of handling an outbreak. Without this trust,

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contributors

Project Officer

Marsha Vanderford, Director,
Emergency Communication System and Chief,
Emergency Risk Communications Branch,
Office of Public Health Preparedness & Response,
Centers for Disease Control and Prevention

Project Director

Nadya Belins, Public Health Workforce Lead,
Emergency Risk Communications Branch,
Office of Public Health Preparedness & Response,
Centers for Disease Control and Prevention

Editor-in-Chief

Nadya Belins, Public Health Workforce Lead,
Emergency Risk Communications Branch,
Office of Public Health Preparedness & Response,
Centers for Disease Control and Prevention

Editors

Roger Pippin and **Jude Wilson**,
Health Communication Specialists, McKing Contractors

Researcher

Roger Pippin,
Health Communication Specialist, McKing Contractors

Writers

Jessamyn Ressler-Maerlender, **Roger Pippin**, and **Jude Wilson**,
Health Communication Specialists, McKing Contractors

Design/Layout

Nathan Huebner, Emergency Web Team Lead, and **Catherine Jamal**,
Usability Specialist, Emergency Risk Communications Branch,
Office of Public Health Preparedness & Response,
Centers for Disease Control and Prevention and
Denise Hofmann, Health Communication Specialist/Web Designer,
McKing Contractor

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