IPHCA
Indiana Primary Health Care Association

IPHCA Emergency Management Communicator

January 2009

Communication

Establishing communication methods for use in responding to an emergency is crucial to ensuring that the necessary information will be able to be disseminated.

Consider using a variety of sources so that in the event of failure of one of the modalities, communication could still occur.

Some of the possible means of communication include:

- Phones (landline, cellular)
- Satellite phones
- Text messaging
- Email
- Websites
- 800 Megahertz radios
- Amateur radio

For example, if there were an ice storm that disrupted power, would your landline phone work? If the power is out and your phone is a digital model, it may not work unless you have a functioning battery backup. One way to ensure that you would still have access if phone service is still available is to have one of the traditional phones with a cord in your facility for use in the event of a power outage.

Using the same example of an ice storm, if the phone lines have snapped and are no longer functioning, having cell phones as a backup to the landline phones would allow phone communication to continue.

If, as in recent disasters, a surge in cell phone usage caused the cell phone services to be unavailable, what could be used instead? According to Mark Siegel, a spokesman for AT&T Wireless, "as an alternative, callers should try sending short text messages, which use less capacity on the networks because they pass through in bits and bytes instead of requiring a dedicated circuit as a true phone call does." (http://www.computerworld.com/action/article.do?command=viewArticleBasic&articleId=9045438&pageNumber=2). By using short text messages it may be possible to continue to communicate in a crisis.

Ensuring that your center is able to effectively communicate with your patients, your community and your staff will require planning for backup, or redundant, communication methods. Plan to use a combination of different types of available communication tools to increase your chances of sustainability.

Alternate Methods of Communication

What is an 800MHz radio system?

An 800MHz radio system is a blend of traditional two-way radio technology and computer-controlled transmitters. The system's main advantage is that radio transmitters can be shared among various departments, with the aid of computer programming. Virtual radio groups called "talk groups" are created in software to enable private departmental conversations. This gives the new system the appearance of having many "frequencies," when in fact everyone is sharing only a few.

What is a satellite phone?

A satellite phone or satphone is a mobile phone that sends and receives calls using satellites rather than landlines or cellular broadcasting towers. A satellite phone only requires a clear line of sight to the sky. The three main satellite networks at present are Iridium, Globalstar and Thuraya.

The advantage of a satellite phone is that it can complete calls from virtually anywhere.

A disadvantage of a satellite phone is a noticeable delay in conversations. The signal must first travel to the satellite, then to an earthbound gateway before being routed to the receiver. The receiver's response will follow the same path in reverse, taking equally long to reach the caller. Satellite minutes are also more expensive than cellular minutes.

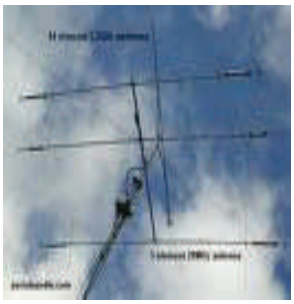
A satellite phone can provide backup communication in disasters when cellular towers or landlines might not be functional.

http://www.wisegeek.com/what-is-a-satellite-phone.htm

What is Amateur Radio?

Excerpt from the American Radio Relay League (ARRL) http://www.arrl.org/pio/bwhatis.html.

The Amateur Radio Service can transmit messages where regular communication systems fail. The FCC created this "Service" to fill the need for a pool of experts who could provide backup emergency communications. Countless lives have been saved where skilled hobbyists act as emergency communicators to render aid, whether it's during an earthquake in Italy or a hurricane in the U.S. On September 11th, it was ham radio that kept New York City agencies in touch with each other after their command center was destroyed. When hurricanes like Katrina, Rita and Wilma, or tornadoes or floods knock out other communications, ham radio provides vital life-and-death capabilities.



Amateur Radio users have a basic knowledge of radio technology, regulations and operating principles, demonstrated by passing an examination for a license to operate on radio frequencies known as the "Amateur Bands." These are reserved by the Federal Communications Commission (FCC) for use by hams at intervals from just above the AM broadcast band all the way up into extremely high microwave frequencies. Amateurs are allocated ten basic "bands" (i.e. groups of frequencies) in the High Frequency (HF) range between 1800 and 29,700 kilohertz, and another seven bands in the Very High Frequency (VHF) bands and Ultra High Frequency (UHF) ranges, as well as Super High Frequency (SHF) bands. Some of these ten bands are very small and some are rather large. Even though many Amateur Radio conversations may be heard around the world, given the right frequency and propagation conditions, Amateur Radio is basically two-way communication.

You can go to www.arrl.org/findaclub to locate clubs near your own home area.

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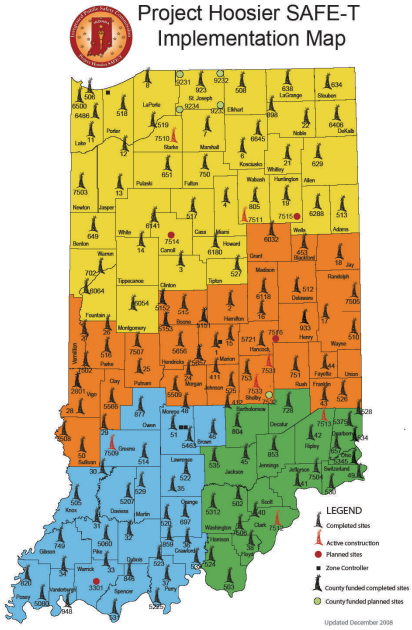
Specific Communication Tools Used in Indiana



Hoosier SAFE-T (Safety Acting for Everyone - Together)

SAFE-T is...

a statewide, interoperable, wireless public safety communications system for Indiana local, state, and federal first responders/public safety officials. SAFE-T operates on a Motorola 4.1 Astro Smartzone OmniLink 800 MHz trunked voice and data system. It supports both analog and digital radios, providing 95% mobile radio coverage statewide using 126 communications sites connected by T1 lines and microwave.

SAFE-T will allow seamless, interoperable and reliable communications among local, state, and federal public safety agencies during routine, emergency and task force situations. SAFE-T will strengthen community safety and security, minimize costs and barriers to communications, and break down regionalization of systems to combat crime, natural disaster and terrorism. SAFE-T was designed to include wide voluntary participation of public safety agencies/first responders while respecting local autonomy.

For more information visit http://www.in.gov/ipsc/.

Government Emergency Telecommunications Service (GETS)

- Free service provided by the federal government for first response agencies to use in an emergency situation when normal plain old telephone systems (POTS) are not functional or are overloaded
- Provides the subscriber with a phone card with an access code that will route the user through the government phone exchange and complete the call
- Obtained by contacting the Department of Homeland Security National Communications System at 1-703-607-6118 or on the web at www.gets.ncs.gov.

WebEOC

WebEOC is a crisis information management system used by the State of Indiana to enable better incident management and simultaneous information sharing in order to build a common operation picture for the state.

The system is the key to successful incident management for tornadoes, anti-terrorism and any other organized response. Today, Marion County EMD uses WebEOC to manage all daily operations such as missing persons, fires, and police chases in addition to large events, emergencies, and generating automatic reports. Nearly all of the 725 registered users can post and edit real-time information, rather than passively viewing it, and are actively using the system as needed. On a daily basis, approximately 50 users gain access to WebEOC for the common operating picture — a task that, prior to 2003, would have required a phone call or a visit to the 20-seat EOC. Monitoring and sharing FEMA and DHS critical infrastructure reports, National Weather Service feeds, intelligence situation reports, and CAD systems are now just part of the EOC.

IHAN

The objective of the Indiana Health Alert Network (IHAN) is to provide a method for redundantly communicating emergency health alert information to key people in Indiana. The alert information can originate from the CDC, the Indiana State Health Department (ISDH), county heath departments and/or other health organizations. The ISDH uses IHAN to deliver messages to the appropriate people in each county; then the local health department or hospital is responsible for “cascading” (sending) the message to the appropriate individuals in the county by whatever means possible. In future phases of the IHAN system, one of those means will be the communication capabilities of IHAN. Local IHAN Coordinators may then be authorized to create, view and approve messages created at their LHD or hospital level and to cascade messages received from the state level.

https://healthnet.isdh.in.gov/datacenter/main.aspx

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For questions or comments, or to schedule a site visit for help in implementing emergency preparedness activities, please contact Jenifer Nelson.

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Communication Failures

Although communication is an essential part in the response and successful recovery from an emergency, it can also be very challenging. Communication methods that are in standard daily use may not be available at all or may be limited. In order to prepare for this possibility, it is best to have redundant communications established so that business can continue and vital services can continue to be performed.

One of the common deficiencies noted after emergencies take place is the difficulty with communications. Regarding the London bombing, CNET reported the following, "communications failures had a direct impact on rescue efforts, with requests for further ambulances, supplies and equipment by London Ambulance Service personnel at the scenes of incidents failing to get through to the main control room. They were also unable to receive instructions as to which hospitals were still receiving patients." (*Communication failures hampered London bombing rescues*: http://news.cnet.com/Communication-failures-hampered-London-bombing-rescues/2100-7348_3-6079889.html)

Additionally, after the events of 9/11 the New York Times reports that, "...communication disruptions almost crippled their efforts." (*A Nation Challenged: Emergency Policy; A Focus on Communication Failures*: http://query.nytimes.com/).

A good definition of communication failure can be found at www.ci.kent.wa.us/ and is defined as "...the severe interruption or loss of private and or public communications systems, including but not limited to transmission lines, broadcast, relay, switching and repeater stations as well as communications satellites, electrical generation capabilities, and associated hardware and software applications necessary to operate communications equipment. These disruptions may result from equipment failure, human acts, (deliberate or accidental) or the results of natural or human made disasters."

Memorandum of Understanding (MOU)

Documents called Memoranda of Understanding (MOU) are often used to develop an agreement between two or more parties who are developing new relationships with each other or are re-defining existing ones. An MOU can help clarify roles and provide a framework for expectations and the collaboration process. Defining expectations, roles and responsibilities before an emergency happens is important for an effective response. MOU templates are available on the IPHCA website at: http://www.indianapca.org/programs/plans_templates.html.

OPHP: Formerly known as MAPHTC

The New Year means a new beginning for IN MAPHTC. The Indiana University School of Medicine Department of Public Health, home of IN MAPHTC, recently experienced rapid expansion, including additional faculty, a larger student body, and new research initiatives. This expansion allowed the scope of continuing education initiatives to broaden. To more closely identify these efforts, IN MAPHTC changed its name to Office of Public Health Practice.

The Office of Public Health Practice will continue to connect public health professionals, will continue to provide learning opportunities, and will work to improve the public health infrastructure in Indiana. Through efforts such as the Indiana Joint National Public Health Week Conference, Building the Foundation for a Healthy Indiana, the interactive website, and the spring 2009 course schedule, the OPHP commitment and dedication to serving the public health workforce statewide can be seen. Please visit their website, www.publichealthconnect.org, to see the latest news and upcoming events.