

MARCH 2005

\$5.00

9-1-1

MAGAZINE

MANAGING EMERGENCY COMMUNICATIONS



Integrated

Preparedness

Disaster Training Reaps Benefits in Minneapolis

By Kristi Rollwagen, Deputy Chief, Minneapolis FD

What we have here is *failure to communicate.*

Moviegoers no doubt will recognize the oft-quoted line from cinema classic "Cool Hand Luke." Here in the real world, far from the prison scenario Paul Newman's convict character faced, firefighters and other EMS professionals have been known to mutter those same words, time after time.

Whenever an urgent response scenario unfolds, communication is an issue. Emergency responders often have a short amount of time to arrive at a scene, get a problem under control and deal with the impacts. They must communicate with each other and with the outside world – usually while dealing with an evolving disaster at hand. Despite people's best efforts, communications tend to fail.

Here in Minneapolis we've been conducting a series of integrated exercises aimed largely at improving



The Minneapolis Fire Department handles a 2nd alarm fire on East Lake Street. The department's Emergency Preparedness Division recently developed a series of desktop disaster planning exercises that played out over the Internet to each participant's workstation

our emergency response communications. We've conducted a pair of large-scale response scenarios and integrated a new Web-based information-sharing tool to facilitate better coordination of disaster-response activities. We've brought

together a wide range of disciplines for these exercises, melded all of our processes and gotten to work on new ways to talk back and forth. We have a long way to go. But through the use of new technologies and new modes of cooperation, our region is making



Minneapolis Fire Dept. Deputy Chief Kristi Rollwagen is flanked by John DeJung, Minneapolis 9-1-1 Director [left] and Chris Terzich, Wells Fargo Emergency Preparedness Director, during the Snowball II emergency preparedness exercise.

progress on an issue that has bedeviled every disaster-response group since the beginning of time.

The series of exercises we've performed carry the "Operation Snowball" name – an apt one for an area that gets four feet of snow in an average winter. Attaching such a tag to an emergency preparedness exercise also makes sense considering the ways such situations can tend to *snowball* out of control if not properly addressed.

The first Operation Snowball, conducted in December 2002, was a tabletop exercise carried out inside the Minneapolis Convention Center. About 150 representatives from local police, fire, EMS, and city government departments, as well as local hospitals, gathered for a day to simulate a weeklong response to a disease that infected great numbers at a performance in Minneapolis' Orchestra Hall. Organizers named the pesky disease *Richardsella Turnerensis* in "honor" of the city's emergency preparedness director at the time.

The second Operation Snowball took place in February 2004. It was a

much more ambitious undertaking, giving more than 400 area professionals a chance to solve six different disaster situations over a seven-day period. But unlike its predecessor, Operation Snowball II played out entirely over the Internet, with participants logging on from their own workplaces to a communication system provided by MissionMode Solutions.

Sometime in the next few years we will organize an Operation Snowball III to test out new processes developed in response to issues raised in a succession of drills conducted in coming years.

Lessons learned

Before we start planning for Snowball III, it's worthwhile to look back at the lessons learned in the progression from Snowballs I to II.

As expected the biggest problems in the Snowball I tabletop exercise stemmed from balky communications. A lot of decisions needed to be made, with input from a number of organizations, but nobody was stepping forward to make them.

We had an email system set up, but that soon became overloaded. Communications were getting lost, both from the bottom up and from the top down.

Another interesting trend emerged due to people's inability to share information. Representatives of Minneapolis and St. Paul – Twin Cities separated by a river – were separated physically during the tabletop exercise. As officials from both sides responded to the biological outbreak independently, they make decisions at different paces. For instance, authorized personnel from one side of the river were dispensing medications while officials on the other side were still debating the need. In a real-world situation the two sides should be working together, with common goals. In Snowball I they did not.

In Snowball II we set up the Internet-based exercise for two reasons. We wanted to allow for a wider level of participation from professionals who would have had trouble leaving their own workplaces. Second, we wanted to test the capabilities of an integrated communications medium.

MissionMode's Emergency Alert and Situation Center was integral to Operation Snowball II and was the primary communication platform for the exercise. MissionMode enabled the participants to quickly notify multiple agencies of emergencies and then bring them together online to share information, collaborate, and rapidly coordinate responses.

Scenarios played out over several days via situation rooms on the Web site. Participants were notified of new scenarios and updates via MissionMode alerts that were broadcast via e-mail, phones, pagers, or whatever notification system the participant preferred. No one was required to leave their office for an extended period of time or meet in a

conference room with people that they would not normally meet face to face.

As each scenario began, the operation controller would send an Alert to all the participants' communication devices. When the Alert was delivered, the recipient was asked to acknowledge receipt by using the interactive voice response (IVR) system, replying to a text message or by going online. Getting an acknowledgement back confirms that the message was actually received rather than simply sent. This allows the team to react accordingly based on who is aware, or not aware, of the problem.



After receiving an Alert, the participants would then log into the Situation Center using their computers. The Situation Center is an application that is accessible via the internet using a browser like Microsoft Internet Explorer. No special software was required so a participant could log on from the office or home, whichever was more convenient.

The MissionMode Emergency Alert and Situation Center functioned as planned. It proved to be an efficient way for notifying large, dispersed teams of an important event as well as an effective communication medium. MissionMode subscriptions were

subsequently purchased by a number of organizations for use operationally.

Among the notable results from Operation Snowball II were:

- 25 situations and 51 alerts were created.
- 8477 notifications were sent to email, phone, pager, SMS and/or fax.
- 965 messages were posted in the situation logs.
- Users could participate from their offices or homes.
- Each agency could see what the other agencies were doing.
- 9 private companies, 24 health care organizations, 12 ambulance and 35 government agencies communicated with each other.
- A persistent log was created for future analysis.

An array of disasters

The six scenarios were designed to test responses by public health, hospitals, EMS, law enforcement, fire, haz-mat, public information, emergency management, and others and assess the interaction between and among response agencies. The participants had to deal with a downed aircraft near a highway bridge; a chlorine leak at inside the University of Minnesota Aquatic Center; a cyber terrorism bomb attack that knocked out communications in downtown government and communications company buildings; a spreading plague; the discovery of an anthrax-laced letter inside Minneapolis' main post office branch; and a second cyber terrorism scenario that disabled crime information computers and regional 9-1-1 service.

Since none of the participants had to gather for the series of exercises, all operated from their own offices and interacted via telephone, e-mail

and fax, and by posting comments on the MissionMode online situation room.

The key issues identified in Operation Snowball II were remarkably similar to those identified in the original Operation Snowball exercise of 2002. They focused on four areas: command, communication, logistics and the operation of the exercise itself. There was some dramatic improvement in many of these areas, but we still have some concerns.

Command: In the current exercise, there was little confusion regarding the incident command system and unified command for the "routine" scenarios such as the plane crash and the chlorine leak. These are fairly traditional emergency response scenarios and the incident commanders are readily recognized and acknowledged.

The cyber terrorism scenarios created some problem with identification of an incident commander, as there was not a traditional incident scene for the event. And public health scenarios create additional confusion because a public health emergency is a slowly emerging incident that will generally cover multiple jurisdictions and involves a response at multiple jurisdictional levels.

Communication: Public information is a key communication component. The questions that were raised at all levels included who sets the message? Who becomes the identified spokesperson for the event? How are messages disseminated? Some basic communication message templates for a variety of public health emergency scenarios for use by local public health and other partners could be developed by the Minnesota Department of Health.

Inter- and intra-agency communication was greatly

facilitated by the use of the MissionMode site. Redundancy and diversity are the key words in developing a comprehensive communication system for inter- and intra-agency communication.

It is important for individual agencies to develop policies and procedures on how they will communicate with their employees and agencies that they work closely with (such as EMS, hospitals and public health).

It was obvious that communication among response agencies was much more effective in Operation Snowball II than it was in the original exercise. This was partly due to use of the MissionMode tool, but also important was the fact that participants were actually forced to use telephones and traditional communication tools as opposed to simulating those types of communications in the Snowball I tabletop exercise.

Logistics: The basics of an emergency response include having the proper personnel, equipment,

supplies, training, and planning in place prior to the need for the response. On the whole, the basic logistics were in place for the response to all of the scenarios presented to the

participants. In the plane crash scenario, all responders seemed to know what they had to do and had the necessary personnel and equipment to accomplish their tasks. The big questions were ones of jurisdiction (where did the plane go down, exactly), but that did not immediately impact the emergency response.

The Exercise: The “chat room” format of the sub-situation rooms proved to be very helpful to some disciplines, and it was nice to be able to see all of the postings and know what other disciplines were doing on

various scenarios. This proved educational to many participants, who would normally have no idea how fire or EMS actually respond to an incident. Also valuable is the fact that all of the postings are available for review, so that there is a complete record of what was communicated in all of the scenarios.

The future

Operation Snowball II not only allowed us to assess our region’s ability to respond to different kinds of disasters today; it gave us a look into a future where the Web integrates all of our response capabilities. A number of local hospitals, local health departments and state agencies have installed the MissionMode tool, and regional police and fire departments are evaluating the best ways to use it. Our goal is to set up additional exercises over the next few years that test our departments’ use of the Web more fully.

Communication will always be an issue in evolving response scenarios. We will never construct a perfect system that guarantees 100 percent success. At the same time, we have to push to keep getting better. Because, as we all saw on Sept. 11, 2001, in the world of emergency response, the costs of repeated failures to communicate cannot be measured just in dollars, but in lives lost. ■

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For More Information

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To access information using the World Wide Web, go to:

<http://www.missionmode.com/>