TOPOFF 3 Comments and Recommendations by Members of New Jersey Universities Consortium for Homeland Security Research

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Abstract

Faculty members from the New Jersey Universities Consortium for Homeland Security Research were observers for the TOPOFF 3 exercise in New Jersey in April 2005. The exercise involved release of pneumonic plague with symptomatic individuals sent to hospitals and asymptomatic individuals to Points of Dispensing (PODs) to receive antibiotics. This paper summarizes Consortium members' observations about the exercise, with emphasis on the POD strategy and implementation and on the role of communications and command centers. The future role of university collaborations with local and federal agencies in similar counter-terrorism exercises is also discussed.

Introduction

The TOPOFF 3 Exercise held April 4-8, 2005 provided an opportunity for federal, state, and local agencies and jurisdictions to exercise a coordinated response to a large-scale terrorist attack. It aimed to test both plans and skills and provide information to participants and observers about the preparedness and response plans. The exercise took place in Connecticut, New Jersey, the United Kingdom, and Canada. Members of the New Jersey Universities Consortium for Homeland Security Research were invited to be observers of the TOPOFF 3 events held in New Jersey between April 4th and 7th. The Consortium, consisting of seven New Jersey universities[1],

[1] Fairleigh Dickinson University, Monmouth University, New Jersey Institute of Technology, Princeton University, Rutgers University, Stevens Institute of Technology, and University of Medicine and Dentistry of New Jersey.

was founded in 2003 to coordinate homeland security research among faculty at New Jersey's universities and to facilitate collaboration among university faculty and between university faculty and New Jersey and federal government officials. The Consortium is recognized by and works with the Office of the Attorney General of the State of New Jersey as well as numerous government and military research units in the state and the federal government. We were provided access to the planners, and our activities during TOPOFF 3 were supported by Lt. Dennis McNulty of the NJ State Police. His goal was to provide the Consortium observers with unfettered access to exercise play. While this didn't always happen, we feel that involvement of university observers earlier in the process in future exercises would help make this happen more smoothly.

The comments about TOPOFF 3 are based on observations and subsequent discussions by our Consortium members and are provided in the following as a guide for improving the approaches employed in emergency response. They are primarily directed at acute exposure crisis intervention, response and control. This article is not only intended to provide feedback to the state and federal agencies and the emergency management community on some specific aspects of TOPOFF 3 and their implications for preparation and planning for future terrorist events, but also to illustrate new roles that the academic community can play in collaboration with government and the private sector in partnerships in the defense against terrorism.

The TOPOFF 3 scenario depicted a complex terrorist scenario. The New Jersey part involved a simulated biological attack in Union and Middlesex Counties involving a vehicle-based biological agent, later identified as pneumonic plague. Local hospitals were involved with patients streaming in, and eventually all New Jersey counties became Points of Dispensing (PODS) for antibiotics. A related chemical weapon attack that was originally planned for Boston took place in New London, Connecticut. TOPOFF 3 in New Jersey also involved a mock cyber attack.

Some components of TOPOFF 3 had multiple Consortium reviewers, while others had only one reviewer. TOPOFF 3 aimed to examine a variety of issues, including public health and safety, terrorism prevention (putting the pieces together to ward off a major attack), communications, interagency collaboration, public/private collaboration, recovery and remediation. The major sections reviewed by the Consortium and discussed here are: The PODS (Point of Dispensing) and Communications and the Command Centers.

General Observations

Our goal was to observe various TOPOFF 3 components over the course of the entire event. The TOPOFF event provided an opportunity to test various components of the national, state and local response systems. From this vantage point many aspects of TOPOFF were successful. It is, however, the nature of a critique to concentrate on those points that were not as successful or need attention.

One of the most important general weaknesses we observed was that TOPOFF 3 was a totally scripted or playbook exercise. Individual components attempted to attain a realistic set of activities; however, the exercise lacked the random introduction of surprise or contradictory

information that would allow for analysis of reactions by individuals in complex decision making contexts. One of the most glaring examples of the scripting was the disclosure of the identity of the biological agent of concern more than a week before the event started in New Jersey. The release of this information was statewide since it was announced on a talk radio station in New Jersey, a number of days before the event. There was, unfortunately, no flexibility for the game controller to change the agenda after this occurred. This resulted in our being unable to reliably assess a crucial aspect of the TOPOFF 3 event response. Some examples of the problems generated by prior knowledge were: 1. a laser-like reaction and response to the release of a specific biological weapon, pneumonic plague, rather than the implementation of "shot gun" tactics that would be needed to determine the presence of an unknown biological or chemical agent; 2. the lack of a sense of true "chaos" among the press, the emergency responders, the local officials, and others since the sick had a treatable illness and the method of treatment was a given; and 3. the lack of any truly significant perturbations, or inclusion of new and inconsistent information that refuted the initial hypotheses. Each of these aspects prevented a true assessment of the impact of the event, including level of paralysis that could have resulted among all industrial, commercial or routine activities. What could be assessed during TOPOFF 3 was the implementation of various components of the local, state or national response system, and the interaction among the various components.

In the future, it would seem to be preferable for the Department of Homeland Security or the State of New Jersey to employ the kind of stochastic events that are used during a "war game." Typically, war games start with a plan and then at times randomly selected perturbations or new adverse events are added at specific locations. This sort of process is essential for truly stressing the response systems to the limit. While individuals associated with some of the components of the TOPOFF 3 exercise conducted in New Jersey felt that they were stressed to the limit, without the introduction of stochastically placed new events or some other similar element of realism, it is difficult to determine whether or not that statement is true. As an example, what if there were a secondary attack with another agent? Could this have been handled effectively by the State? The addition of some more elements of realism would allow us to have more confidence that our preparedness was tested in a meaningful way.

A series of observations made by the Consortium were related to the actual schedule of events. The aftermath of the bio-agent release at Kean University was displayed by the Virtual News Network (VNN), a pseudo news network created for the TOPOFF 3 exercise. However, VNN did not convey an air of urgency. Officials were standing around in their normal work clothes providing interviews to unprotected VNN reporters. Again, there appeared to be a VNN playbook. Soon, people were being shipped off to hospitals without any idea (in the "script") of what the contaminant would have been at the site. This would not have been a logical decision since pneumonic plague takes 2-3 days before individuals begin to display symptoms of the disease. The idea of quarantine was not considered for the people immediately adjacent to the release or the students in the surrounding buildings. The time between initial sample collection and confirmation of plague was unrealistically short – less than 24 hours. Based upon the mode of action of plague, and the actual time delay before appearance of disease, the appearance of symptoms and patients at the hospital was too short for each of the affected communities.

Another general observation was that the level of training within the individual components reviewed by our observers (e.g., communications and medical intervention) was quite variable, ranging from excellent to fair. More emphasis needs to be put on training those who will be heavily involved in such exercises (and potential real events), both appropriate government officials and volunteers. Also, the methods of communication and documentation we observed ranged from computer-based entries to information scribbled on pieces of paper. More attention needs to be paid to taking advantage of modern and efficient communication systems and training individuals (including volunteers) to use them. To some extent, this is just a matter of working out the appropriate protocols in advance. A surprising aspect of TOPOFF 3 was that the best and the worst of specific activities could be identified at all levels of government and response units, both in terms of training and in terms of communications.

The Points of Dispensing (PODs):

Introduction

Three separate PODS associated with TOPOFF 3 in New Jersey were observed by members of our Consortium: Middlesex County (The Athletic Center at Rutgers University), Monmouth County (Brookdale), and Union County (Rahway). By our observation, only two of the PODs operated in a similar manner as *Points Of Dispensing*. The third (Monmouth County) acted more like a *Point of Distribution*. This is an important distinction and will be explained below. When coupled with varying levels of effectiveness of operations observed at individual PODs, the distinctions re-enforce recommendations we will present about the value of PODs.

The principal purpose for a POD was to dispense drugs, and educational materials and emotional support, to the members of the community who were not showing any overt symptoms or may not have been exposed to the agent. The layout of a POD was designed to provide an orderly flow of people from the entrance to the point of dispensing, and finally to the exit of the POD. (Those people exhibiting symptoms were directed to hospitals.)

Conceptual Design

A major conceptual problem with a POD is the "bringing together of large numbers of people to receive their materials in one location." During a state or national homeland security crisis there will be uncertainty, confusion, security issues and the potential for secondary attacks. Therefore, logistically it will be almost impossible to get large numbers of people to a POD quickly or efficiently, or prevent them from getting into harm's way during a secondary attack. Further, the roadways around a POD will not be able to handle a large number of cars converging on a location in a time of crisis, and the mass transportation needed to move people from a parking lot to the POD will be difficult to assemble over a short period of time. In addition, the roadways will be overwhelmed with nervous drivers, and parking lots will be very hard to manage. (Like so much else about the plans illustrated by TOPOFF 3, this aspect of the POD concept depends heavily on a buy-in from the public. Omitting analysis of public buy-in is a flaw in a number of aspects of the plans.)

The POD model depends on many active and motivated volunteers who present themselves at each POD. In a time of crisis, however, how difficult or easy will it be to reach these volunteers and have them stay long hours? Without accomplishing this, the effectiveness of each POD will be severely compromised during an event. During a real event, volunteers will not have the luxury of making child or elder care arrangements days in advance (there will be very short notice), and one can question whether they would be willing to stay long hours while their family was left alone. It should be noted that at some of the PODs, even during the TOPOFF 3 exercise, no provision was made to have 24 – 7 coverage.

Analysis of Specialized POD Activities

Consortium observers were concerned that seemingly excess attention was paid at the PODs to being able to accommodate people with isolated problems. For instance, there was a desire to have a POD designed to effectively handle disabled people during an event. During a terrorist event logistics would be cumbersome, and dealing with disabled individuals upon arrival/departure would cause problems. Not all disabled people will have a "buddy," and the movement of the disabled requires much time and effort even under optimal circumstances. Also, some PODs made a major effort to have interpreters located at the POD site. This is a nice idea, but is it realistic to believe that one can get volunteers that speak up to 14 languages to a POD during an actual event? Moreover, if a person didn't speak English, how would they get to the POD in the first place? Of course, they might have had someone help them who knew enough English to get them to the POD, but not enough to understand the nuances in questions they might have to answer. The question remains as to the feasibility of providing enough interpreters and the extent to which we can devote a lot of person-resources to this issue. By way of contrast, we envision the need for considerable psychological counseling. How to complete such counseling during such events needs a thorough analysis. It may be best handled by better education of the general public now, and not during an event.

There was considerable effort to keep records. We understand the desire to record who got what medications, who received what counseling, etc. However, this slowed things down considerably. In a real emergency, it might not be feasible.

Another observation relates to the ability to get food to the volunteers. This would also be very difficult in a real crisis. Would the food purveyors even be willing to send trucks out? Would they even be capable of sending trucks out (have enough drivers) and should they even consider travel? Would they be subject to a secondary attack? One of the experts we consulted indicated that food suppliers or other industries were not even considered as potential partners in the TOPOFF program. Whether or not this is the case, this weakness necessitates more thought because the ability to move food products and other materials during an attack could be compromised by the attackers and because other security issues will arise since all the trucks, personnel, and packages entering and leaving a POD would have to be thoroughly checked and approved for entry and exit. Further problems discussed by a Consortium member with the New Jersey Food Council and New Jersey Business Force/BENS (Business Executives for National Security) included that the food industry might cease to work due to inability to get food prepared and delivered, with roads closed, workers panicking, and re-supplying food staples needed to prepared consumable food supplies made difficult or impossible.

Disease Model

Implementation of the POD approach in TOPOFF 3 was flawed from the standpoint of microbiology and the spread of disease. First, as an exercise, the fact that everyone knew the agent was pneumonic plague reduced all the uncertainty and much of the anxiety to a minimum for the workers and volunteers at each POD. The control plans could be implemented with a defined pre-screening procedure. Materials explaining the drugs, their side effects, who should not take them, etc., were prepared in advance. They were very professional in design and available in good quantities. But, what if we didn't know the identity of the biological agent causing disease? Would we have the ability to access similar materials in "real time" and print them and copy them on site?

The POD concept also begs the question: "***What if the agent was a contagious communicable disease before an individual displayed symptoms?"*** In such situations, the POD would act as a new point(s) of exposure to the illness and lead to the inevitable, a large number of new victims. We were surprised at how little attention was paid to wearing masks and the inconsistency with respect to their use. In Middlesex County, some POD workers wore them, some did not. Some had them and told the observers they would have worn them in case of a real emergency. None of the people coming through the lines had masks. In contrast to Middlesex County, the Union County POD did distribute masks to the volunteers, police and EMS, but not the general public entering the building. The latter could be important since such individuals could be a secondary source of the bacteria or other infectious agent.

A major uncertainty was the kind of mask that would have been appropriate if the pathogen were unknown. There would be a need to have the more expensive type of masks available and prior personal protection instructions and fittings of the workers for the types of masks to wear in the event of an attack with an unknown agent.

In the case of TOPOFF 3, the workers knew the nature of the agent, which was a critical problem in assessing the validity of operations observed at a POD. Since the disease, pneumonic plague, is communicable via droplet infection, the main method of control of disease incidence would be by identifying "true" victims before they entered a POD and then triaging each to the hospital. This was done in Union County; however, in spite of the presence of a pre-screening procedure, one or more infected people could be missed during an actual event or less scripted exercise, thereby contaminating the entire POD or infecting individuals in the immediate surroundings. Another communicable disease that is contagious before an individual displays symptoms would cripple the effectiveness of the triage system used at a POD. Thus, the POD system might actually lead to the spread of disease by encouraging people to leave home and stand in line with contagious individuals.

Critical Load Issues at a POD

Within each POD the amount of time a person spent from start to finish varied significantly from person to person. For example, in the Union County POD, once a person successfully passed through the metal detector and reached the registration line, the time spent from the start to finish could be as short as 13 minutes or as long as 35 minutes. Each person

coming to a POD played a specific (scripted) role, e.g., no questions, lots of concerns, symptomatic, having specialized medical needs, irritated, etc. This was a good idea, and provided some information on the functioning of a POD during distribution. The long processing times in Union County occurred under relatively smooth operating conditions. However, in a real crisis, there would be noise, long lines, an occasional person getting sick, some people pushing and shoving or trying to get to the head of the line, and possibly some sense of panic (if things get out of control). The question remains: What if the POD had to handle 50,000 people during a real crisis, and not the less than 1000 people handled in TOPOFF 3? Could the processing be accomplished and distribution of drugs be effectively implemented?.

In the case of a true terrorist event three additional variables would be in play: 1. a much larger influx of people over a short period of time to the POD; 2. much less control over the preparations; and 3. a very short window of time between the announcement of the agent and the time for initiation of dispensing. Each of these variables could lead to a major problem in preventing further infection. For the first, the problem would be the large numbers of people coming to a place where there may be a communicable disease. For the latter two variables, the POD will not have the time to set up and obtain volunteers in a reasonable period of time. Finally, as noted earlier, bringing many people to a POD, e.g., on a bus, may seem efficient, but again it increases the possibility of secondary sources of the primary infection. Further, will enough buses be able to get to the POD, and will there be enough volunteers to man them during the crisis? The real issue, it seems to us, is whether in a public health emergency, we would have time to screen, counsel, and to complete follow up with a large number of people. Perhaps the main reason for dispensing medication in some cases, such as this one, is psychological rather than medical. However, for either infectious disease or mental health reasons, is the widespread dispensation in a few fixed locations the right way to proceed?

Operations at Individual PODS

The Union County POD operated effectively for the duration of operation and the number of people present, and was very effective in providing information and education for the people processed through the POD. For example, there were video screens providing information throughout the POD. However, the Union County POD could not distribute more than about 1000 drug dosages in a four hour period, clearly not enough to protect a large number of Union county residents.

The Middlesex County POD serviced fewer than 500 people, with some being repeats. Observers were told that the POD was not meant to operate more than one or two days, and the POD could not operate 24-7 because of a lack of volunteer workers or participation requirements for volunteers even during a well-planned exercise. (At the Middlesex County POD, the rules required that all volunteers be screened and nobody with a record could be used. The extensive screening process seemed to drastically cut the number of volunteers.) A heavy investment of people would be necessary and it is pure speculation that the level of participation could be increased during a real event. In general, the Middlesex County POD had a number of other problems: patients wheeled through the registration area and operations area without masks (as noted above), personnel who did not appear to be well trained in safety and other procedures, and poor coordination with local police.

The biggest success, which in our opinion can be used to find a better approach for dispensing of materials, came from operation of the Monmouth County POD. This was due to two major aspects of its operation: *1. Monmouth did not follow the rules for how a POD would operate; and 2. the team was extremely well trained and well equipped for efficient operation.* The leadership in Monmouth should be commended for their efforts in making their POD a successful operation. In fact, our observers were told that the team had been training for months, and much basic information that was collected on site in Union and Middlesex County had been pre-entered in Monmouth's emergency response databases. The latter would be important to have for any response unit, but the amount of training and "database updating" could be called heroic. Each of these points demands attention, because the results are somewhat aligned with our recommendations for the future. Finally, as stated above, in contrast to the POD being a designated Point of Dispensing, as in the Union and Middlesex County approach, the Monmouth POD could be considered as a *Point of Distribution*. This was a distinctly different approach for implementing POD-related activities. The main focus of the Monmouth County POD was as a point for distribution of all medicines to a few people. These individuals, who were the main ones who came through the POD, then redistributed drugs to more people. As a result, our observers were told that 67,000 people (10% of the county) received their medicines in four hours. This is impressive, though it still requires people coming to central points of distribution, and volunteers. However, the results were much better than those obtained at the effectively operated POD in Union County, which served at most 1000 people in four hours, and the ineffectively operated POD in Middlesex County, which served at most 500 people.

One upside to the Monmouth revised POD concept was that their system was computerized so a person getting the drugs knew who they were getting the drugs for, and could then distribute them efficiently. However, we do not know whether or not they were actually distributed. To a large extent, the Monmouth approach was successful since Monmouth had a lot of the recipient information preprogrammed in before the event. During a real event, this type of command and control would not be possible, unless there was a constantly updated list or lists of people who are in the computer database. Such a list or lists would have to be accessible and provided to a small group of designated people who could coordinate the distribution of drugs within the county.

For the Future

Any system supporting widespread distribution of drugs during an emergency must minimize bureaucratic administrative requirements that may slow the process. Examples could be a combination of existing corporate systems, USPS, highway toll systems, supermarkets, mobile community systems, etc. The reliance on one system, like the USPS which had been suggested for TOPOFF for a large portion of the State of New Jersey, needs to be avoided, but its pluses and minuses should be analyzed as it is one of several alternatives for the distribution of meds over a short period of time.

Communication issues, which are the subject of the next section, are critical to the successful operation of PODs or other dispensing systems. Community-wide education on radio and TV that can provide true indication of the impact caused by a major terrorist or accidental

release event is a necessity. Providing timely, relevant, and accurate information to the public can reduce confusion, provide good reasons for specific courses of action taken by the federal and state government,, and provide the public with an explanation of the nature of the release, where to obtain needed medications, and how to use them. This must have simple modes of communication and reinforcement to increase the trust in the government messages and directions during a crisis.

The critical POD-related biological issues start with preventing an increase in the possibility of furthering the spread of the disease while people are present at the POD. It just cannot be done in a large area that has people of unknown exposures in close proximity to each other.

The PODs also lead to medical logistical issues of material supply, processing of people during an event, and maintaining adequate levels of trained personnel at the POD 24-7. The security issues at PODS were also determined to be very important. For instance, how do the police maintain order in a POD, keep the POD secure from secondary attacks (they will become a second level of primary targets), and keep traffic flowing to and from the POD? Each one of these issues compounds the concerns related to further infection, and identifies a factor that pulls the police away from pursuit and interdiction activities.

A narrowly-defined POD may be workable for a specific aspect of a WMD emergency response event. One such example would be the distribution of prophylactic medications to emergency responders for their use, and use by their families. The limited implementation of a POD for highly trained personnel would not cause diversions of law enforcement and other public safety officials from other tasks.

General Recommendations on PODS

Based upon the above analysis, we have a series of recommendations. From the standpoint of public health and logistics we offer the following:

1. Decentralization will prevent encouraging mass movement of people throughout the State under conditions which can lead to the spread of a communicable disease.

2. Prophylactic antibiotics or other drugs, as well as information, should be dispersed within each community, with the police, firefighters, etc. getting the materials from a central location (e.g., as in the Monmouth POD Model). Additional antibiotic stocks can be held in small, centralized locations (police departments, fire departments, town halls) if additional need arises. This concept limits travel and gives more control over antibiotic dispensing. Also, it precludes “outsider” attempts to disrupt drug dispersal.

3. The major limitation of localized municipal dispersal is the mechanics of antibiotic delivery to each municipality. Perhaps a single official vehicle (police, fire, health department, etc.) from each municipality could travel to a centralized depot (e.g., at an airport) to receive the medication for dispersal within their local communities.

4. Use of a decentralized approach limits the number of personnel required when compared to centralized PODs. Also, use of a decentralized approach allows law enforcement personnel to effectively protect the general public and to eliminate the need for traffic control or mass transit.

5. Pre-screenings may not be needed in many circumstances.

6. Minimize the paper work; this is a crisis situation.

7. Improve the training of local and statewide members of the community of volunteers and workers on the general classes of agents that may be encountered and the procedures for self protection, and protection against secondary source (victim and clothing) during times within "harm's way."

Communications and Command Centers

Introduction

Communications were a major matter of concern during our discussions about the TOPOFF 3 event. Things we concentrated on were interagency and federal/state collaboration/communication; methods for communicating directly or indirectly with the public; technical aspects of communications; and the role of the media.

Communications with the Command Centers and Federal/State and Interagency Collaborations

The command centers will play a central role in most emergency situations. A troubling aspect of the problems encountered by the team was that poor communications occurred between the State command center and the County command centers. This led to confusion, and resulted in some centers operating independently.

During TOPOFF 3, the county command centers were receiving incomplete information from the State, and most information flow appeared to be vertical, top-down. There were few horizontally-directed communication paths. In a true event, horizontal communication would be essential since local officials would be much more directly involved and command and control would occur mostly at the local level. We recall that during 9-11-01, the local officials had a major role; they almost certainly would have again in a future terrorist attack. The lack of communication during TOPOFF 3 was sufficiently severe that it led some volunteers at command centers to find information through "Google" searches.

There were also some concerns about the communication between federal and state officials, though we were not able to observe these communications. For example, the lack of access to critical information by some important local officials in TOPOFF 3, e.g., because of lack of clearance, was a problem that, according to accounts we heard, resulted in locals scrambling in response after a decision was made.

Even with information about the event presented in various forms by the "real" press, there still appeared to be many individuals at various levels of participation who did not have information. Based upon the observations by our team, the range in knowledge went from very high, e.g., through the pre-event training in Monmouth, to individuals at the Middlesex Center looking up information on the Internet during the beginning of the event. External resources seemed to be spotty, with some locations getting little feedback from county and state authorities on requests. Lack of coordination and communication were issues repeated numerous times to us.

Within the POD system, at Middlesex County, we observed major frustrations among the local police, and their concerns were expressed to three separate observers. The local police were not considered as a major player in the exercise, and were not trained to efficiently help with the flow of people, or support the operation of the system.

A point expressed by many volunteers and emergency responders at various Emergency Operations Centers (EOCs) and PODs was the lack of a good communications strategy. To some extent, this was related to our team's observation of a business-as-usual approach associated with the tasks at hand, which included paying little attention to details of communication protocols. There was no indication of an event going on in various locations. Whjle there was an air of efficiency and total control in Monmouth, there was a lack of enough personnel to get tasks done at Middlesex County EOC and POD. In fact, the Consortium observers were enlisted to help during their observation time at the Middlesex County EOC, and they were given no guidance as to communications.

Technical Aspects of Communications

Some more or less technical aspects of communications during TOPOFF 3 are worth commenting on. The information trail throughout the process was not systematically established for flow to and from the local level. There was a heavy reliance on paper at many locations, and wired telephones. This needs to be re-assessed. Wireless technology and FAX machines are very important in emergency situations, and operable printers are essential. With all the planning that had been done for TOPOFF 3, the New Jersey Department of Health and Senior Services (DHSS) had minimal operable printers at the Trenton Command Center, and they had key operations being handled by personnel with little or marginal computer skills. In one case an individual was sitting at a computer screen, but spending a majority of time writing information on pads and scraps of paper.

Secondary attacks are a serious potential threat in connection with terrorist events. Cyber attacks are a potential threat to the crucial communications systems involved in event response, either as a secondary or as a primary attack. During TOPOFF 3, there was a pre-TOPOFF cyber-attack simulation to which university observers were also invited. It is hard to evaluate how useful it was for the participants since the observers were cordoned off from the actual participants and so were reduced to overhearing what was going on at the nearer tables. The observers' impression, based on limited access to the exercise, was that the "general guidelines" that were to result from the exercise were basically known in advance.

Public Information

The importance of immediate, authoritative and accurate public information can not be stressed enough. The "Giuliani model" of telling it like it is, what is happening, how bad it is, what we are doing, what we cannot do, what we know and what we do not know, what you should do, what precautions are necessary, and providing a take-charge image, provides the leadership necessary to insure a successful distribution of materials, and better coordination of response. With this type of leadership, built on a solid and practiced plan, the public is more likely to follow directions, as proven in past events ranging from 9-11 to evacuations. As part of the support for the "Giuliani approach," there is the need to enlist "action oriented" researchers who can provide insights and analysis to anticipate public response and offer timely solutions.

Industrial Participation

Private industry has a special role to play in communications during a terrorist event. The Department of Homeland Security did not include the private sector as a major participant within the design of TOPOFF 3. It was primarily through the efforts of the NJ Business Force/BENS that private organizations participated in various aspects of the exercise. Further, the Office of Emergency Management (OEM) noted in its after action report the need to have an industrial presence in the future. It is important to note that industrial and commercial partnerships are crucial to implementation of a coherent emergency response program because on any given day of the week, most residents and workers (whether in New Jersey or elsewhere) are linked to jobs, child care, transportation, etc. Each of these activities can be seriously affected during an event, and would impact post-event rescue, recovery or pursuit. The prescribed or stochastic movements of people or specific and general attempts to have people stay in place during an event are critical to success in managing the extent and spread of a problem. These activities also need to be coordinated with the types of services that can be provided by private industry, e.g., communications links. The issues of evacuation or "stay in place" were not thoroughly evaluated during TOPOFF 3, e.g., at businesses, schools etc., and such an evaluation is a current need. Moreover, large employers could be used as points of dispensing for medications and instructions. In light of the above, during a real event, the private sector will have a large role, and very possibly one on a par with government entities. All the different private sector efforts would require coordination and pre-event exercises.

The Media

The media plays an important role in an emergency. In today's world it can be the source of much-needed and timely and accurate information and instructions to the public. In TOPOFF 3, the press representatives were not presented as realistic for the type of crisis that was unfolding in the State of New Jersey. In fact VNN reporters were used primarily as passive communicators of scripted information, and VNN actually was the primary source of information on the scripted activities to individuals within the State command center during the first few hours post release. A review of any major disaster (natural or otherwise) will reveal that the press will be a point of active information gathering and discussion, which could also create potential confusion and result in poor or incomplete reports. We were not allowed to view the VNN or real media crews directly, only through media feeds. There were some opportunities to

view one VNN control room. A major point of concern was that the production team had a complete playbook with no surprises. Also, the VNN team appeared to have a true antipathy toward the "real" media. They were not pleased to have them around.

Some of our observers reviewed the Governor's Press Conference. Their comments could be summarized as "not providing a realistic assessment of the situation." The language of the Governor was reassuring (appropriately so), but did not exhibit true anxiety and concern. In 9-11-01 the President was removed from the scene because no one knew what might happen next. In TOPOFF 3, everyone knew what the agent was and the plan of response; therefore, the situation was not portrayed as "messy". Thus, the exercise did not seem realistic. There was no real test of methods of and strategies for "risk communication" that are so important in crisis situations.

General Recommendations on Communications

1. In future exercises, it is important to eliminate the lack of urgency, which was traced by many to the scripted nature of the event.

2. The desire for full command and control versus natural flow of information and chaotic events during a crisis was a glaring flaw in the exercise. This approach needs to be re-evaluated for the future.

3. It is important to complete a total review of the communications strategies used and attempt to develop and test a variety of plans that improve horizontal as well as vertical communication.

4. It is important to educate the press and involve the industrial and commercial sectors in the implementation of communication strategies.

5. The need for education includes pre-event sessions for the general public as well as emergency responders. Education cannot be limited to public service announcements, but must be part of our overall "straight talk" educational program. It was troubling to the Consortium observers that many of the police who were around the release point or in the PODS were not utilizing personal protection or understood the critical issues associated with exposure to biological weapons or the spread of disease – something that might have been overcome with proper education in advance.

5. Various types of advanced communication tools should be tested and individuals should be trained on how to use them in a crisis mode. "On the fly" training for computer use and information gathering during an event should be minimized.

6. A concerted effort is needed to engage the industrial and commercial sector during TOPOFF exercises. Their participation is critical at all levels since they can be targets, will have a large portion of the employed population, and can provide support personnel, materials and communication channels.

Discussion

Finding solutions to the complex problems arising from the threat of terrorism and natural disasters can benefit from the partnership among government, industry, and academia. The practical experience/knowledge gained through synergies among government, other entities, and the research community should be encouraged since it can provide guidance on projects needed to fill major gaps. In particular, university faculty can provide new points of view and help government officials "think outside the box" as they design and evaluate exercises to test our preparedness and ability to respond to terrorist attacks. In turn, direct involvement of university researchers in such exercises can help them inform and focus their future efforts to develop new plans, methods, and technologies useful to society. All of us involved as observers in TOPOFF 3 learned a great deal from the experience and this should help us all be more prepared for hazardous events in the future. We recommend that the experience the "Consortium" had in TOPOFF 3 should be considered as a model for universities in those states hosting TOPOFF 4 and beyond.

Acknowledgements

We very much appreciate the ability to collaborate with many members of the emergency response community in this effort and the efforts that were made to provide constructive criticism of our work, as well as the ability to observe operations during TOPOFF 3. We especially thank Jim Langenbach (NJDHSS), Dave Leonardis (NJOHS) and Lt. Dennis McNulty (NJSP), who took the time to understand the objectives of the Consortium, sought out strategic locations to best allow university researchers to have involvement, and were otherwise instrumental in achieving cooperation between the academic research and public safety communities. In addition, this article has benefited from the input of a wide variety of individuals with whom we discussed our observations after TOPOFF 3. We would like to thank Mike Augustyniak (NJSPOEM), Bob Brownlee (NJDHSS), Joe Dolina (NJOAG), Joe Painting (NJOEM), Joe Picciano (FEMA/DHS), and Bonnie Pyer (NDMS/DHS/FEMA), as well as Roberts Frye, Consultant, and Gayle Ferreira, Monmouth University. Fred Roberts would like to thank the National Science Foundation for its support of his work under NSF grant number EIA-0205116 to Rutgers University.