




DomPrep Journal

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TRAINING

A close-up photograph of a hand holding a silver pen, positioned as if about to write. The hand is wearing a grey turtleneck sweater. The pen is positioned horizontally across the word "TRAINING", which is underlined by a thick black line.

Ambush-Style Attacks
Tactical Medical Support
Techniques & Learning Styles
Critical Public Health Threats
Transition From Routine to Disaster
Police Cadet Leadership Programs
Unwinnable Scenarios
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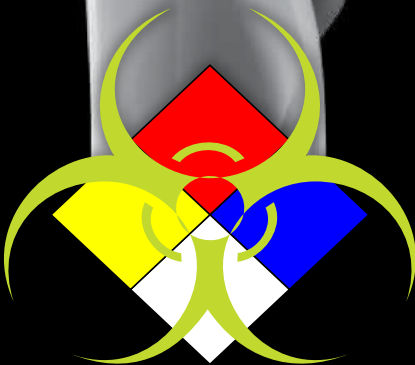
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About the Cover: As agency changes occur in personnel, budgets, funding, practices, and policies, training may need a helping hand to maintain its priority status. Regardless of the learning style and training technique, comprehensive training and ongoing refreshers should be offered and accessible to anyone who plays a key role when everyday activities turn into real-life disasters. (Photo by iStockPhoto)



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Editorial Remarks

By Catherine Feinman



In the recently released “[National Health Security Strategy and Implementation Plan, 2015-2018](#),” the U.S. Department of Health and Human Services highlights several training-related needs that must be addressed over the next three years: evaluation of workforce training effectiveness; regional adaptation of current training materials; development of training materials for communities where such materials are lacking; and expansion of training efforts using e-learning resources. These training gaps exist and must be filled across disciplines and beyond geographical boundaries.

Leading this month’s issue is an article written by a subject matter expert with many years of experience in teaching training courses and writing training manuals. Glen Rudner addresses the challenge that responders face before the training begins: deciding which learning approach to take. Instructor-led, web-based, or a combination of both trainings can each be effective, but the decision choice depends on each participant’s learning style.

Philip Beck, Samuel Johnson, and Zoë Thorkildsen discuss ways to train law enforcement officers to better integrate them into effective response efforts. Beck shows how tactical medics are fulfilling medical response needs in dangerous situations. Johnson describes how police cadet leadership training programs can help mend relationships between law enforcement officers and the communities they are sworn to protect. And Thorkildsen shares a Pittsburgh, Pennsylvania case study of officer training, which is designed to protect officers from potential ambush scenarios.

In addition to human-caused threats, natural threats such as Ebola have exposed gaps in training. Tanya Ferraro’s article describes how public health agencies must be able to transition from daily routines to critical disaster roles. Craig DeAtley shares the importance of ensuring that hospital employees are trained with comprehensive personal protection. Andrew Roszak emphasizes that having the proper plans and equipment is only as good as the training the personnel receive. For all of these cases, Chris Mangal reminds officials that, in order to have adequate training, equipment, and personnel, agencies also must have sufficient funding and financial plans in place.

Rounding out the issue are two articles on training personnel to make the best decisions in high-threat scenarios. Joseph Cahill describes one positive teaching technique to build confidence when paramedics find themselves in life-threatening situations. Stephen Grainer shares a type of training being used in Virginia that helps students face challenges, adapt, and overcome uncertainties. Whether training for a natural, technological, or human-caused disaster, it is important to remember that both participants and instructors play critical roles in enhancing the learning experience.

Training Challenge – Choosing the Best Learning Approach

By Glen Rudner

One responder sits in a classroom listening to an instructor and discussing key concepts and issues with other participants. Another responder sits at a computer during odd hours going through tutorials and posting on discussion groups. Both types of trainings are effective, but the deciding factors between instructor-led, web-based, or a combination of both trainings are personal.



The history of emergency response includes many different approaches to responder training. These approaches have varied in delivery using methods such as self-paced self-study, classroom/skill station, instructor-led training (ILT), web-based training (WBT), hybrid training (ILT and WBT), and others. This article focuses on the similarities and differences between ILT, WBT, and hybrid training.

Through the U.S. Fire Administration, the [Emergency Management Institute](#) began providing basic “online” learning programs that have since expanded tremendously. Since that time, many educational organizations have developed online programs to assist all emergency responders in furthering their education and earning both basic and advanced degrees. With all that is available, it is important to consider what makes online, also known as web-based training (WBT), a good foundation for responder training.

Overcoming Obstacles & Focusing on the Goal

There are many obstacles – such as incident response, inspections, and normal duties – which must be overcome on a daily basis for responders to be able to sit in a classroom or auditorium. Once in the room, participants then have to listen for hours to instructors, who in many cases are peers, discuss a subject that responders have heard many times during their

careers, which in turn may raise the responders’ level of boredom and disinterest in the subject. There has to be relevance to the responders’ regular duties as well as a behavior change by the responder during the training in order for it to be relevant and interesting. It must be relevant to the work setting and to the responders’ circumstances.

“Regardless of the delivery method, the learning outcomes for participants are the same – the transference of knowledge that can be measured. With that said, such knowledge is not transferred effectively without terminal and enabling objectives as well as content.”

Trainers should emphasize that trainings focus on a simple behavior checklist and build in complexity to facilitate learning. This can be accomplished in today’s learning atmosphere with WBT and with hybrid training using one face-to-face session followed by WBT, or WBT followed by one face-to-face session, so that

discussion of questions and issues can be done person to person. WBT and hybrid training have a level of appeal to today's responders due to the increased use of technology both personally as well as in the workplace.

The similarities between WBT and ILT include similar learning objectives, content, layout, structure, and flow. However, the major differences are: course delivery method, when and where the learning takes place, how complicated ideas and theories are explained and applied, and the budgetary impact of the training. Of course, the learning objectives of any training should be the primary concern.

Regardless of the delivery method, the learning outcomes for participants are the same – the transference of knowledge that can be measured. With that said, such knowledge is not transferred effectively without terminal and enabling objectives as well as content, which include: text, graphics, quizzes, exercises, and tests. Slides comprise graphics and text that are used to support ILT are the basis for the visuals presented in WBT. During both WBT and ILT, the information is presented to the participant, a course of instruction is completed, and a quiz on the module is given. A final exam provided after all the learning modules are complete evaluates the participants' ability to recall and use the knowledge gained.

Many Considerations –

Format, Time, Place, Pace & Cost

Although there are similarities in the course materials, there are marked differences as well. The course delivery for WBT is offered online, in varying formats including, but not limited to: video-based, PowerPoint with embedded videos, multimedia format, and interactive. In each of these delivery methods, the participant sits solo in front of a computer and interacts only with the content. Unlike WBT, ILT takes place in a venue, where the participants receive lectures and interact with other students and the instructor through questions and discussions that assist in the transfer of knowledge and also bolster the information that is received.

A further difference is in the learning environment, which includes where and when the learning can take place. WBT can be completed at any time or place within the constraints of the courses' timeframes for completion, which is dependent on availability of Internet connectivity and compatibility of computers with the program requirements. Not all participants learn at the same pace, at the same time, or at the same level, which makes WBT advantageous.

ILT follows a schedule with specific start and end times that are based on the availability of the facilities, instructional staff, and participants. ILT is synchronous and learning takes place



concurrently. All participants take courses at the same time with a group of people with whom they interact and discuss course content.

WBT courses are priced with a one-time registration fee, and then bundled with a course of training to include several programs to meet the desired goals. With ILT, the cost is based on the attendee though can be priced by the class with capped limits on the number of attendees. The additional costs that may be incurred include hotel and airfare expenses and other accommodations needed for the instructors. Hybrid training includes the one-time registration fee and a one-time visit to a classroom, which is easily accessible to both students and instructors and on a date that does not conflict with work.

The Ultimate Decision Is Personal

There are multiple ways to learn – web-based, instructor-led, and hybrid training courses. Abilities, time, and cost play roles in determining training needs. The types of courses participants choose depend on the participants’ learning styles, personal preferences, costs, and course availability. Training courses are designed to provide solutions and offer a variety of choices to meet participants’ personal and professional training needs.

Glen Rudner is the general manager of CIRG at the Security and Emergency Response Training Center in Pueblo, Colorado. Before his move, he was a private consultant and retired as a hazardous materials response officer for the Virginia Department of Emergency Management. His 35 years of experience in public safety include 12 years as a career firefighter/hazardous materials specialist for the City of Alexandria (Virginia) Fire Department, as well as a former volunteer emergency medical technician (EMT), firefighter, and officer. As a subcontractor, he has served as a consultant and assisted in development of many training programs for local, state, and federal agencies. He also serves as secretary for the National Fire Protection Association (NFPA) Hazardous Materials Committee, member of the International Association of Fire Chiefs (IAFC) Hazardous Materials Committee, member of the American Society of Testing and Materials (ASTM), and the co-chairman of the Ethanol Emergency Response Coalition.

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Learning How to Provide Tactical Medical Support Under Fire

By Philip J. Beck

At 8:16 a.m. on 16 September 2013, a shot was fired (the first of many) in Building 197 of the Washington Navy Yard. During the next 69 minutes, while at least 117 officers from eight law enforcement agencies attempt to neutralize the threat, two U.S. Park Police tactical medics and a Navy surgeon triage and treat the wounded.



In 1989, the U.S. Park Police (USPP) and the Casualty Care Research Center (CCRC) in the U.S. Department of Defense founded the Counter-Narcotics and Terrorism Operational Medical Support ([CONTOMS](#)) Program based on the recognition that:

“Law enforcement and the military needed tactical medical support of special operations to enhance mission success. Most emergency medical services (EMS) systems in the United States and abroad can handle individual patients in controlled situations but in some locales, local emergency medical technicians have been pressed into service to support counter terrorism, drug interdiction and other law enforcement activities without any additional training. These activities are specialized in nature; characterized by prolonged operations, organized opposing forces, use of military-type weapons, and increasing death and injury among law enforcement officers, perpetrators and innocent citizens.”

Medical Training for the “Hot Zone”

This specialized medical training has been termed “tactical emergency medical support” ([TEMS](#)). TEMS is widely known as an established sub-specialty of pre-hospital care and emergency medicine. The military and the civilian law enforcement community work in cyclic rotations to define and develop the wounding trends and medical needs of soldiers and police officers, respectively. The military makes strides in medical care during times of war, then civilian law enforcement agencies refine these lessons learned to apply to care in the street.

For a number of years, medics specially trained to work in the “hot zone” – the most dangerous area during an active incident – have effectively supported specialized response or SWAT teams. Indeed,

the ability to provide SWAT teams with medical care in the hot zone has grown exponentially over the last 25 years. However, with the current trends in active threats, law enforcement officers are finding that these specialized teams are typically not the first officers on the scene. This realization was highlighted during the [September 2013 incident](#) at the Washington Navy Yard. In that active

“The military makes strides in medical care during times of war, then civilian law enforcement agencies refine these lessons learned to apply to care in the street.”

shooter incident, a USPP patrolman who had been trained in basic TEMS tactics administered lifesaving care to one of the survivors of the shooting.

With the growing number of active shooter incidents, the CONTOMS Program (now a co-sponsorship between USPP, U.S. Health and Human Services, and the Chesapeake Health Education Program) has expanded to include TEMS training for the frontline law enforcement officers as well. Members of the USPP patrol force have received basic TEMS training, as well as medical “go bags” to be able to handle casualties encountered in active shooter situations. During an incident, USPP officers may find themselves in the hot zone as the only responders able to provide care to victims, since EMS responders typically must wait on the perimeter until the scene is secure.



Ensuring Officers’ Safe Return Home

This incorporation of TEMS has become a force multiplier for the USPP and a proven lifesaver. It has been learned through past events that approximately 20 percent of those wounded by penetrating trauma die from readily treatable causes. The Number 1 cause of preventable death is exsanguinating hemorrhage. One basic tool given to these officers is a tourniquet. On several instances after teaching officers the proper technique in tourniquet application, they have put it to use effectively and without issue. By setting up the go bags in a similar fashion and having them in a consistent area on the officer’s person, each officer knows where to find the lifesaving gear in a stressful environment.

By providing street officers with an additional tool in their toolkit, TEMS puts additional caregivers in the fight that would not normally be there. Although it is understood that the main goal of the law enforcement operators is to stop the threat, those officers who are in the fight also have the ability to provide “buddy care” for fellow officers who may become injured. The ultimate goal of this TEMS initiative is to ensure that all officers go home safely each night to their families.

For more information about the USPP TEMS Training or CONTOMS Program, visit the website at www.nps.gov/uspp, click on CONTOMS.

Captain Philip Beck has been with the U.S. Park Police since December of 1988. He has served in many roles to include detective sergeant, SWAT/K9 commander, central station patrol commander, and watch commander. Along with these responsibilities, he has developed and presented a course on active shooter for civilian employees and is a principal instructor for the CONTOMS (Counter Narcotics & Terrorism Operational Medical Support) Tactical Medical Training Program. He revamped the U.S. Park Police policy on mass arrests, now commonly referred to as high-volume arrests, to ensure compliance with the law and a person’s ability to exercise their First Amendment rights.

Financial Planning for the Next Ebola Threat

By Chris N. Mangal

Public health and healthcare funding is a priority during a disease outbreak such as Ebola. However, when ongoing funding is unavailable, government agencies must scramble to find ways to support public health response efforts. Three funding opportunities may help address these current gaps and avoid disease-specific funding for response efforts after the threat is realized.



The largest outbreak of Ebola continues its devastation in the West African countries of Sierra Leone, Liberia, and Guinea. As of 18 February 2015, the World Health Organization reported that the total number of suspected and confirmed *Zaire ebolavirus* cases is [23,253](#). Thousands of people have died in these countries as healthcare systems continue their struggle to respond to this epidemic. In the United States, two imported cases of Ebola with one death and two locally acquired cases greatly challenged the healthcare system. While thousands of health workers are making efforts to contain this deadly outbreak at its source, the U.S. government has taken aggressive steps to provide international support as well as to ensure domestic preparedness for Ebola Virus Disease (EVD).

Raising the Preparedness Question

In August 2014, some Americans were concerned when the U.S. government brought infected citizens home for treatment. All of these cases were successfully treated and Ebola-free patients were released. The United States had one fatality in the case of a Liberian national who traveled from Liberia to Texas. This one fatality in the United States, along with subsequent infections in two healthcare workers, caused much angst in the medical community, increased public scrutiny, and raised the question, “Is the United States prepared for threats such as Ebola?”

Over the years, the Association of Public Health Laboratories (APHL) has communicated the importance of sustained funding for preparedness and response. In its [February 2012 position statement](#), “The Need for Sustained Funding of Public Health Laboratories to Ensure All-Hazard Preparedness,” APHL noted, “It is essential that public health laboratories receive sustained funding to acquire and maintain the sophisticated instrumentation, highly trained technical staff and essential infrastructure necessary to ensure their ability to respond to all-hazard emergencies quickly and reliably at any time.” Simply put, a one-time funding approach cannot produce a robust system that will be fully functional to respond to something as deadly as Ebola.

Although state and local health departments received increased federal funds after 9/11 and the subsequent anthrax attacks, these funds have declined steadily over the years. However, the expectation to deliver a rapid response with massive electronic communications still remains. It is true that federal funds have strengthened the public health and healthcare systems to respond to a wide range of threats, but these successes are in jeopardy if

Congress continues to cut programs such as the U.S. Centers for Disease Control and Prevention (CDC) Public Health Emergency Preparedness (PHEP) Cooperative Agreement.

Partnerships for Stronger Laboratories

CDC's Laboratory Response Network (LRN) for Biological Threats Preparedness is comprised of three primary tiers:

- Sentinel Clinical Laboratories, which will likely be the first to encounter patient samples and thus must be able to rule-out and refer potential threats to the next tier;
- Reference Laboratories, 70 percent of which are state and local public health laboratories capable of identifying potential threats; and
- National Laboratories, which are select federal laboratories that provide further strain characterization of threat agents and also lead research and development efforts.

Many of the state and local public health laboratories, which comprise the Reference Level, have used CDC PHEP funding to strengthen their systems in various ways. They have: hired qualified personnel and trained them; purchased modern technologies to rapidly and accurately detect threats; upgraded their facilities to ensure workers and the public are protected from potential

biological agents; and performed outreach and training to their private clinical partners. Moreover, these laboratories have cross-trained many of their staff members so they are prepared to respond to naturally occurring outbreaks and acts of terrorism.

“Although state and local health departments received increased federal funds after 9/11 and the subsequent anthrax attacks, these funds have declined steadily over the years. However, the expectation to deliver a rapid response with massive electronic communications still remains.”

CDC is utilizing a similar approach, which they demonstrated in August 2014 when they partnered with the Department of Defense

(DOD) United States Army Medical Research Institute of Infectious Diseases (USAMRIID) to deploy their Ebola assay to select laboratories within the LRN. A major success in the U.S. response to Ebola was the CDC-DOD USAMRIID partnership to rapidly initiate testing capability across the LRN. Currently, 55 U.S. public health laboratories are able to conduct preliminary testing for the Zaire ebolavirus using DOD's real-time reverse transcription polymerase chain reaction (rRT-PCR) test, which was deployed by the LRN.

Although leveraging the LRN to respond to Ebola was a success, many gaps were observed in laboratory preparedness and response. These include but are not limited to:

- *Ability of some clinical laboratories to safely and correctly package and ship specimens to public health laboratories* – There were several inconsistencies and multiple interpretations of the U.S. Department of Transportation regulations, including whether to classify EVD as a Category A or Category B infectious substance.

- *Lack of biosafety programs in most clinical laboratories* – The CDC’s “Domestic Ebola Supplement to Epidemiology and Laboratory Capacity for Infectious Diseases (ELC)– Building and Strengthening Epidemiology, Laboratory and Health Information Systems Capacity in State and Local Health Departments” stated, “The events surrounding laboratory testing of patient specimens suspected of Ebola virus infection point to a lack of biosafety programs in most U.S. clinical laboratories. For example, biosafety plans may be absent or outdated and staff charged with implementing and training additional staff on biosafety procedures may require additional education and practice to do so effectively and confidently. Some deficiencies illustrated during this event may span across many U.S. laboratories while others may only apply to some laboratories.”
- *Lack of timely guidance for clinical laboratories to perform routine diagnostic tests on patients under investigation.*
- *Connectivity between healthcare and public health systems.*



Federal Funding of Future Efforts

In response to the Ebola outbreak and observed gaps in hospital preparedness, healthcare infection control, biosafety, surveillance systems for international travelers, as well as laboratory testing, epidemiological investigations, and responder safety, the U.S. government provided supplemental funding to support Ebola preparedness and response. Via the CDC, two Ebola supplemental funding opportunities have been made available to state and local public health departments: (a) the Hospital Preparedness Program and PHEP Cooperative Agreements/PHEP Supplemental for Ebola Preparedness and Response Activities; and (b) the Domestic Ebola Supplement to Epidemiology and Laboratory Capacity for Infectious Diseases (ELC).

As listed in the CDC PHEP announcement, this funding is intended to:

- *Support accelerated public health preparedness planning for EVD within state, local territorial, and tribal public health systems;*
- *Improve and assure operational readiness for EVD;*
- *Support state, local, territorial, and tribal Ebola public health response efforts; and*
- *Assure collaboration, coordination, and partnership with the jurisdiction’s healthcare system to assist in the development of a tiered system for EVD patient care.*

The ELC funding is intended to strengthen healthcare infection control practices, enhance laboratory biosafety and biosecurity practices, and enhance surveillance of migrant populations and international travelers. The U.S. Department of Health and Human Services Assistant Secretary for Preparedness and Response just released the Hospital Preparedness Program Ebola Preparedness and Response Activities funding [announcement](#), which states that it is intended to:

“Ensure the nation’s health care system is ready to safely and successfully identify, isolate, assess, transport, and treat patients with Ebola or patients under investigation for Ebola, and that it is well prepared for a future Ebola outbreak. While the focus will be on preparedness for Ebola, it is likely that preparedness for other novel, highly pathogenic diseases will also be enhanced through these activities.”

These funding opportunities are a significant step to help state and local agencies address gaps in their public health and healthcare systems. However, an important learning lesson is to avoid the narrow approach to resourcing public health and healthcare preparedness – disease-specific funding is not the best approach to ensure a prepared nation. The challenges observed in the domestic response to Ebola point to the need for sustained resources to respond to all threats. Such resources encompass funds to ensure a trained laboratory workforce at the private clinical – for example, hospitals – and public health levels, strong biosafety programs, safe and secure facilities and modern technologies for rapid detection of threats, and electronic data messaging so results can be shared in a timely manner. There is a clear need to revisit the long-term preparedness and response strategy to ensure that the United States is ready for the next threat.



Chris N. Mangal, MPH, is the director of public health preparedness and response at the Association of Public Health Laboratories (APHL). The recipient of a bachelor’s degree in microbiology from the University of Florida, and of a master of public health degree from the University of South Florida, she is responsible for providing programmatic and scientific leadership for preparedness activities for APHL members, staff, and partner organizations, such as the U.S. Centers for Disease Control and Prevention (CDC). She has more than 12 years of experience working to improve laboratory practice in the detection of public health threats, and to expand and enhance the relationships between APHL member laboratories and CDC, other federal agencies, and private organizations involved in emergency preparedness and response, public health testing, policy, and training.

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Cadet Programs – Mending Police-Community Relations

By Samuel Johnson

As conflicts arise between law enforcement agencies and the communities in which they serve, police cadet leadership programs could reduce crime, increase community relations, and change lives. Through education, community service, and public safety, these programs promote highly trained police departments and break down socioeconomic barriers.



A zero-tolerance crime-control policy was first implemented in New York City during Mayor Rudolph Giuliani’s administration in the early 1990s and later spread to other cities. In New York City, this policy certainly had an impact on crime between 1990 and 1999, as shown by [declines in](#): homicides (73 percent); burglaries (66 percent); assaults (40 percent); robberies (67 percent); and auto thefts (73 percent). The policy was built on the fundamental principle of the Broken Windows Theory, which suggests that untended behavior leads to the breakdown of community controls. Therefore, the concept is to fix problems when they are small, so they do not accumulate. By focusing on lesser crimes, officers send a message that criminal behavior – whatever sort – will not be tolerated. The effects of this policy, though, have come at a [heavy cost](#) to community-police relations, with members of minority groups expressing feelings of being unjustly targeted as a result of the socioeconomic status of the neighborhoods in which they live.

Addressing Barriers & Accomplishing Goals

Many attribute the practices of this policy to the growing complaints of discourtesy, excessive force, and police brutality. So, in the aftermath of recent incidents surrounding these allegations – such as the Michael Brown and Eric Garner cases in 2014 – President Barack Obama signed an executive order on 18 December 2014 to create the [Task Force on 21st Century Policing](#). This task force was established in an effort to strengthen community policing and to build trust among law enforcement agencies and the communities they serve.

A significant lesson in leadership that can be learned in the wake of these recent incidents, and a focal topic that should be assessed by this task force is how important it is for law enforcement agencies to make a proactive effort to hire a workforce that has ties to the population it serves. Members of a community have a vested interest and tend to have a better understanding of their community’s cultural and environmental dynamics. But there are barriers that need to be addressed to accomplish this goal.

Segments of the population in urban areas have criminal records for petty crimes, which disqualify them from finding viable employment, particularly in the law enforcement profession. Those who do not have criminal records and could be possible candidates would rather not apply because of the negative local stigma that is associated with the policing profession. One solution for local law enforcement agencies to find representatives from the community to serve among

their ranks is a police cadet program. A proposed Police Cadet Leadership Initiative was created by the author based on his experiences while serving in the Baltimore Police Cadet Program in 2005-2006. This proposed model was constructed on [a model](#) used by the Metropolitan Police Department in Washington, D.C.

Introduction to the Police Cadet Leadership Initiative

The Police Cadet Leadership Initiative is a program that could provide young adults with the opportunity to start their careers, receive college credits leading to an associate's degree, obtain on-the-job training, and learn during a three-year apprenticeship program. Although many will not see the immediate return on this investment because of the three-year time frame between youths entering the cadet program and them graduating from the police academy, there are some immediate and long-term effects. By investing in young people who have a vested interest in the community, the cities that adopt this or similar programs have the opportunity to change lives by helping to produce civic-minded community members who will work, in part, to build sustainable communities.

Relationships & Recruiting

As a result of [zero-tolerance policing](#), many communities harbor antagonistic attitudes toward law enforcement. This “us-against-them” mentality serves as a major catalyst to the strained relationships that prevent the two parties from building rapport and creating a positive working relationship. A step toward repairing these relationships will be to build viable partnerships with key stakeholders within these young people's sphere of influence. The intended audience for this program will be high school juniors and seniors who are student-athletes or who participate in Junior Reserve Officers' Training Corps (ROTC) programs. Because of the relationships that the coaches and military instructors of these programs have with these kids, they will be able to encourage them to explore the benefits and options associated with a career in law enforcement, without the negative images sometimes associated with the profession.

Service Learning Requirement

Built on the tenets of education, community service, and public safety, the Police Cadet Leadership Initiative will manifest how a highly trained police department is central to a pluralistic, democratic society. Cadets would serve as full-time employees of the agency that hires them. The structure of the program requires cadets to spend half of their time operating in an interagency work capacity, and another portion of their time as an on-campus student. Additionally, cadets will be required to perform five hours of community service per semester. These community service activities will vary each semester and could be completed by volunteering at a homeless shelter, children's hospital, nursing home, domestic violence shelter, local high school sports program, or local cultural event.

Through this collaborative endeavor, cadets will have the opportunity to familiarize themselves with the internal operations of the police department by serving in an administrative capacity in various divisions of the organization. The educational portion will allow cadets to complete course work that leads to an associate's degree at a local community college. The structured environment of the college experience will further expose them to persons from all segments of the community. These interactions will foster conversations, understanding, and the ability to approach policing from a sociological perspective, thus realizing that there are other ways to solve community

problems than merely making arrests. The purpose of the community service experience is intended to further orient participants to the service profession by being able to empathize with people from different backgrounds and to gain a level of sensitivity to the cultural diversities.

Succession Planning Through Mentoring

The landscape of professional law enforcement is changing and, to effectively create sustainable change, organizations must [prepare tomorrow's leaders](#) today. Often seen in the military and the private sector are [succession plans](#) that ensure the efficient continuity of operations within the organization as management and leadership change. As cited by Liz Weber, certified management consultant, in her [blog](#) on 24 July 2012:

“Succession planning and leadership development are more than just lining up recruits for vacancies, and most public sector managers haven’t caught onto this yet,” said Eric Henry, executive director of the Pennsylvania State Employees’ Retirement System. “Solid leadership planning and development means you’ve created an organization that has a number of junior and mid-level managers ready to step up and take over for a number of your department heads when the need arises; whether through planned attrition or unplanned departures.”

The years of experience that are lost when a senior member of any organization leaves has the potential to stagnate operations during the transition period. Recognizing the inevitability of this process, law enforcement organizations could pair cadets with current mid-level managers or executive staff to gain insight on their departments’ daily operations, to discover the opportunities that the law enforcement profession offers, and to help build the cadets’ leadership skills. There should be clear guidance to ensure that this relationship is highly effective with the establishment of ground rules that express the frequency of communication and meetings between the mentor and mentee. Through this relationship, mentees will express their short- and long-term goals, which the mentors can use to create plans that will allow the mentees to gain exposure in these focus areas while providing the appropriate guidance.

Bethany Rubin Henderson is the founder of City Hall Fellows. This program was created out of her conviction that getting cities’ own best and brightest to return home and tackle social problems locally was the best way to tackle the most pressing challenges. Her theory of change: smart leverage – that one talented, passionate, well-trained individual working in the right place inside government can change an agency, and that many working together can change a city. Since their 2008 launch, City Hall Fellows has trained 75 urban changemakers (selected from 1,700 applicants) who have transformed how three cities (San Francisco, Houston, and Baton Rouge) operate. The Police Cadet Leadership Initiative being built on these same ideologies would help to produce local changemakers in the law enforcement profession that will be able to make a sustainable difference in the communities they serve through the skills they learn from this collaborative engagement.

Samuel Johnson Jr. is the training and exercise coordinator for the Mayor’s Office of Emergency Management in Baltimore City (Maryland). In this role, he is responsible for providing emergency preparedness training for over 5,000 public safety professionals. He has served within the city of Baltimore for over 6 years in various capacities, which include the Baltimore Police Department and Baltimore Housing. In 2015, he was recognized by Forbes magazine as one of the country’s top 30 law and policy professionals under the age of 30. He completed his master’s degree at the Johns Hopkins University, Public Safety Executive Leadership Program.

Hospital Threats – More to Address Than Just Donning & Doffing

By Craig DeAtley

An American flown from Sierra Leone lies in critical condition at the National Institutes of Health in Bethesda, Maryland. In another case, a nurse who contracted Ebola when caring for a patient is suing Texas Health Resources for not properly training its employees. As these examples demonstrate, biological threats to healthcare workers still exist, and the training must go beyond simply donning and doffing.



The experiences over the past year with Ebola have once again highlighted the lengths to which healthcare facilities must go to protect their staff, including the use of personal protective equipment (PPE). However, Ebola is not the only clinical situation requiring PPE. Hospital personnel, otherwise designated as “first receivers” – by the Occupational Safety and Health Administration (OSHA) – who perform decontamination on patients affected by chemical or radiologic exposure also require protection. Regardless of the threat, each hospital is required to have a comprehensive program that addresses a variety of issues related to PPE.

The OSHA [Best Practices for Hospital Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances](#) is a widely used document to help healthcare facilities, especially hospitals address a variety of response issues including donning (putting on) and doffing (removing) PPE.

Many Choices, but Availability May Be Limited

Hospitals facing the threat of patients contaminated with biological or hazardous materials find themselves having to make a variety of decisions when it comes to staff protection. Although hazardous materials teams operated by fire departments and/or private sector companies may have four operating levels of PPE (Levels A, B, C, and D), hospitals generally maintain Level C as their highest level of protection, which is the minimum best practice recommendation set forth by OSHA. The ensemble composition and protective material used is based on what is required for the perceived threat.

PPE items typically include garb to protect the skin (impervious gown or suit/coverall), hands (gloves), and feet (boots/shoe covers) protection, along with respiratory protection (surgical mask, N95 respirator, or powered air purifying respirator – PAPR). Additional items such as portable radios, personal dosimeters, and identification vests also may be worn depending on a hospital’s operational procedures.

Outfitting a single responder in proper PPE can cost hundreds (or even thousands) of dollars, not including the PAPR, which depending on the brand and type purchased can run \$600-\$1,200. Increasingly, vendors are marketing PAPR systems that have disposable hoods that can be thrown away after use rather than put through a rigorous cleaning/reconditioning process that must be done in accordance with vendor instructions to ensure staff safety. Cartridge use and replacement also must be done in compliance with manufacturer recommendations. Depending on the type and duration of the incident, several change-outs per team member may be required. Some vendors now are selling battery

packs that use D cell batteries for easier replacement, rather than continued reliance on rechargeable lithium or nickel cadmium batteries.

The amount of PPE to be kept on hand is another major decision and is determined by a variety of factors including but not limited to the amount of staff that will dress out, as well as available funding. Storage space must be found and may require considerable square footage depending on the amount of items purchased. Ideally, the space assigned is in proximity to where it will be used. OSHA and the vendors have outlined maintenance expectations for PAPRs and other items. These include documentation of regular equipment checks and replacing items before their expiration dates. The rechargeable battery packs for many of the PAPRs must be replaced every 3-5 years; users should consult with their vendors to ensure they are getting the optimum use of their systems. Even gloves, surgical masks, and N95 respirators have expiration dates, so sustainment funding is another commitment that must be made by the hospital.

Training Procedures to Perform & to Protect

The OSHA First Receiver document also outlines the initial training that is to be provided to hospital personnel responsible for decontaminating patients exposed to hazardous materials. Subjects include response basics along with PPE and decontamination principles. The initial training may take eight hours to complete and includes actual practice of donning and doffing, as well as decontamination practice. Refresher training also should be presented annually with records kept of the training given to each team member.

Response guidance has been published and periodically updated by the Centers for Disease Control and Prevention and OSHA on PPE use when caring for a suspected or actual Ebola patient. Among the expectations is that everyone caring for these patients must be trained in proper donning and doffing techniques for the PPE they will be using (the PPE being worn varies somewhat between Ebola treatment centers, particularly in regards to the type of respiratory protection).

Also being stressed is the importance of a safety observer or “protector” always watching those working at the patient bedside for potential contamination contact and, if noted, then providing directions on personal decontamination. The doffing process is another phase where someone is observing and requires the PPE removal steps be done in a slow and deliberate manner to reduce the risk of contamination occurring since, unlike for chemical decontamination scenarios, the PPE for personnel caring for Ebola patients is not thoroughly decontaminated before removal.

The protection of hospital personnel working with patients contaminated with hazardous materials, or ill from a highly infectious disease, is of paramount importance. To meet that responsibility, the hospital must make administrative, logistical, and financial commitments that have short- and long-term implications to ensure that their staff has what is needed, and are properly trained to safely perform their tasks.

Craig DeAtley, PA-C, is director of the Institute for Public Health Emergency Readiness at the Washington Hospital Center, the National Capital Region's largest hospital; he also is the emergency manager for the National Rehabilitation Hospital, administrator for the District of Columbia Emergency Health Care Coalition, and co-executive director of the Center for HICS (Hospital Incident Command System) Education and Training. He previously served, for 28 years, as an associate professor of emergency medicine at The George Washington University, and now works as an emergency department physician assistant for Best Practices, a large physician group that staffs emergency departments in Northern Virginia. In addition, he has been both a volunteer paramedic with the Fairfax County (Va.) Fire and Rescue Department and a member of the department's Urban Search and Rescue Team. He also has served, since 1991, as the assistant medical director for the Fairfax County Police Department.



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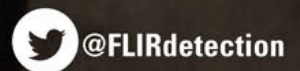
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Transitioning From Routine to Disaster

By Tanya Ferraro

Public health agencies serve valuable roles and fill operational gaps that only they can perform. Planning and training within and between agencies are necessary for public health services to transition from daily operations to emergency response to a widespread pandemic, environmental hazard, or other critical public health threat.



Every agency that carries a responsibility during a disaster requires training, and public health is certainly no exception. The functions of public health are surprisingly vast in a disaster situation. Across the United States, public health agencies have critical roles for dealing with environmental hazards, water and sewer contamination, disease outbreaks, mass fatalities, and many additional responsibilities.

Leading & Supporting Roles in Disaster

With increasing frequency, public health agencies are finding themselves as the subject matter experts in various areas, and their emergency response partner agencies are taking notice of their pivotal roles in disaster. Occasionally, public health is the lead agency in disaster, with examples including the most recent Ebola and measles outbreaks. At other times, public health plays a supporting role in many other ways. In order to seamlessly incorporate public health into a disaster response, adequate training remains at the forefront of preparedness, both inside the agency, and with outside agencies.

Training inside the walls of public health is often meant to fit all potential responses. This means that, although each disease or outbreak treatment may be different from the next, the response is essentially the same. Therefore, public health is able to train on their specific needs for the response, and fill in the details as needed. When employees from public health or other agencies are trained in the Incident Command System, the structures and positions filled are applicable to a multitude of disasters. Because the response structure essentially remains the same for each disaster, it is imperative that the training inside public health be consistent and frequent in the principles shared by other response partners. This is most successfully accomplished by identifying, training, and exercising with local first responders and other agencies involved in emergency management.

One of the most essential elements in an effective public health emergency response is the ability to train staff and leadership on how to make the critical switch from daily operations to emergency operations. This process is not successful by training in all topics all the time, but by creating realistic and operationally sound training plans that allow staff to identify areas that require their expertise on a daily basis. Identifying where daily public health responsibilities fit into the incident command structure and emergency operations plan allows staff to make sense of the emergency responsibilities they will inevitably be given. Incorporating training and exercises, which put into practice lessons that would otherwise be lost in a classroom, builds upon the elements learned to foster advanced skills out of introduction.

Multifaceted Planning & Training

Developing relevant training plans begins with identifying areas most in need of those plans and relaying those reasons to the staff members who will receive the training. Once they understand why they are receiving training, connecting their unique daily roles to their emergency roles becomes more palpable and purposeful. The “what” that is completed does not always change, but the “how,” “where,” “why,” and “who” to report to certainly do, and these are the questions that introductory-level training should eventually expound on to prepare staff for response.

One such type of training is for a point of dispensing (POD), which is a site where medications are distributed to a large group of people. A POD includes more elements than where to host a site and how to open it. There is a structure with many roles – documentation, nursing, consultation, logistics, resource management, security, public information, and more – that include the management principles of incident command learned in introductory training. The practical skills of a specific role – for example, that of a public health nurse – may be the same as his or her everyday responsibilities, such as giving injectable vaccines. Although the systems, reporting, documentation, safety, and location of PODs may differ, exercising the roles in advance can greatly reduce errors, increase comfort, and ultimately increase efficiency.

“One of the most essential elements in an effective public health emergency response is the ability to train staff and leadership on how to make the critical switch from daily operations to emergency operations.”

During a large-scale planned event, there may be environmental factors that arise related to drinking water, sewage, or other areas of environmental health expertise. Public health recommendations and the way agencies complete testing may be the same as any regular day, but who needs to know about it, how it is documented, and who leadership should share information with are part of the transition from routine to response mode. The same training that prepares public health to change their mindset for a POD also prepares them to work in an influenza clinic, emergency testing site, or even a call center as subject matter experts. The same incident command training that discusses the organizational layout for leadership in a POD is applicable to an environmental health disaster.

The list of training and its cross-references are endless throughout the many facets of public health and potential response areas. As the only resource for many functions in disaster, it is imperative to keep training as a priority for public health. Creating robust training and exercise plans that are rooted in necessity help to: build upon skills as they are continuously taught; identify routine functions and how they can be completed in any disaster; and incorporate partner agencies. Such training and planning are how public health can be most successful during routine and disaster situations.

Tanya Ferraro is the training and exercise coordinator for the Fairfax County Health Department. Since 2007, she has worked in various facets of emergency management, including public information, training, volunteer management, and social media. She is co-host of the emergency management podcast EMtalk and enjoys creating preparedness-related memes and songs for colleagues and community members alike. She studied public safety, emergency management, and homeland security at Bluefield College and is a certified hospital emergency coordinator. Connect with her at about.me/tjlasagna

Adrift – The No-Win Scenario in Responder Training

By Joseph Cahill

In a training scenario, a lose-lose situation may make a lasting impression on students, but does little to improve the decision-making skills of the responders. Regularly faced with making life-or-death decisions, emergency responders should receive training that includes no-win as well as winnable alternatives, thus reflecting real-life scenarios while not deflating student confidence.

“Imperative! This is the Kobayashi Maru, ... nineteen periods out of Altair Six. We have struck a gravitic mine and have lost all power.... Our hull is penetrated and we have sustained many casualties.... Life support systems failing. Can you assist?”

–“Star Trek II: The Wrath of Khan,” Jack B. Sowards



This message, which crackled across the radio, marked the start of the Starship Enterprise’s training mission to Gamma Hydra. The scenario posed a choice: (a) save about 80 crew members of a disabled freighter and violate a treaty with a hostile neighboring government; or (b) let the freighter drift to a certain doom, honoring the treaty but violating the commitment to save those in distress. As a plot device, such scenarios define aspects of main characters in a motion picture and set the stage for later conflict, but they also could serve as a valid training tool for first responders.

Choices Leading to Unwinnable Places

Emergency medical technicians and paramedics often face life-or-death decisions, with cardiac arrest being the most severe condition a patient can be in and still receive care from these emergency medical services (EMS). According to 2013 statistics from the American Heart Association, only 9.5 percent of people who experienced out-of-hospital cardiac arrests survived long enough to be discharged from the hospital.

EMS programs often teach and test treatment skills for various patient scenarios using simulations, where the simulated patient experiences many conditions, including cardiac arrest.

In order to create an unwinnable scenario, the rules must be stacked against the student, often in an artificial manner. One such scenario is called the “two doors,” which may be used to simulate the EMS response to an active shooter situation. The two-student team would be dispatched to a shooting, and enter a scenario room with an instructor playing the role of a police officer. The sounds of gunfire come from outside, and students have the choice between two doors at either end of the room. Unbeknownst



to them, an instructor/shooter with a balaclava – that is, a ski mask that covers portions of the face – awaits behind each door. Since EMS personnel have no effective response to an active-shooter situation, they rely on the police officer for safety and control of the scene. If they call for EMS resources, they simply put more EMS staff in harm's way without improving the situation. Inherent in this scenario's design is that the only way to win is to not play.

Instructors may support such scenarios as a way to impress upon students that there are such scenarios that they may encounter in real life. However, what all no-win scenarios need is a winnable path. After the student arrives at the unwinnable corner, the instructor explains what the student could have done to succeed. In other words, there actually should not be any [no-win scenarios](#), just scenarios that branch off and could lead to unwinnable places. In an EMS scenario, student teams should have the opportunity to spot the threat during scene size-up and to pull back before they become trapped in the room, or alternatively to remove the patient quickly enough that the shooter's return does not trap them in a room with only two doors, both with dangerous consequences.

“What all no-win scenarios need is a third path. In other words, there actually should not be any no-win scenarios, just scenarios that branch off and could lead to unwinnable places.”

Balancing Success & Failure

These decision-making skills should continuously build on previous training and experience. Applying the training received, students should be able to succeed in the scenario, even if each team does not. Observing the success of other teams also can be valuable learning experiences. The stakes are high in EMS and the training should be difficult enough to make students think about what they are doing and understand that there are branches on the decision tree, in most encounters, that may lead to negative consequences.

Training should offer students the tools to make good decisions and understand the necessary procedures intended to keep them safe and make them successful. A no-win branch should only be included in a scenario when three criteria are met: (a) the branch is realistic to conditions in the field; (b) the stakes in a similar real-life scenario are high; and (c) the students' training would lead them to another path, but they just did not take it. Care must be taken not to paint an outlook that is too positive, but not so negative as to crush the confidence of the students.

Joseph Cahill is the director of medicolegal investigations for the Massachusetts Office of the Chief Medical Examiner. He previously served as exercise and training coordinator for the Massachusetts Department of Public Health and as emergency planner in the Westchester County (N.Y.) Office of Emergency Management. He also served for five years as citywide advanced life support (ALS) coordinator for the FDNY – Bureau of EMS. Before that, he was the department's Division 6 ALS coordinator, covering the South Bronx and Harlem. He also served on the faculty of the Westchester County Community College's paramedic program and has been a frequent guest lecturer for the U.S. Secret Service, the FDNY EMS Academy, and Montefiore Hospital.

Preparedness: Moving Beyond The Stockpiling of Stuff

By Andrew Roszak

Equipment, plans, and personnel are only as good as their ability to perform when needed. When disaster strikes, it is imperative that local, state, and federal levels of government, emergency management, volunteer organizations, and healthcare coalitions are all operationally ready and trained to use all of the “stuff” they have acquired over the years.



For many years, the prevailing focus of preparedness programs focused on “stuff” – for example, personal protective equipment, ventilators, generators, plans. Preparedness planners were evaluated based on how much stuff could be acquired and stored, only to watch it expire. For too long, being prepared meant being “fully stocked.” However, all of the stuff in the world cannot make up for a lack of trained professionals with the knowledge and expertise to lead responses.

Shifting Strategies – From Stockpiles to Real-World Application

Over the past few years, there has been a growing national movement away from measuring stuff and toward measuring actual operational capacity to recognize triggers, activate systems, and perform essential tasks. Perhaps the biggest evidence of this shift is occurring with the Centers for Disease Control and Prevention’s (CDC) Strategic National Stockpile Program, which is revising the way that medical countermeasures (MCM) programs are evaluated. From 2007 to 2013, the CDC used the Technical Assistance Review (TAR) to ensure that local health department MCM plans met a standard set of criteria, which was used as a means to measure preparedness across the country.

Beginning in 2014, the TAR was replaced with a new Operational Readiness Review, which focuses more on the demonstration of operational capacity for preparedness and response activities. This represents a shift in the way MCM programs will be measured, from evaluating preparedness plans to actually proving that these plans can be carried out in the real world. Through this shift, the overarching goal is to regularly practice, evaluate, and improve preparedness plans through real-world responses or exercises that engage key partners and systems. The regular engagement, training, and practice gained through these responses and exercises will ensure operational readiness and coordinated responses when emergencies occur.

The demonstration of operational capability requires additional time, resources, and planning. However, by actually testing plans, policies, and procedures, there is a tremendous opportunity to identify gaps. Through this new review, public health must train not only the public health workforce, but also the workforce of its partners. This will ensure that fellow responders and partner organizations have a solid grasp of their specific tasks and expectations.

Ongoing Analysis of Training & Funding

The National Association of County and City Health Officials (NACCHO) has been closely tracking funding and staffing issues at local health departments through the National Profile of Local Health Departments. This study is the only comprehensive analysis of local health departments and provides longitudinal data since 1989. The latest “[Profile](#),” released in early 2014, contains some troubling findings regarding funding levels and the amount of resources dedicated to preparedness and, specifically, preparedness training. Over the past three years, the data shows a significant drop in per capita funding for preparedness, from \$2.07 per capita in 2010 to \$1.15 in 2013. At the same time, federal funding for state and local preparedness dropped more than [38 percent](#) between 2005 and 2012. Both of these findings paint an alarming picture, as [more than half](#) of local health departments rely solely on the federal government for preparedness funds.

Although funding has declined, the latest “Profile” revealed an interesting trend. Despite the cuts to preparedness, local health departments did not report a corresponding decrease in preparedness staff. In fact, emergency preparedness staffing has increased from [65 percent](#) to 77 percent of local health departments reporting a full-time preparedness staff person from 2010 to 2013, respectively. Nationally, the estimated number of emergency preparedness staff employed by all local health departments grew to 2,900 full-time employees, an increase of 200 from [2010](#).

This may seem like an unexpected victory for preparedness. However, anecdotal evidence provided by local health department interviews reveals a different picture. Since 2009, local health department staffing has fallen overall from 190,000 to 162,000 personnel in 2013. This represents a huge loss for the capacities of local health departments throughout the country. This also represents a diminished capacity to respond to public health emergencies, which often require an all-hands-on-deck approach that includes staff not designated to preparedness activities.

More concerning, it seems likely that local health departments are cutting back on vital functions – namely trainings and exercises – in order to maintain full-time preparedness positions. Training and education provide the foundation for emergency preparedness and response capabilities. For example, in 2013, 87 percent of local health departments developed or updated a written emergency plan; however, only 38 percent of local health departments participated in a full-scale exercise or drill.

As highlighted by the personal protective equipment training needs for treating an Ebola patient, in-person training must be prioritized. Although many individual agencies have written plans, far fewer have tested these plans in a real-world environment. Additionally, the challenges the nation faces are evolving faster than ever, and the increasingly interconnected world further accelerates these potential threats. As with Ebola, public health threats can emerge on the other side of the world and travel to U.S. communities within a day. Now, more than ever, preparedness professionals must be aware of the latest advances in the field and ensure that preparedness efforts are informed by the best available scientific evidence.

National Preparedness Summit

Difficulties created by the economic downturn – reinforced by cuts to preparedness funding and new federal travel restrictions – have made acquiring training at national conferences nearly impossible for some professionals. Those who do travel must choose wisely to ensure the best

value for their limited resources. The 10th annual Preparedness Summit is a four-day annual event that attracts nearly 1,800 attendees who work at local, state, and federal levels of government, emergency management, volunteer organizations, and healthcare coalitions.

This year's theme is timely: "Global Health Security: Preparing a Nation for Emerging Threats." Global health security preparedness issues – such as protection against infectious diseases, the health effects of climate change and extreme weather, and cybersecurity threats to critical infrastructure – will be explored in a multidisciplinary environment. Additional sessions on medical countermeasures, volunteer recruitment and retention, radiation planning and response, and preparedness law also will be featured.

The Preparedness Summit delivers opportunities to connect with colleagues, share best practices, and learn about new advances in the field. Attendees will learn how to implement model practices that enhance capabilities to prepare for, respond to, and recover from disasters and emergencies. In keeping with the focus on operational readiness, this year the Summit will provide 28 workshops and demonstration sessions taught by subject matter experts, which offer participants an in-depth learning experience and hands-on training. Both the workshops and the demonstration sessions are designed to be highly interactive and frequently incorporate real-world events into the sessions.

In addition, workforce issues continue to be a challenge. More than [25 percent](#) of local health department directors are more than 60 years old, creating a looming crisis and potential for mass exodus of historical knowledge. For the first time ever, NACCHO will be conducting a new preparedness coordinators training workshop in conjunction with the Summit to better train and sustain the preparedness workforce. This pilot program will pair preparedness coordinators who have less than two years of experience with a seasoned mentor. The response to this pilot project has demonstrated a need for this type of training, with more than 50 participants signing up within the first few weeks.

In a world with increasingly global challenges, the 2015 Preparedness Summit Planning Committee and NACCHO staff have carefully curated the sessions to ensure that attendees have the opportunity to learn from speakers and presenters that represent the best ideas in public health preparedness. Attendees will leave the Summit equipped with the knowledge of how to shift preparedness practices and planning beyond merely stocking shelves with "stuff."

The 2015 Preparedness Summit will be held 14-17 April 2015 at the Atlanta Marriott Marquis. Additional information is available at: <http://preparednesssummit.org/>

Andrew Roszak, JD, MPA, EMT-P, serves as the senior director for environmental health, pandemic preparedness and catastrophic response at the National Association of County and City Health Officials (NACCHO). Prior to his position at NACCHO, he provided support for Super Bowl 46 and the Indianapolis 500 as the senior preparedness advisor for the Health and Hospital Corporation of Marion County, Indiana, and the MESH Coalition. Previously, he served as senior advisor for the U.S. Department of Health and Human Services (HHS) at the Health Resources and Services Administration and at HHS's Emergency Care Coordination Center. During the 110th and 111th Congresses, he served as a Winston Health Policy Fellow in the U.S. Senate, on the Budget and Health, Education, Labor and Pensions (HELP) Committees. Immediately beforehand, he served two years in the Office of Health Protection at the Illinois Department of Public Health and eight years as a firefighter, paramedic, and hazardous materials technician in the Chicago-land area. He has an AS in paramedic supervision, a BS in fire science management, a Master of Public Administration and a Juris Doctorate degree. He is admitted to the bars of Illinois, District of Columbia, and the U.S. Supreme Court. Twitter: @AndyRoszak

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Pittsburgh: Traffic-Stop Training to Prevent Police Officer Ambushes

By Zoë Thorkildsen

Across the United States, incidents of police officers being targeted in ambush-style attacks have raised great concern. The Pittsburgh Bureau of Police addressed this rising concern by creating reality-based training scenarios that build situational awareness and test officers on incidents they are likely to encounter during routine traffic stops.



In 2009, the Pittsburgh Bureau of Police (PBP) responded to a call for service that developed into an ambush of police officers. Three officers were killed, and two were seriously injured. According to data from the Federal Bureau of Investigation’s Law Enforcement Officers Killed and Assaulted database, PBP experienced record-high levels of ambushes against police officers in the department in 2002 and 2006, as seen in Figure 1. Noticing these trends in their departments amid growing national concerns about violence against police, PBP began to research how best to ensure that their officers were prepared to respond safely and effectively to these types of scenarios.

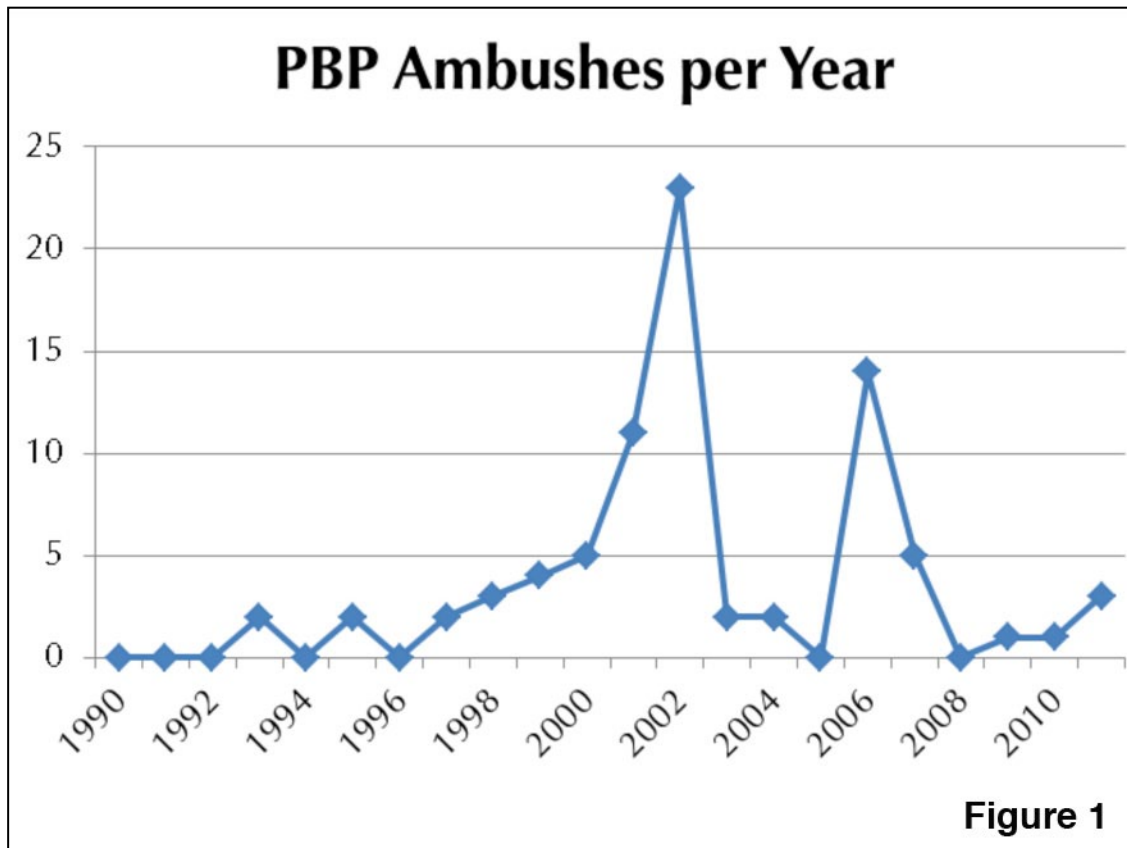
In early 2013, PBP experienced several firearms assaults on officers and conducted internal analysis to better identify the underlying problems. One result of that analysis, conducted in 2013, was the discovery that officers would benefit from reality-based training, which typically includes the following characteristics:

- Scripted scenarios;
- Actors/role-players;
- Equipment, such as simulated service weapons with simulated ammunition pellets (“simunitions”);
- Specific learning objectives; and
- Performance evaluations by training staff.

Training Planning & Structure

Given concerns about assaults and ambushes during traffic stops, PBP chose to focus on traffic-stop scenarios in their training program in the summer of 2014. After conducting research on ambush- and assault-related reality-based training scenarios, PBP developed in 2014 a set of five traffic-stop scenarios, three of which involved ambush elements. PBP had used reality-based methods previously for firearms training, so the department was familiar with associated benefits and challenges.

PBP chose to make its training voluntary, meaning officers opted-into the program rather than being selected. The department chose to offer the training on a voluntary basis for two reasons. First, reality-based training scenarios involving simunitions (as PBP’s training does) inherently



involve safety risks. Training officers felt that officers who participated in the training voluntarily would be more likely to both accept and mitigate these risks. As this was a pilot program for PBP, safety was an important concern when considering the future of the program. Second, training officers wanted to begin the pilot training session with officers who were particularly interested in the training technique.

PBP training officers (firearms training staff supplemented by about 30 officers) created a training space in the firearms training range for the summer 2014 training. Officers who participated in the training did so in their normal response structure; that is, an officer who typically patrolled alone would participate in the training individually, while officers who worked in team units could participate as a team. Each of the five scenarios that PBP developed was active for one week, meaning that the complete training program lasted for a total of five weeks. Below are brief descriptions of the five scenarios.

- *Week One Scenario:* Responding officers are called to respond to a moving violation by a sport utility vehicle (SUV) with tinted windows. When the officer(s) approaches the vehicle, the driver role-player refuses to respond to questions. After a short period of time, the driver produces a firearm and fires on the responding officer(s).
- *Week Two Scenario:* Officers are called to respond to a moving violation by an SUV. Before officers can approach the vehicle, the driver role-player fires on the responding officer(s).

- *Week Three Scenario:* Officers are called to respond to a crash following a high-speed pursuit. Upon arriving on the scene, the driver role-player exits the crashed car and flees. A second role-player is concealed in the vehicle. If the responding officer(s) does not check and clear the vehicle, this second role-player fires on the officer(s).
- *Week Four Scenario:* Officers are called to respond to a suspicious vehicle in a parking lot. While investigating the vehicle, a role-player with a firearm attempts to approach the officer(s) from behind.
- *Week Five Scenario:* Officers are conducting a traffic stop and, upon running the plates of the stopped vehicle, are informed that it has been flagged as being involved in several drive-by shootings.

Training Outcomes

Over 500 officers (out of approximately 900 sworn officers) participated in the training program over the 5-week period in the summer of 2014. PBP found that after the initial group of officers participated, word-of-mouth helped increase interest in the training among other officers. Incorporating reality-based training represents a cultural shift for PBP, since the department had not previously used that style of training for tactical response. Training officers noted that some officers were initially uncertain of how to participate in this more open-ended style of training, as they were more used to being given a specific set of directions to execute and then being judged on the execution of those tasks, rather than on decision-making in a scenario.

PBP used a student-centered feedback model for evaluation during its training program. After officers completed a scenario, they would engage in a dialogue with the training officer, during which the training officer would ask the trainees what they thought went well or warranted improvement. In this way, the training officer guided the officers through a self-evaluation process. Officers were then given the option to repeat the training scenario multiple times if they wanted to practice again or try to improve their performance.

PBP will continue using reality-based training techniques, dedicating a little over a month each year to offering these force-on-force training scenarios with evaluator feedback. PBP plans to develop the training scenarios each year based on the needs of the department and on national trends in police preparedness. This training has been added to the standard requirements for new recruits.

Key Takeaways

PBP constructed and executed a successful training program to better prepare officers to handle ambush and traffic-stop scenarios. Some key elements of their program include:



- Leveraging research and evaluation of real-world events to design reality-based training scenarios;
- Engaging with multiple stakeholders in the development of the training program;
- Focusing on safety considerations and incorporating multiple safety officers;
- Conditioning officers with multiple types of scenarios that cover a broad spectrum of tactical responses, not all of which require use of force;
- Having officers train in their regular unit configurations; and
- Engaging in evaluations using student-centered feedback models.

Reality-based training can be used to better prepare law enforcement officers – and responders in other disciplines – to respond to scenarios they may encounter in the real world. PBP successfully implemented this training in their department using traffic-stop scenarios, but it is broadly applicable to numerous scenarios and agencies.

“According to data from the Federal Bureau of Investigation’s Law Enforcement Officers Killed and Assaulted database, PBP experienced record-high levels of ambushes against police officers in the department in 2002 and 2006.”

Acknowledgements: CNA Corporation would like to thank the Pittsburgh Bureau of Police for taking the time to participate in an interview and explain their use of traffic-stop training techniques, as described in this case study. For more information about reality-based training, see Kenneth R. Murray’s definitive text on the subject: “Training at the Speed of Life: Volume One,” published in 2004 by Armiger Publications.

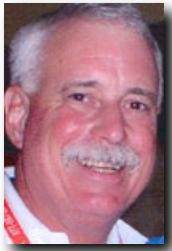
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Ongoing Training Needs: Virginia's Solution

By Stephen Grainer

In a remote rural area – far from customary amenities, distractions, and other conveniences – players are faced with challenges and must learn to adapt and overcome in order to reap the benefits, otherwise face the consequences. No, this is not a reality television show, but it is an effective “reality” training model that Virginia has perfected to ensure that its emergency responders are prepared to take command if and when needed.



Flooding, wildfires, winter storms, and an array of other natural calamities have headlined daily news continuously, not to mention the first cases of the Ebola virus in the United States, and now increasingly virulent threats to national security and prosperity from both homegrown and external terrorist sources are daily news across the country. Since the promulgation of the National Incident Management System (NIMS) following the attacks of 9/11, the U.S. emergency response community continues to see an ongoing demand for delivery of training addressing the Incident Command System (ICS). The good news is that with the promulgation of NIMS has been a concerted effort to upgrade training capabilities for emergency responders nationwide. The primary intent of NIMS is to foster continuity and consistency in the fundamental practices for managing emergency incidents.

The Good, the Bad & the Forgotten

Although there is a broad spectrum of threats and potential consequences are great, the occurrence of significant incidents has been relatively infrequent. This is a “good news-bad news” situation. The good news is that major and calamitous incidents do not strike everywhere continuously. The bad news is the same. Thus, the opportunities to apply much of the knowledge, skills, and abilities promoted by the training provided are limited.

More bad news is that, although there is a wealth of training programs related to NIMS, there has been minimal attention directed toward maintaining the knowledge, skills, and abilities that are promoted by the training. The 2011 edition of the National Incident Management System Training Program lists 28 different courses of instruction in the so-called “Core Curriculum” for NIMS. Most of these courses offer a building-block progression that typically begins with [IS-700](#) (“National Incident Management System, An Introduction”) and continues through the four primary Incident Command System courses (ICS-100 through 400). Additionally, the listing includes all-hazards position-specific training courses. Since 2011, more position-specific courses also have been introduced.

In addition, there is a variety of other related or affiliated training programs listed in the Emergency Management Institute’s Independent Study system. A cursory review of the EMI Independent Study menu listing at www.training.fema.gov/IS shows approximately 100 different self-study programs, most of which have some applicability to NIMS. Therefore, training related to and supportive of the development of NIMS is readily available. However, very few of the current courses available are specifically intended to facilitate or support ongoing maintenance of training previously received. In essence, to date, most of the training has been a “once-and-done”

check-off process for NIMS compliance. For many, NIMS-compliant training was completed as long ago as 2004, with little, if any, follow-up training since then.

Therefore, it can be surmised that there are gaps between the initial training that has been provided over the past 10 years and the ability of many individuals to recall or apply that knowledge in the absence of application or practice over time. Thus, there is now a question regarding the capabilities or ability to recall past training of a significant percentage of “emergency response providers” ([Homeland Security Act of 2002 – Public Law 107-296, 25 November 2002](#)) who were initially trained years ago. An evolving challenge is to formulate and provide training and exercise opportunities by which prior training can be refreshed and reinforced for the potential expanding incidents – that is, emergencies that transcend or exceed typical emergency conditions.

This challenge is being met in a variety of ways. In some cases, state and local authorities have stipulated that individuals must repeat certain training courses periodically. In other cases, individuals may be required to attend the next upward level of training. In still other cases, individuals may be required to “retest” at the level to which they are required to be qualified. Of course, in some instances, there are currently no requirements for maintenance training or the ability to demonstrate any level of competence.

Action Plans & Incident Command Forms

In Virginia, there are two programs that provide review, refresher, and update training to the emergency responder community. Although having had limited activity, both programs have received favorable feedback from participants. The first is a one-day classroom program entitled, “ICS Planning Process and Forms.” The curriculum consists of extracted components from Units Five and Six in the [ICS-300](#) (“Intermediate ICS for Expanding Incidents”) training course. The emphasis is on the planning cycle (Planning “P”) and the standard forms typically used to develop an incident action plan (IAP). This program targets individuals trained through ICS-300.

The program begins with a review of two [key forms](#), the ICS-211 documenting response resource check-in and the ICS-214 (“Unit/Activity Log”), followed by a review of the component phases of the Planning “P.” After the review, students are presented with a generic, but realistic (for Virginia), scenario using both detailed written information (for continuing reference) and a newscast-like video of the incident elements to provide realism and intensity for the students. Students are provided basic information such as that which would probably be captured on an ICS-201 form or on a typical command/status board, which is frequently carried by fire department command officers such as battalion chiefs. In small groups of six to eight students, they are then charged with developing an IAP to address the challenges presented and given several hours to assess and develop objectives, strategies, and tactics to compose the key documents needed for a basic IAP.

Following a review of their tentative products with the course instructors – as reviewed in a mock planning meeting – the students then finalize and prepare their IAP for delivery in a simulated operational period briefing. Following all mock operational period briefings, the instructors moderate a review session to identify strengths and areas for attention in the future. There are no grades given for the program because the purpose is not to rate students’ accomplishments, but rather to provide review and refresher training (and for some, exposure to the new forms) under the typical time constraints and pressures often encountered when suddenly confronted with a situation that requires an organized approach for effective management.

This one-day program addresses an important need for refresher training for personnel who infrequently apply or review some of the critical core ICS practices. However, it is not necessary to create or adopt a course such as this. Rather, by extracting the key curriculum elements (as determined by the organization's needs), instructors with practical experience in ICS can readily provide a brief refresher program using the existing materials in ICS-300. Simply devoting an hour to forms such as the ICS-215, ICS-215A, and the core forms used to create an IAP can be extremely beneficial to refresh personnel periodically.

Evolving the Command Structure With Rewards & Consequences

A second program developed in Virginia is entitled "Command & General Staff – Practical Evolutions." This program is fundamentally a functional exercise in which the participants are placed in command and general staff functions and charged with developing an IAP for a scenario. The added twist to this program is that it is conducted in an "unrestricted" environment – that is, the activities are not scripted as is often the case in many exercises. Some have dubbed the conduct of the program as a "consequence-based activity." In simple terms, the exercise is based on the general principle that "for every action, there is an equal (and sometimes opposite) reaction." When the players plan and execute a logical and effective action for any challenge as determined by the exercise controllers and simulators, their decisions and actions are "rewarded." To the contrary, should the players make questionable decisions or fail to take action, adverse consequences often will ensue.

Conducting this program necessitates having an experienced exercise control and simulation team. Fortunately, in Virginia, most of the controllers and simulators conducting the program have many years of on-the-job experience with which to work when conducting the program. This keeps the exercise under control, but unrestricted by artificial constraints or scripting. The Command & General Staff – Practical Evolutions program can be conducted for an organized incident management team with staff performing the functions they are assigned within the team, or those who are not members of a team can be assigned functions based on their interests, skills/experience, or a combination of both.

At a remote, but readily accessible training and conference facility operated by the Department of Forestry, the program formally commences with an agency administrator briefing at a pre-designated time in which students are briefed on the scenario and the rules of engagement are detailed by the activity controllers. The participants then are given time to identify their organizational challenges and prepare to take action. Among the challenges beyond the impending scenario are decisions related to: (a) accommodations (determining who will bunk with whom in the available facilities); (b) development of a food menu for the operational period; (c) identification of who will prepare meals and snacks; and, in general, (d) the internal organizational needs that affect team performance and sustainment. In a typical training environment, these types of issues are transparent to the students/participants.

Within two hours of the designated reporting time, the scenario injects generally commence. Typically, the activities become an adapt-and-overcome situation for the participants. Indeed, this is similar for the controllers and simulators, but the eventual outcome generally provides the participants a greater appreciation for their challenges and outcomes.

During the course of the program, the participants experience virtually all of the steps or components of the ICS Planning "P," beginning with the agency administrator briefing and

continuing through the various briefings and meetings identified in the standard planning cycle. Generally, the program concludes with an operational period briefing, after which the program facilitators and controllers provide feedback, and all participants discuss strengths, weaknesses, and opportunities for future improvement.

The schedule for the program is flexible. However, the timeline that has been most stimulating for participants begins with their arrival in early afternoon and concludes the next afternoon. This requires the participants to identify and address factors associated with meals, accommodations, scheduling of briefings and meetings – possibly at unusual hours – and ensuring completion of all aspects of conducting a planning cycle. In addition, beginning and ending in the afternoon facilitates travel to and from the activity during daylight hours. As with the ICS Planning Process and Forms program, the participants are not graded on performance. Rather, it is expected that they will identify their individual and collective (team) strengths and areas that require further work.

In general, past participants in these programs typically have remarked that they did not expect the intensity of the activities and the breadth of demands. Most incident management team deployments are prearranged, with facilities, services, and accommodations provided. However, there may be challenges beyond being given a reporting location, receiving an agency administrator or transition briefing, assuming command, and commencing incident management operations with conducting a tactics meeting, developing an IAP, and conducting an operational period briefing. The Command & General Staff-Practical Evolutions program provides an opportunity to identify challenges that extend beyond simply being an incident management asset.

A Model for National Change

Certainly similar and perhaps better programs are being employed around the country. The two programs presented herein are two efforts currently employed by Virginia to address an identified shortfall. The primary challenge is to recognize the need to provide practical and realistic training accompanied by opportunities for refreshing through exercises and application of knowledge, skills, and abilities.

Perhaps one of the most urgent challenges confronting the emergency response sector is directing attention to a broader effort to train and exercise the entire population of emergency responders, thus ensuring that there is a measure of competence to perform within the ICS framed by NIMS. There is a need to provide review and refresher training for a large contingent of emergency responders and to develop and provide opportunities to exercise under reasonably realistic conditions to ensure that not only critical command and general staff positions can be staffed by personnel familiar with and comfortable in their position responsibilities. When needed, professionals from any discipline must be able to integrate their identified position assignments or task proficiencies with the greater needs associated with any incident. Thus, training must have a clearly identified target of performance, not simply meeting an imposed requirement.

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