

Is The Next Great Threat to Law Enforcement Invisible?

By

**Lieutenant Michael Doane
Roseville Police Department**

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The Command College Futures Study Project is a FUTURES study of a particular emerging issue of relevance to law enforcement. Its purpose is NOT to predict the future; rather, to project a variety of possible scenarios useful for strategic planning in anticipation of the emerging landscape facing policing organizations.

This journal article was created using the futures forecasting process of Command College and its outcomes. Defining the future differs from analyzing the past, because it has not yet happened. In this article, methodologies have been used to discern useful alternatives to enhance the success of planners and leaders in their response to a range of possible future environments.

Managing the future means influencing it—creating, constraining and adapting to emerging trends and events in a way that optimizes the opportunities and minimizes the threats of relevance to the profession.

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It was a quiet Sunday morning when dispatch informs officers that there is a man down at the mall. Since there are no further details, multiple officers respond from this mid-size law enforcement agency. Dispatch advises that emergency medical crews are staging until police arrive. Officers arrive and go inside the mall and find the man, who appears to have died in one of the shops. The officers find no signs of violence, trauma or obvious cause of death. They conclude it seems to be an unattended death, and then go about their daily business. One officer remains behind to complete the report writing process. It will be days before the autopsy; however, the two officers who checked the body are now developing eye irritation and nausea. Within hours, they are rushed to the hospital for treatment.

As it turned out after a lengthy investigation, the officers did not notice the white powder on the store owner's desk, which in this case turned out to be Ricin. The store owner was a victim of bioviolence; the officers were not prepared or trained to investigate bioviolence. Given that law enforcement fatalities have increased sharply, almost all due to the known risks of policing, imagine a future that also includes an unseen and largely unknown biological risk to officer safety. Police leaders need to work now to help avoid the scenario noted above; we must begin our work to respond to, and investigate, incidents of bioviolence.

What is Bioviolence

Law enforcement officer fatalities increased sharply from 117 in 1009 to in 2010 to 162 officers. Seventy-three were traffic related but even firearm fatalities increased 24 percent. The first quarter of 2011 has fared worse with fatalities up 25 percent including a 78 percent increase

in firearm related fatalities.¹ These incidents are tragic; however, none of them involved an exposure to biotoxins or other “invisible” killers. Unfortunately, in a time where anthrax has been sent to members of Congress, and where other biological entities can be produced by persons intending harm, we are compelled to work to strengthen our defenses against yet another means of violence. Before we discuss what to do, though, it is important to understand what it is.

Barry Kellman (2007) defines bioviolence as "the infliction of harm by the intentional manipulation of living micro-organisms or their natural products for hostile purposes."² For example, a deliberate attack occurred in Oregon, to reduce voter turnout, where cult members deliberately contaminated self-serve salad bars in restaurants with salmonellosis. Customers and employees were sickened when they ate or worked from the salad bar. The cult members were able to grow the strain at their own laboratory at their commune.³ Another attack occurred inside a laboratory working with type 2 *Shigella dysenteriae* where a worker intentionally contaminated muffins and donuts inside the break room. The attack was contained inside the lab; however, it obtained a hundred percent infection rate.⁴ More recently was the ricin scare in Las Vegas in 2008. An employee discovered a vial of ricin in an Extended Stay motel after the occupant went to the hospital from respiratory distress. That man nearly died and several people's health was monitored including the responding police officers to determine if they had been infected as

¹ LawMemorial.org, Law Enforcement Fatalities Spike Dangerously in 2010, retrieved 4-27-2011 from www.nleomf.org/assets/pdfs/reports/2010_Law_Enforcement_Fatalities_Report.pdf

² Kellman, Barry (September 2007) *Bioviolence*, (p.3) Cambridge, New York: Cambridge University Press

³ Torok, Tauxe, Wise, Livengood, Sokolow, Mauvais, Birkness, Skeels, Horan, Foster 1997 p.389-395, *JAMA*, August 6, 1997—Vol 278, No. 5

⁴ Kolavic, SA & Kimura A & Simons SL & Slutsker L & Barth S & Haley, CE (August 1997) An Outbreak of *Shigella Dysenteriae* type 2 among laboratory workers due to intentional food contamination *Journal of the American Medical Association*, p.396-398

well.⁵ These three examples demonstrate that bioviolence is a real threat, and it exposed some of the difficulties in investigating it at the local level.

Investigative Challenges

Bioviolence investigations will always result in a cross jurisdictional investigation. The Federal Bureau of Investigation is the lead agency for the federal government. After the 2001 anthrax attacks, protocols were put into place between public health departments, CDC, and the FBI on notification triggers and investigative authority.⁶ When dealing with an overt act, the jurisdictional lines are clear because it is readily identifiable as a criminal act and there are protocols for crime scenes. The FBI and local agencies deal with the criminal act identifying evidence and the suspect for prosecution while the CDC and local public health deal with the containment and treatment of the biotoxin. Both law enforcement and public health work collaboratively dealing with the issues of the event. This issue becomes very relevant when dealing with a covert act.

In an article written for PubMed Central by doctors Butler, Cohen, Friedman, Scripp and Watz (2002) they wrote, “The covert act may not be initially recognized as an attack, and public health generally first recognizes the problem and leads the initial inquiry. The early response will focus on diagnosis, medical care, and epidemiologic investigation.”⁷ Their focus is not

⁵FOX News' Ian McCaleb, Catherine Herridge, Catherine Donaldson-Evans and The Associated Press contributed to this report, retrieved from <http://www.foxnews.com/story/0,2933,333781,00.html>

⁶ Butler, Cohen, Friedman, Scripp and Watz ,Collaboration Between Public Health and Law Enforcement: New Paradigms and Partnerships for Bioterrorism Planning and Response, PubMed Central Volume 8 2002 pgs 1152-1156

⁷ Butler, Cohen, Friedman, Scripp and Watz ,Collaboration Between Public Health and Law Enforcement: New Paradigms and Partnerships for Bioterrorism Planning and Response, PubMed Central Volume 8 2002 pgs 1152-1156

dealing with the motive or identifying and collecting evidence to identify and prosecute the perpetrator. Another challenge on the local level will be the involvement of the federal government.

If a bioviolent attack is determined to be bioterrorism, Presidential Decision Directive 39 specifies the Federal Bureau of Investigation as the lead agency for the crisis plan. It further charges FEMA with the federal response management⁸. The local agencies then take a supporting role to assist the federal government in the response and investigation. If the local agency has an officer on the region's Joint Terrorism Task Force (JTTF) the agency has a standing liaison officer to the federal government. Many small and mid-size agencies do not have the staffing to participate in task forces, which limits the lines of communication. It also limits the knowledge of the local agency in dealing with the federal government on these types of events. A first necessary step, then is for Federal, State, and local agencies to build and maintain a strong relationship to ensure a smooth transition of control and the lines of communication amongst jurisdictions.

Why the Urgency

A bioviolent attack against the community or specifically directed at local law enforcement can have dramatic implications to public safety. A blue-ribbon panel assembled by Congress in 2008 reported that a biological terror attack likely by 2013. Former senator Bob Graham in response to the blue-ribbon panel report stated, "The consequences of a biological attack are almost beyond comprehension. It would be 9/11 times 10 or a hundred in terms of the

⁸ Centers for Disease Control and Prevention. Biological and Chemical Terrorism: Strategic Plan for Preparedness and Response. Recommendations of the CDC Strategic Planning Workgroup. MMWR 2000;49(No. RR-4):[page 9].

number of people who would be killed.”⁹ 421 first responders died during the 9/11 attacks and that number has increased to almost two thousand from illness and disease in the aftermath. Those casualty numbers exceed the number of public safety staff of most small or mid-size municipal or county agencies. The CDC reported emergency workers, health-care workers, and public health officials could be at special risk during a biological or chemical attack; therefore, an event like this could be catastrophic to the staffing levels of local agencies.¹⁰

The convergence of scientific breakthroughs, the advances in information technology and the decrease funding at the local level may provide the perfect storm for a bioviolent event. Three areas in science that could have a large impact on bioviolence are nanotechnology, synthetic biology and medical breakthroughs in medication for specific ethnic groups. Nanotechnology can treat disease at the molecular level; for example, nano-robots can deliver the chemotherapy treatment directly to the cancer cell for treatment and the healthy cells would not be damaged.¹¹ Another example of medical breakthroughs involves the creation of drugs to treat disease in certain ethnic groups. In 2005, the FDA approved a heart drug for African-Americans. The drug BiDil reduced the mortality rate of African-American heart attack victims by 43 percent.¹² One of the purposes of synthetic biology is to control the behavior of organisms through genetic modifications. The positives include the potential of creating organisms that create energy or eat pollution; however, some scientific ethicists fear governments or individuals

⁹ CNN U.S, 2008, Biological terror attack likely by 2013, panel says, retrieved from <http://articles.cnn.com/2008-12-02/us/terror.report>

¹⁰ Centers for Disease Control and Prevention. Biological and Chemical Terrorism: Strategic Plan for Preparedness and Response. Recommendations of the CDC Strategic Planning Workgroup. MMWR 2000;49(No. RR-4):[page 8].

¹¹ UnderstandingNano.com, Nanotechnology in Medicine, retrieved 8-25-2010 from www.understandingnano.com/medicine.html

¹² Saul, Stephanie (6-24-2005) F.D.A. Approves a Heart Drug for African-Americans, The New York Times retrieved from www.nytimes.com/2005/06/24/health/24drugs.html

could produce biological weapons and other dangerous life forms with this technology.¹³ History has demonstrated that evil intentions or byproducts are sometimes produced through good scientific breakthroughs.

Information technology also creates a sense of urgency for law enforcement to stay ahead of this potential threat. People can now access research information at their fingertips through the internet. Universities and research sites publish their findings and research, which is available on line to the masses. Extremist groups now have the capabilities and access to the information to use biological as weapons. The advances in medicine and science with the instant access to retrieve data are a driver for creating a sense of urgency for local law enforcement to prepare for bioviolence.

In these economic times, staffing has become a major concern to public safety. Police and fire have seen dramatic decreases in staffing. Fire department personnel are the first responders to medical aide calls; therefore, they have maintained a closer relationship with county public health officials. Although their communications are primarily focused on naturally occurring epidemics and pandemics, the protocols they have in effect now will work in a bioviolent incident. Fire departments are also the primarily responders in hazardous material incidents because of their specialized equipment to handle those incidents safely. Law enforcement agencies are now prioritizing their resources with a focus on providing patrol services. Special assignments and task forces are on the budget cut lists, all of which affect first responder's ability to safely respond to bioviolent incidents. Even though the federal government will step in and take control, local agencies will still be the first on scene and will

¹³ Brown, David (5-21-2010) Scientists Create Cell Based on Man-Made Genetic Instructions, The Washington Post

have to contain the event safely, and the cuts in funding will jeopardize the local agencies ability to accomplish that goal.

Another victim of the economic climate is the decreasing funds for training. Public safety personnel have a lot of mandated training, and that training will take priority for funding. Department heads will have to stand fast on training and educate city managers and county executive officers in the importance and necessity of training. The Department of Homeland Security provides bioterrorism training free of charge; however, there is still travel costs associated with that training, which prevents small and mid-size agencies from participating. With staffing reductions and training cuts, local law enforcement is falling further behind the advancement of science and technology and ill prepared to respond to bioviolence. There are, though, specific steps we can take to keep us ahead of the curve with respect to potential bioviolent incidents in our cities.

Recommendations

In August of 2010 a panel of experts was convened to discuss the impact of bioviolence to patrol operations in mid-size law enforcement agencies. The panel was comprised of subject matter experts from the FBI, Placer County public health, emergency room physician, mental health professional and first responders from police and fire departments. The following recommendations represent the considered perspectives of the panel regarding steps local agencies should take to better prepare for the possibility of a bioviolent attack.

First, law enforcement agencies must take advantage of existing opportunities to train their staff in counter terrorism and mass casualty incidents. This training can provide the skills and a foundation of knowledge applicable to bioviolent events. The Department of Homeland

Security and FBI offer training to state and local officers. Some of their training programs are fully sponsored by the federal government; therefore, the only out of pocket expense to the local agency is the officer's salary.¹⁴ This training also provides valuable networking opportunities that will assist local agencies in forming partnerships and obtaining contact people to provide resources in a timely manner.

The second recommendation is to participate in joint terrorism task forces or other multiagency task forces dealing with crime patterns or issues. There is at least one JTTF in every FBI field office in the United States.¹⁵ In these economically difficult times, agencies can work together to possibly assign one or two officers to these task forces. This will allow those officers to learn about bioviolent events or other crime trends and bring that information back to the local agencies. Networking will become more valuable as will regional approaches to these concerns at the local level. The regional approach will provide training and personnel resources without one agency having to take the financial burden for those positions. An adjunct to this recommendation is to train officers to be Terrorism Liaison Officers which allows the officer to remain at the agency but gives them access to fusion centers including the Department of Homeland Security Fusion Center.¹⁶ This would be a good intermediary step to stay connected to updated information and threat assessments.

The third recommendation is to seek out partnerships with non-law enforcement organizations. These organizations can include educational institutions, private corporations involved in corporate and international security, and public health organizations. This would

¹⁴ Department of Homeland security website and FBI website retrieved 7-20-2011 from <http://www.dhs.gov/xfrstresp/training> and <http://www.fbi.gov>

¹⁵ The FBI Federal Bureau of Investigation, retrieved 7-20-2011 from the FBI website http://www.fbi.gov/about-us/investigate/terrorism/terrorism_jtfts

¹⁶ Peace Officer Standards and Training California website retrieved 7-20-2011 from <http://catalog.post.ca.gov/>

provide networking opportunities for officers, which may lead to training opportunities or assistance in an actual bioviolent event.¹⁷ Public health officials deal with naturally occurring flu viruses or other sicknesses that influence large segments of the country. The H1N1 virus was the most recent outbreak that led to some collaboration between the police and public health.¹⁸ Even though this was a naturally occurring event, the same principals and protocols would be used to respond to a deliberate bioviolent attack.

The final recommendation involves the recruitment and hiring of officers with degrees in biochemistry, medicine, and biological sciences. The Federal Bureau of Investigation already recruits scientists and biochemists. In reviewing job announcements, many organizations require or desire a four-year degree in criminal justice or related field. Some agencies do not award education incentive pay to degrees in the biological sciences. Both of these attitudes will harm the law enforcement profession of the future. Crime trends change over time and a prime example is computer crime and identification theft. Had law enforcement executives seen the trend, agencies would have been recruiting information technology students to become law enforcement officers. The same holds true when we consider the possible criminal trends in our future.

As a profession, law enforcement is still struggling to gain expertise in computer sciences dealing with these types of crime. The advancements in medical science already provide a criminal or terrorist the tools needed for a bioviolent attack. State and local law enforcement agencies need to start hiring subject matter experts now to deal with this future threat. They also

¹⁷ Karchmer, Cliff, Pam Tully, Leah Devlin, Frank Whitney, and Michael Sage (Moderator), "New Pressures/New Partnerships: Public Health and Law Enforcement", American Society of Law, Medicine & Ethics, retrieved on 7-20-2011 from <http://www2a.cdc.gov/phlp/docs/Proceeding2003.pdf>

¹⁸ Garrett, Ronnie, "Pandemic Prep", Law Enforcement Technology, August 2010 pg 10-12

need to be innovative in creating positions for these subject matter experts to continue to learn and collaborate with others in the private sector and federal government to stay current in their disciplines. This will provide local agencies with subject matter experts that can provide in house training responding to and identifying these future threats. This would make first responders safer and provide a higher level of service to the citizens of those communities.

Conclusion

There is a tendency in leadership during challenging times to become singularly focused on today's issues, when leaders should spend a significant portion of their time focusing on future crime trend possibilities and preparing their departments to deal with those crimes safely and professionally. A down economy brings many financial challenges for an executive to manage: no money for additional staffing as well as staffing reductions, no money for equipment, and no money for innovative training for future crime issues; however, leaders must stay vigilant to provide the knowledge, skills, and equipment necessary to respond to high risk calls including bioviolence.

A large scale bioviolent incident has not occurred at the local or state level in the United States outside of war time. There have been large scale bioviolence in the Middle East during the twentieth century and other wartime events that have caused the United States military to train and prepare for bioviolence. Events in Asia were at the local level and should serve notice to today's leaders of the potential threat to cities in the United States.¹⁹

Hope is a powerful emotion and can be useful in many situations; however, hoping a bioviolent event does not occur is not a strategy to prepare for the possibilities. Leaders need to

¹⁹Bellamy, R.J and Freedman, A.R., QJM (2001) 94 (4): 227-234.

take advantage of training opportunities offered at the federal and state level. Leaders need to continue to collaborate with federal law enforcement. These partnerships will make for smooth transitions and an atmosphere of trust and collaboration preventing a struggle for jurisdiction. Maintaining a focus on training, collaborating with subject matter experts outside of law enforcement, and hiring officers with a more diverse educational background will provide the foundation to be able to safely respond and contain a bioviolent event at the local level.

Works Cited

Bellamy, R.J and Freedman, A.R., QJM (2001) 94 (4): 227-234.

Brown, David (5-21-2010) Scientists Create Cell Based on Man-Made Genetic Instructions, The Washington Post

Butler, Cohen, Friedman, Scripp and Watz ,Collaboration Between Public Health and Law Enforcement: New Paradigms and Partnerships for Bioterrorism Planning and Response, PubMed Central Volume 8 2002 pgs 1152-1156

Centers for Disease Control and Prevention. Biological and Chemical Terrorism: Strategic Plan for Preparedness and Response. Recommendations of the CDC Strategic Planning Workgroup. MMWR 2000;49(No. RR-4):[page 9].

CNN U.S, 2008, Biological terror attack likely by 2013, panel says, retrieved from <http://articles.cnn.com/2008-12-02/us/terror.report>

Department of Homeland security website retrieved 7-20-2011 from <http://www.dhs.gov/xfrstresp/training>

FBI website retrieved 7-20-2011 from <http://www.fbi.gov>

FOX News' Ian McCaleb, Catherine Herridge, Catherine Donaldson-Evans and The Associated Press contributed to this report, retrieved from <http://www.foxnews.com/story/0,2933,333781,00.html>

Garrett, Ronnie, “Pandemic Prep”, Law Enforcement Technology, August 2010 pg 10-12

Kellman, Barry(September 2007) Bioviolence, (p.3) Cambridge, New York: Cambridge University Press

Karchmer, Cliff, Pam Tully, Leah Devlin, Frank Whitney, and Michael Sage (Moderator), “New Pressures/New Partnerships: Public Health and Law Enforcement”, American Society of Law, Medicine & Ethics, retrieved on 7-20-2011 from <http://www2a.cdc.gov/phlp/docs/Proceeding2003.pdf>

Kolavic, SA & Kimura A & Simons SL & Slutsker L & Barth S & Haley, CE (August 1997) An Outbreak of Shigella Dysenteriae type 2 among laboratory workers due to intentional food contamination Journal of the American Medical Association, p.396-398

LawMemorial.org, Law Enforcement Fatalities Spike Dangerously in 2010, retrieved 4-27-2011 from www.nleomf.org/assets/pdfs/reports/2010_Law_Enforcement_Fatalities_Report.pdf

Peace Officer Standards and Training California website retrieved 7-20-2011 from <http://catalog.post.ca.gov/>

Saul, Stephanie (6-24-2005) F.D.A. Approves a Heart Drug for African-Americans, The New York Times retrieved from www.nytimes.com/2005/06/24/health/24drugs.html

Torok, Tauxe, Wise, Livengood, Sokolow, Mauvais, Birkness, Skeels, Horan, Foster 1997 p.389-395, JAMA, August 6, 1997—Vol 278, No. 5

UnderstandingNano.com, Nanotechnology in Medicine, retrieved 8-25-2010 from www.understandingnano.com/medicine.html