

ICE DRILL:

Dealing with a New Reality--Terrorism

by Captain Michael Byrne

On a quiet, fall day this past year on a street in lower Manhattan, a group of approximately 200 people gathered outdoors to hear a speech by a well-known expert on financial planning. There was much anticipation in the audience as he prepared to speak. Meanwhile, a man in a clown suit handed out festive balloons and a vendor did a brisk business nearby at his hot dog stand. The weather was cool but pleasant and the forecast called for showers later in the day.

The crowd applauded and all eyes were focused on the speaker as he reached the podium. In the center of the audience, a man with a backpack crouched down and pulled a spray nozzle from his sleeve, then placed a mask-like bag over his head. With all eyes still focused on the speaker, the man with the backpack began to spray the people around him. He walked toward the speaker and, upon reaching the dais, sprayed the speaker and other dignitaries present. The substance was odorless but felt oily to the touch.

At first, people were startled and mildly annoyed, but very quickly those who had been sprayed on their exposed skin started to salivate uncontrollably and their eyes began to tear. As symptoms worsened, they started to collapse, twitching and gasping for air. Now sensing danger, the crowd began to panic and people started running in all directions.

At the same time, the balloon man--using a device hidden in his helium tank--and the hot dog vendor--using a device concealed by his cart--started to release the same substance. The fleeing crowd ran right into the vapor clouds and soon these individuals became symptomatic. A person walking by with a cell phone called 911 and reported people were collapsing in the street. A CFR-D engine and ambulance were dispatched.

Full-scale drill exercise

Does this represent the typical CFR-D and ambulance call? Absolutely not, but here, briefly, you have the plausible scenario that met our response units on November 9, 1997, during the exercise known as ICE (Interagency Chemical Exercise). Operation ICE, coordinated by the Mayor's Office

of Emergency Management, was a full-scale, planned exercise involving New York City's entire public safety community. The Fire Department had a significant involvement in this training drill, which was held so that we might be better prepared in the event of a terrorist attack.

Our city is not unaware of the dangers and problems that terrorism can present. Recent events, such as the World Trade Center bombing and letter bombs at the United Nations and the pre-empted bombing of our subway system last year, are but a few incidents that compel us to be prepared.

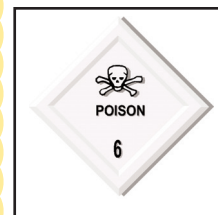
We also are well aware that our city is the source of many of the premiere targets for terrorist groups. (See New York Facts & Figures on page 4.) If a group wants to send a message, New York City represents a huge canvas on which to paint a picture.

Terrorism has, in recent years, taken a deadly and insidious turn. Terrorists are not limiting their acts to the use of explosive devices. The new forms of threats are significant in that they attack people more than places, leaving a serious psychological impact and, in some cases, long-lasting contamination that explosive devices do not.

Chemical, biological, nuclear

There are three main classes of terrorist weapons (chemical, biological and nuclear) that are of serious concern and that necessitate enhancing our preparedness.

Chemical Terrorism: A recent example was the sarin gas attack in Tokyo, Japan, which left 12 people dead and 5500 injured. Chemicals are diversified into a number of classes, all of which are designed to maximize casualties. There are four general classes: nerve agents (sarin, VX, soman tabun), vesicants (mustard, lewisite, phosgene), blood agents (hydrogen cyanide) and choking agents (chlorine gas, phosgene). Depending on the dispersal mechanism, casualties can range from a few to many hundreds or even thousands.



All photos by FF Tom McNulty

Biological Terrorism: Recent incidents include anthrax and black plague scares in Washington, DC, and the anthrax scare in Las Vegas. Biological agents are divided into three categories: bacteria, viruses and toxins. Some examples include: ■ bacteria--anthrax, ■ yersenia pestis (black plague); viruses--smallpox, equine encephalitis and hemorrhagic fevers; and toxins--ricin and botulinum toxins. The impact of this kind of attack is affected by a number of factors, including whether it is announced or unannounced; the amount of the agent; the dispersal mechanism; and local weather conditions.



Nuclear or Radiation Terrorism: While it is improbable that a full nuclear weapon could be developed and delivered, what is more probable and possible is a conventional explosive device with radioactive materials enclosed and dispersed in an explosion. This is referred to as a "dirty bomb." The resulting contamination will have both an immediate and long-lasting impact on our city.



lic address system); defining the scope of the incident; establishing some preliminary scene control and, finally, being aware of--and on the lookout for--possible secondary devices.

Preparation through training

The ICE exercise was designed to highlight our city's capabilities in responding to a chemical attack. It focused on a number of key areas to deal with this new and emerging threat, including the following:

First Responder Awareness--Much of the experience to date shows the first and, in some cases, the second wave of responders falling victim to the attack. This is preventable through the refinement of our skills and training. Performing a proper *size-up or 10-second scene survey* before rushing in to assist the victims not only protects our responders, but also allows them to take the appropriate actions to manage this kind of incident.

Calling for help is the single most important action we can take. Transmitting the 10-80 signal (for a hazardous materials response) not only will get the proper equipment on the way, but also will let all other responding units know to proceed with caution.



Use your personal protective equipment to the best possible advantage. While it may not be the most appropriate, it will, in many cases, be sufficient to protect you until the true nature of the event is determined.

Other important first responder actions include attempting to calm the victims (possibly by using your apparatus or vehicle pub-

Direction and Control--Who's in charge? The scene of a chemical terrorist incident is a hazardous materials incident, a crime scene and a mass casualty incident all at the same time. The scene will be chaotic and the imposition of a prioritized, disciplined control structure is the only hope for minimizing the event's impact and preventing further loss of life.

Our protocols, as defined by the Mayor in "Direction and Control of Emergencies in the City of New York," clearly establish the flow of command at these events. The protocol calls for the Fire Department to be the Incident Commander while the mitigation of the hazardous area, as well as the rescue of victims, are taking place.

Incident Command then shifts to the Police Department for the management of the crime scene. This oversimplifies the challenges of this event for, in reality, most of the actions will occur at the same time. During the rescue and hazard mitigation phase, the Police Department will be assisting in the rescue of victims, searching for secondary devices, managing site control, protecting/preserving evidence and isolating/safeguarding witnesses. The Fire Department IC must take these elements into consideration and provide for their integration at the scene.

Once command has shifted to the Police Department, the Fire Department during the crime scene phase will be





standing by should any additional chemicals be discovered and be ready to provide medical care should the need arise. All agencies at the scene have important and vital roles to play. Respect for this and the proper coordination of actions are the keys to success.

Hazardous Materials--The chemicals we may encounter at terrorist scenes are some of the most dangerous known to man. Many of them were designed with only one purpose in mind--to kill people (the chemical simulated at the ICE Drill was VX, a particularly dangerous and persistent agent that can cause death within minutes of contact). Hazardous Materials Units at ICE exercised all of the proper procedures just as they would do at any hazardous material release: sampling; agent detecting and monitoring; establishing hazard zones; and containing and mitigating the hazard.

Decontamination at these scenes provides an additional challenge since victims must be decontaminated rapidly to reduce casualties and allow for medical treatment and transport. At ICE, we had the opportunity to test the most recent enhancement to our decon capability--a trailer that can provide rapid decon at the scene for a large number of victims. Our Haz Mat units, as well as the chemical protective clothing (CPC)-trained ladder companies, performed admirably and brought a well-organized and knowledgeable approach to the incident.

First Aid and Medical Management of Victims--The medical challenges at ICE were significant. Chemical agents can act very quickly, necessitating rapid triage, decon and treatment



New York Facts & Figures

Population and Land Area

- 7,322,564 total population
- 18 million tri-state area population
- 301 total square miles
- 205,952 total area in acres
- 200+ skyscrapers
- 18,655 landmark locations
- 943 landmark buildings
- 175 museums

Tourism

- 30.3 million visitors to NYC in 1996
- 5.5 million international visitors
- \$11.9 billion in visitor spending
- 346 conventions in NYC/year
- \$1.1 billion in convention spending
- 230 hotels
- 71,000 hotel rooms
- 16.7 million rooms filled in 1995 (78.5% occupancy)

Transportation

- 3 major airports servicing NYC (JFK, LaGuardia, Newark)
- 55.5 million domestic passengers and 22.1 million international passengers
- 1.1 million flights at all three airports
- 722 miles of subway track
- 468 subway stations
- 5917 subway cars
- 3.5 million subway riders on a typical weekday
- 65 bridges

Economic Factors

- 65 Fortune 500 firms headquartered in NYC
- More than 20% of all foreign-based investment located within metropolitan area
- Assessed valuation of taxable real estate in NYC is \$44,002,712,508

Missions/Consulates

- 200 foreign missions to the U.S.
- 90 foreign consulates to the U.S.

Religion

- Diversity of religious affiliations
- 6000 churches, temples and mosques throughout the five boroughs

FDNY Resources

- Total personnel in excess of 14,000+
- 11,000+ members with operational Haz Mat training
- 6000+ members with Certified First Responder training
- 4000 EMTs and Paramedics (EMS)
- Specialized Collapse Rescue Unit
- Hazardous Materials Unit #1
- 400+ personnel trained to the technician level
- Haz Mat Support Units (9)
- Decon Units (2)
- Bureau of EMS HazTac Units (9)



of victims. Medical attention was complicated further by the need to initiate treatment before decon in many of the cases. Our EMS Command HAZ-TAC units were able to do this with the use of auto injectors in the warm zone. EMS Command demonstrated their organized and efficient capacity to provide for the treatment and transport of the injured.

Crime Scene and Incident Investigation--A terrorist event is, by definition, a criminal act--one of the most insidious kinds of crimes imaginable. We all want to see the people responsible for the event brought to justice. As such, it is incumbent on all responders to make every effort to preserve the crime scene. For example, move objects only when necessary and report any unusual items or conditions to police officers.

Additionally, we should be aware that the law enforcement response will come from a number of agencies: NYPD, Joint Terrorist Task Force (JTTF), FBI, ATF and State Department, when appropriate. All of these groups may need to interview victims, as well as all of the responders who operated at this incident. We should be ready, willing and able to cooperate with them at the appropriate time.

The Fire Department is very active in responding to this new threat. Our Haz Mat experts are developing a training curriculum that will reach all of our members. An informational video is in development, in addition to other efforts--such as this and future articles in *WNYF*--to keep you



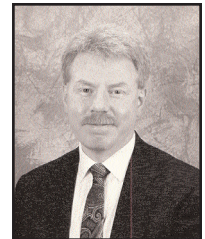
Leading the post-drill critique (left to right) are Captain Mike Byrne, Jerome Hauer, Director OEM, NYPD Chief of Department Louis Anemone and FDNY Chief of Operations Peter J. Ganci, Jr.

informed and knowledgeable with the intention of keeping you as safe as possible in the event of a terrorist attack in our city. Hazardous environments are not new to us, but as the possibility of an event of this kind increases, it is both prudent and necessary to prepare so that we may better protect ourselves and the people of New York City.



About the Author...

Captain Michael Byrne is a 19-year veteran of the FDNY. He is the former First Deputy Director of the Mayor's Office of Emergency Management and was Exercise Director of the ICE Drill. He currently is Commanding Officer of the Fire Commissioner's Office of Strategic Planning.



Federal Perspective On Terrorism

The nation, as a whole, has come to realize the magnitude of this emerging threat and has responded with several initiatives. Presidential Decision Directive 39 (PDD-39) of 1995 titled, "United States Policy on Counterterrorism," clearly lays out responsibilities of federal and local authorities in incidents of this kind. It divides the incident into two parts: Crisis Management and Consequence Management.

Crisis Management falls under the direct authority of the FBI as lead agency. This area includes actions to identify, acquire and plan the use of resources needed to anticipate, prevent and/or resolve a threat or act of terrorism.

Consequence Management falls under the direction of FEMA (Federal Emergency Management Agency) as lead agency in support of state and local jurisdictions. Consequence Management focuses on actions to protect public health and safety, restore essential government services and provide emer-

gency relief to governments, businesses and individuals affected by the consequences of terrorism.

Federal legislation titled, "Defense Against Weapons of Mass Destruction," also was drafted in the U.S. Senate in 1996 and created the Domestic Preparedness Program, which has brought both funding and training to our Department and other New York City agencies. Through the efforts of this program and coordination of the Mayor's Office of Emergency Management, more than 500 of our members went through training levels including awareness, operations, Haz Mat technician, EMS technician and Incident Command.

Additionally, working with the Public Health Service, the department is developing a Metropolitan Medical Strike Team (MMST) capability for mass decontamination at the scene. Finally, the Fire Department was the recipient of a grant from the Bureau of Justice Assistance of the Department of Justice to develop a local training program for "First Responders to Incidents of Terrorism."