



# TIMs - TICs - Toxic And Too Close To Home



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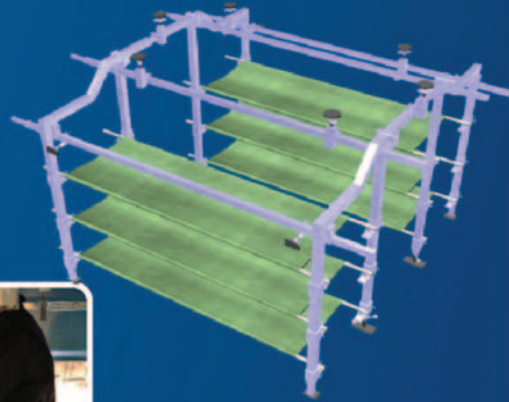
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## Publisher's Message

By Martin (Marty) Masiuk



To anyone following the news these days, it seems clear that there have been more accidents involving toxic industrial chemicals (TICs) and toxic industrial materials (TIMs) in recent years than ever before in the nation's history. Earlier this week (21 March), to cite but one recent example, a tanker carrying 33,000 pounds of hydrofluoric acid flipped over in a small town in Northeastern Pennsylvania. It later was reported by the Associated Press that an estimated 5,000 people had to be evacuated. The accident happened in the rural community of Wind Gap, Pennsylvania. One can only imagine the havoc it would have created if it had occurred on a major intersection of a fairly large city – and was not an accident, but a deliberate act perpetrated by a person or persons with criminal intent. The consequences would have been huge – and, in all likelihood, extremely lethal.

Several articles in this month's printable issue of *DPJ* focus on chemical preparedness and spell out how the nation's first responders, and the equipment manufacturers who support them, have made great strides in the development, deployment, and use of personal protective equipment, detection systems and devices, and effective decontamination and recovery techniques. Nonetheless, it has become increasingly clear that we must remain vigilant, and be much better prepared, to cope with chemical events of more severe consequences than what happened earlier this week in Wind Gap.

That task grows more difficult with each passing day, as Adam Montella points out in his insightful article on the widespread availability of toxic chemicals in farm communities, manufacturing plants, and “depot” warehouses in every major city throughout the country. The easy availability of these chemicals makes the job of emergency responders not only more complicated but also more dangerous, as Joseph Cahill notes (in two articles: one on the handling of chemical “incidents”; the other on the complexities of mass-evacuation situations – a topic also discussed in considerable detail in the exclusive Webinar included in this issue). Neil Livingstone completes the quartet with a chilling report on Al Qaeda's implacable quest to obtain weapons of mass destruction of any type, biological or nuclear as well as chemical.

Complementing these articles are three others, closely related: one, by Stephanie Ostrowski and Crystal Castillo, reviews the lessons learned from a recent CDC (Centers for Disease Control and Prevention) bioterrorism exercise in Pierre, S.D.; the second, by David Henry, focuses on strategies to protect the workforce during and after a pandemic flu (or, of course, a dangerous chemical or biological incident); the third, by Raphael Barishansky, discusses the federal National Incident Management System and Incident Command System guidelines underpinning the responses to any mass-casualty situation.

Rounding out the issue are an ahead-of-the-news analysis by Joseph Trindal of the U.S. stakes in Mexico's “Narco-Civil War”; Kay Goss's assessment of the current and future challenges facing the Department of Homeland Security under new DHS Secretary Janet Napolitano; an exclusive inside-the-limo report, by Derrick Mayes and Cynthia Tsai, on the difficult challenges facing personal-security professionals; and updates by Adam McLaughlin on recent homeland-security milestones reported from Colorado, Missouri, South Carolina, and Texas.

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*About the Cover: A train loaded with toxic chemicals passes through Washington, D.C., only a few blocks away from the U.S. Capitol Building, on 30 July 2004. The danger posed by the intentional or accidental release of such chemicals in a major metropolitan area has caused widespread concern to contingency planners in cities and states throughout the country. (US News and World Report Photo by Robert Nickelsberg/Getty Images)*



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# The EMS Role in Chemical-Release Incidents

By Joseph Cahill, EMS



For almost a century, chemical agents have been used to horrific effect by legitimate governments and terrorist groups alike. On 16 March 1988, Iraqi Kurds living in Halabja, in the northern area of the country, were attacked by troops deployed by the Iraqi government, which used both nerve agents and conventional weapons to kill an estimated 5,000 of its own citizens. On 20 March 1995, a Japanese terrorist group known as Aum Shinriko released a nerve agent (sarin) into an Hbiya subway station in Tokyo, killing 12 people and hospitalizing more than 1,000. Even today, similar attacks causing only a small fraction of those numbers would overwhelm the average Emergency Medical Services (EMS) agency in even the largest city of almost any country in the world.

During the initial response – which is defined here as starting when an incident is first reported and ending when its true nature is recognized – the usually unspoken truth is that many responders themselves are likely to be among the victims. That candid admission, needless to say, is an unpopular statement in most healthcare agencies and organizations. However, its validity has been borne out in numerous exercises in which the participants were not pre-warned of the nature of the threat.

Largely for that reason, it has become evident that the most important actions that can be taken to improve the survival of the *responders* are: (a) improving their ability to recognize the nature of the threat earlier; and (b) requiring them, and training them, to

promptly take the actions needed to protect themselves.

## Recommended Antidotes and Deployment Options

The usual role of EMS responders is to treat patients both on the scene and during their transportation to a healthcare facility – and, in responding to a chemical attack, to ensure that there are definitive antidotes available for nerve-agent poisoning. Atropine and Pralidoxime Chloride (also called 2-pam) are the recommended antidotes for such nerve agents as sarin, tabun, and what is called “the V series” of agents. These antidotes are already on the market, in the form of auto-injectors originally designed for military use. The auto-injectors are similar to the epi-pens carried by those who allergic to bee stings, and are used the same way – i.e., the user removes a safety cap and pushes the end of the “pen” against his or her leg, and the spring-loaded device delivers the medication.

There are two ways – “stockpile” and “distributed” – usually employed to ensure that these medications are quickly available at the scene of an incident in which a chemical nerve agent has been released, either accidentally or deliberately. New York City, to cite but one prominent example, uses a distributed plan, storing small caches of the medications on a relatively large number of vehicles assigned to local emergency services units throughout the city. The main advantage to using the distributed model of prepositioning is that the supply of antidotes builds as additional units arrive at the scene of the incident. In addition, having the overall supply spread around the entire city means that there is no central

stockpile that can be attacked and/or otherwise destroyed.

There also is an important disadvantage – namely, that unless there is at least a minimum level of antidotes available on each vehicle that approximates the amount that the crew of that vehicle is likely to need, the response unit will frequently if not always be behind the curve in a number of situations requiring the

dispatch of additional units to the scene for the sole purpose of bringing a larger supply of medications.

The other principal “availability” model is to keep most if not quite all antidotes in a large centralized stockpile that can be immediately mobilized at the time an incident is first reported. The principal advantage of this model is that a large amount of medications can be

brought to bear very quickly without depending on additional units arriving at the incident scene. This model also facilitates coverage of a larger incident area with a smaller amount of medications and/or when EMS resources are relatively thin.

### **An Essential Supporting Role**

After the removal to healthcare facilities of all patients who can be saved there still remains the task of “cleaning up” the incident scene. EMS falls into a supporting role at this point, standing by not only to assist if new patients are discovered but also to support the efforts of other responders.

The support role varies, of course, in accordance with the plans developed and followed by different jurisdictions but typically might include both caring for injured rescuers and also evaluating the condition of responders who are about to enter extreme environments that would require such personal protective equipment as a “level-A” hazardous materials suit.

In short, whatever the nature of the incident – i.e., whether a release is accidental or intentional – EMS units have a critical role to play, not only in the immediate response to a nerve-agent release but also in treating the victims and supporting the ongoing rescue, control, and overhaul or clean-up efforts.

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*Joseph Cahill, a medicolegal investigator for the Massachusetts Office of the Chief Medical Examiner; previously served as exercise and training coordinator for the Massachusetts Department of Public Health, and prior to that was an emergency planner in the Westchester County (N.Y.) Office of Emergency Management. He also served for five years as the citywide advanced life support (ALS) coordinator for the FDNY - Bureau of EMS, and prior to that was the department's Division 6 ALS coordinator, covering the South Bronx and Harlem.* ▼



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# The Friendly Neighborhood Chemical Weapons Store

By Adam Montella, Health Systems



The devastating hurricane seasons of 2004, 2005, and 2008, the Tsunami in Southeast Asia, flooding in India and Pakistan, the recent earthquakes in China, and the very real threat of pandemic influenza – all of these mass-casualty incidents, and others, demonstrate that the United States and its allies have as much or more to be concerned about from destructive acts of nature, and the overwhelming number of victims they produce, as from terrorist attacks, including those in which weapons of mass destruction (WMDs) are used. According to Pietro (Peter) Marghella, the former chief medical planner for the U.S. Department of Defense, “a pandemic influenza outbreak alone has the potential to produce casualty totals that would far exceed the combined casualties of every war fought globally since the late years of the 19th century.”

Nonetheless, terrorist events and incidents over the last decade, particularly those launched against the United States itself on 11 September, have made it abundantly clear to everyone inside and outside the traditional U.S. national-security structure that the “battlefield” is no longer a distant foreign land – overseas. The United States is no longer insulated by its land borders and the Atlantic and Pacific Oceans. The events of 9/11 underscore the grim fact that it is now entirely reasonable to expect additional such attacks – including some in which chemical, biological, radiological, nuclear, and/or high-explosive (CBRNE) weapons are used against the U.S. homeland itself.

There already have been, of course, a few dark chapters in American history when biological and chemical weapons have been employed: During the French and Indian War, to cite but one pre-Revolution conflict, British soldiers gave infected blankets, taken from smallpox patients, to Native Americans. And in World War I, chemical weapons – built from such industrial chemicals as chlorine and phosgene – were used by combat forces, including U.S. troops, on both sides of the so-called “War to end all wars.”

## For Deterrence Only – But If Deterrence Fails ...

Also, and not incidentally, it is known today that the U.S. government itself has possessed three types of weapons of mass destruction: nuclear weapons, chemical weapons, and biological weapons. The United States is the only country to have used nuclear weapons in combat – against Hiroshima and Nagasaki. However, even though U.S. forces used chemical weapons in World War I, they have not done so since the 1925 Geneva Protocol – despite reports that both Germany and Japan were using both chemical and biological weapons (but not on the battlefield) in World War II.

According to Wikipedia, “The United States’ biological weapons program officially began in the spring of 1943 on orders from U.S. President Franklin Roosevelt. Research continued following World War II as the U.S. built up a large stockpile of biological agents and weapons.”

The official position of the United States in building those weapons, though, it should be noted, was: first, to deter the use of bio-weapons

against U.S. forces; and, second, to be able to retaliate if deterrence failed. In fact, President Roosevelt himself stated during World War II that “Use of such [biological and chemical] weapons has been outlawed by the general opinion of mankind. This country has not used them,” he continued, “and I hope we never will be compelled to use them. I state categorically that we shall under no circumstances resort to the use of such weapons unless they are first used by our enemies.”

## A Long and Fearful Destructive Process

In the more than six decades that have passed since the end of World War II the United States has destroyed its biological weapons and has started to destroy its chemical weapons as well (in accordance with a phased-reduction schedule expected to be completed by 2012). The United States also is a signatory to both the Biological Weapons Convention and the Chemical Weapons Convention – which ban the production, possession, and/or use of those classes of weapons.

It was not until 1969 that then-President Richard Nixon ended all offensive aspects of the U.S. bio-weapons program. In 1975 the United States finally ratified both the 1925 Geneva Protocol and the 1972 Biological Weapons Convention (BWC). It was not until 1992, however, that the U.S. Army established a “Non-Stockpile Chemical Materiel Program” to dispose of the U.S. chemical arsenal. In 1993, the United States signed the UN-sponsored Chemical Weapons Convention. The Department of Defense chart shown here identifies the U.S. chemical-weapons storage and

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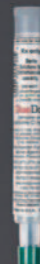
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#### **Important Safety Information**

**The DuoDote Auto-Injector is intended as an initial treatment of the symptoms of organophosphorus insecticide or nerve agent poisonings; definitive medical care should be sought immediately.** The DuoDote Auto-Injector should be administered by Emergency Medical Services personnel who have had adequate training in the recognition and treatment of nerve agent or insecticide intoxication.

Individuals should not rely solely upon agents such as atropine and pralidoxime to provide complete protection from chemical nerve agents and insecticide poisoning. Primary protection against exposure to chemical nerve agents and insecticide poisoning is the wearing of protective garments including masks designed specifically for this use. Evacuation and decontamination procedures should be undertaken as soon as possible. **Medical personnel assisting evacuated victims of nerve agent poisoning should avoid contaminating themselves by exposure to the victim's clothing.**

In the presence of life-threatening poisoning by organophosphorus nerve agents or insecticides, there are no absolute contraindications to the use of the DuoDote Auto-Injector. When symptoms of poisoning are not severe, DuoDote Auto-Injector should be used with extreme caution in people with heart disease, arrhythmias, recent myocardial infarction, severe narrow angle glaucoma, pyloric stenosis, prostatic hypertrophy, significant renal insufficiency, chronic pulmonary disease, or hypersensitivity to any component of the product.

**Please see brief summary of full Prescribing Information on adjacent page.**

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**References:** 1. DuoDote<sup>TM</sup> (atropine and pralidoxime chloride injection) Auto-Injector [package insert]. Columbia, MD: Meridian Medical Technologies<sup>TM</sup>, Inc. 2007. 2. Agency for Toxic Substances and Disease Registry. Medical Management Guidelines (MMGs) for nerve agents: tabun (GA), sarin (GB), soman (GD), and VX. Available at <http://www.atsdr.cdc.gov/MMG/MMG166.html>. Accessed February 21, 2007. 3. Holstoge CP, Dolmeier SG. Nerve agent toxicity and treatment. *Curr Treat Options Neurol*. 2005;7:91-96. 4. Data on file. Columbia, MD: Meridian Medical Technologies<sup>TM</sup>, Inc.



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**THE DUODOTE™ AUTO-INJECTOR SHOULD BE ADMINISTERED BY EMERGENCY MEDICAL SERVICES PERSONNEL WHO HAVE HAD ADEQUATE TRAINING IN THE RECOGNITION AND TREATMENT OF NERVE AGENT OR INSECTICIDE INTOXICATION.**

## INDICATIONS AND USAGE

DuoDote™ Auto-Injector is indicated for the treatment of poisoning by organophosphorus nerve agents as well as organophosphorus insecticides.

DuoDote™ Auto-Injector should be administered by emergency medical services personnel who have had adequate training in the recognition and treatment of nerve agent or insecticide intoxication.

DuoDote™ Auto-Injector is intended as an initial treatment of the symptoms of organophosphorus insecticide or nerve agent poisonings; definitive medical care should be sought immediately.

DuoDote™ Auto-Injector should be administered as soon as symptoms of organophosphorus poisoning appear (eg, usually tearing, excessive oral secretions, sneezing, muscle fasciculations).

## CONTRAINDICATIONS

In the presence of life-threatening poisoning by organophosphorus nerve agents or insecticides, there are no absolute contraindications to the use of DuoDote™ Auto-Injector.

## WARNINGS

**CAUTION! INDIVIDUALS SHOULD NOT RELY SOLELY UPON ATROPINE AND PRALIDOXIME TO PROVIDE COMPLETE PROTECTION FROM CHEMICAL NERVE AGENTS AND INSECTICIDE POISONING.**

**PRIMARY PROTECTION AGAINST EXPOSURE TO CHEMICAL NERVE AGENTS AND INSECTICIDE POISONING IS THE WEARING OF PROTECTIVE GARMENTS INCLUDING MASKS DESIGNED SPECIFICALLY FOR THIS USE.**

**EVAUATION AND DECONTAMINATION PROCEDURES SHOULD BE UNDERTAKEN AS SOON AS POSSIBLE. MEDICAL PERSONNEL ASSISTING EVAUATED VICTIMS OF NERVE AGENT POISONING SHOULD AVOID CONTAMINATING THEMSELVES BY EXPOSURE TO THE VICTIM'S CLOTHING.**

When symptoms of poisoning are not severe, DuoDote™ Auto-Injector should be used with extreme caution in people with heart disease, arrhythmias, recent myocardial infarction, severe narrow angle glaucoma, pyloric stenosis, prostatic hypertrophy, significant renal insufficiency, chronic pulmonary disease, or hypersensitivity to any component of the product. Organophosphorus nerve agent poisoning often causes bradycardia but can be associated with a heart rate in the low, high, or normal range. Atropine increases heart rate and alleviates the bradycardia. In patients with a recent myocardial infarction and/or severe coronary artery disease, there is a possibility that atropine-induced tachycardia may cause ischemia, extend or initiate myocardial infarcts, and stimulate ventricular ectopy and fibrillation. In patients without cardiac disease, atropine administration is associated with the rare occurrence of ventricular ectopy or ventricular tachycardia. Conventional systemic doses may precipitate acute glaucoma in susceptible individuals, convert partial pyloric stenosis into complete pyloric obstruction, precipitate urinary retention in individuals with prostatic hypertrophy, or cause inspiration of bronchial secretions and formation of dangerous viscid plugs in individuals with chronic lung disease.

More than 1 dose of DuoDote™ Auto-Injector, to a maximum of 3 doses, may be necessary initially when symptoms are severe. **No more than 3 doses should be administered unless definitive medical care (eg, hospitalization, respiratory support) is available.**

Severe difficulty in breathing after organophosphorus poisoning requires artificial respiration in addition to the use of DuoDote™ Auto-Injector.

A potential hazardous effect of atropine is inhibition of sweating, which in a warm environment or with exercise, can lead to hyperthermia and heat injury.

The elderly and children may be more susceptible to the effects of atropine.

## PRECAUTIONS

**General:** The desperate condition of the organophosphorus-poisoned individual will generally mask such minor signs and symptoms of atropine and pralidoxime treatment as have been noted in normal subjects.

Because pralidoxime is excreted in the urine, a decrease in renal function will result in increased blood levels of the drug.

DuoDote™ Auto-Injector temporarily increases blood pressure, a known effect of pralidoxime. In a study of 24 healthy young adults administered a single dose of atropine and pralidoxime auto-injector intramuscularly (approximately 9 mg/kg pralidoxime chloride), diastolic blood pressure increased from baseline by  $11 \pm 14$  mmHg (mean  $\pm$  SD), and systolic

blood pressure increased by  $16 \pm 19$  mmHg, at 15 minutes post-dose. Blood pressures remained elevated at these approximate levels through 1 hour post-dose, began to decrease at 2 hours post-dose and were near pre-dose baseline at 4 hours post-dose. Intravenous pralidoxime doses of 30-45 mg/kg can produce moderate to marked increases in diastolic and systolic blood pressure.

**Laboratory Tests:** If organophosphorus poisoning is known or suspected, treatment should be instituted without waiting for confirmation of the diagnosis by laboratory tests. Red blood cell and plasma cholinesterase, and urinary parathionophenol measurements (in the case of parathion exposure) may be helpful in confirming the diagnosis and following the course of the illness. However, miosis, rhinorrhea, and/or airway symptoms due to nerve agent vapor exposure may occur with normal cholinesterase levels. Also, normal red blood cell and plasma cholinesterase values vary widely by ethnic group, age, and whether the person is pregnant. A reduction in red blood cell cholinesterase concentration to below 50% of normal is strongly suggestive of organophosphorus ester poisoning.

**Drug Interactions:** When atropine and pralidoxime are used together, pralidoxime may potentiate the effect of atropine. When used in combination, signs of atropinization (flushing, mydriasis, tachycardia, dryness of the mouth and nose) may occur earlier than might be expected when atropine is used alone.

The following precautions should be kept in mind in the treatment of anticholinesterase poisoning, although they do not bear directly on the use of DuoDote™ Auto-Injector.

- Barbiturates are potentiated by the anticholinesterases; therefore, barbiturates should be used cautiously in the treatment of convulsions.
- Morphine, theophylline, aminophylline, succinylcholine, reserpine, and phenothiazine-type tranquilizers should be avoided in treating personnel with organophosphorus poisoning.
- Succinylcholine and mivacurium are metabolized by cholinesterases. Since pralidoxime reactivates cholinesterases, use of pralidoxime in organophosphorus poisoning may accelerate reversal of the neuromuscular blocking effects of succinylcholine and mivacurium.

Drug-drug interaction potential involving cytochrome P450 isozymes has not been studied.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** DuoDote™ Auto-Injector is indicated for short-term emergency use only, and no adequate studies regarding the potential of atropine or pralidoxime chloride for carcinogenesis or mutagenesis have been conducted.

**Impairment of Fertility:** In studies in which male rats were orally administered atropine (62.5 to 125 mg/kg) for one week prior to mating and throughout a 5-day mating period with untreated females, a dose-related decrease in fertility was observed. A no-effect dose for male reproductive toxicity was not established. The low-effect dose was 290 times (on a mg/m<sup>2</sup> basis) the dose of atropine in a single application of DuoDote™ Auto-Injector (2.1 mg).

Fertility studies of atropine in females or of pralidoxime in males or females have not been conducted.

## Pregnancy:

**Pregnancy Category C:** Adequate animal reproduction studies have not been conducted with atropine, pralidoxime, or the combination. It is not known whether pralidoxime or atropine can cause fetal harm when administered to a pregnant woman or if they can affect reproductive capacity. Atropine readily crosses the placental barrier and enters the fetal circulation.

DuoDote™ Auto-Injector should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers:** Atropine has been reported to be excreted in human milk. It is not known whether pralidoxime is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when DuoDote™ Auto-Injector is administered to a nursing woman.

**Pediatric Use:** Safety and effectiveness of DuoDote™ Auto-Injector in pediatric patients have not been established.

## ADVERSE REACTIONS

Muscle tightness and sometimes pain may occur at the injection site.

### Atropine

The most common side effects of atropine can be attributed to its antimuscarinic action. These include dryness of the mouth, blurred vision, dry eyes, photophobia, confusion, headache, dizziness, tachycardia, palpitations, flushing, urinary hesitancy or retention, constipation, abdominal pain, abdominal distention, nausea and vomiting, loss of libido, and impotence. Anhidrosis may produce heat intolerance and impairment of temperature regulation in a hot environment. Dysphagia, paralytic ileus, and acute angle closure glaucoma, maculopapular rash, petechial rash, and scarletiform rash have also been reported.

Larger or toxic doses may produce such central effects as restlessness, tremor, fatigue, locomotor difficulties, delirium followed by hallucinations, depression, and, ultimately medullary paralysis and death. Large doses can also lead to circulatory collapse. In such cases, blood pressure declines and death due to respiratory failure may ensue following paralysis and coma.

Cardiovascular adverse events reported in the literature for atropine include, but are not limited to, sinus tachycardia, palpitations, premature ventricular contractions, atrial flutter, atrial fibrillation, ventricular flutter, ventricular fibrillation, cardiac syncope, asystole, and myocardial infarction. (See **PRECAUTIONS**.)

Hypersensitivity reactions will occasionally occur, are usually seen as skin rashes, and may progress to exfoliation. Anaphylactic reaction and laryngospasm are rare.

### Pralidoxime Chloride

Pralidoxime can cause blurred vision, diplopia and impaired accommodation, dizziness, headache, drowsiness, nausea, tachycardia, increased systolic and diastolic blood pressure, muscular weakness, dry mouth, emesis, rash, dry skin, hyperventilation, decreased renal function, and decreased sweating when given parenterally to normal volunteers who have not been exposed to anticholinesterase poisons.

In several cases of organophosphorus poisoning, excitement and manic behavior have occurred immediately following recovery of consciousness, in either the presence or absence of pralidoxime administration. However, similar behavior has not been reported in subjects given pralidoxime in the absence of organophosphorus poisoning.

Elevations in SGOT and/or SGPT enzyme levels were observed in 1 of 6 normal volunteers given 1200 mg of pralidoxime intramuscularly, and in 4 of 6 volunteers given 1800 mg intramuscularly. Levels returned to normal in about 2 weeks. Transient elevations in creatine kinase were observed in all normal volunteers given the drug.

### Atropine and Pralidoxime Chloride

When atropine and pralidoxime are used together, the signs of atropinization may occur earlier than might be expected when atropine is used alone.

## OVERDOSAGE

### Symptoms:

#### Atropine

Manifestations of atropine overdose are dose-related and include flushing, dry skin and mucous membranes, tachycardia, widely dilated pupils that are poorly responsive to light, blurred vision, and fever (which can sometimes be dangerously elevated). Locomotor difficulties, disorientation, hallucinations, delirium, confusion, agitation, coma, and central depression can occur and may last 48 hours or longer. In instances of severe atropine intoxication, respiratory depression, coma, circulatory collapse, and death may occur.

The fatal dose of atropine is unknown. In the treatment of organophosphorus poisoning, doses as high as 1000 mg have been given. The few deaths in adults reported in the literature were generally seen using typical clinical doses of atropine often in the setting of bradycardia associated with an acute myocardial infarction, or with larger doses, and due to overheating in a setting of vigorous physical activity in a hot environment.

#### Pralidoxime

It may be difficult to differentiate some of the side effects due to pralidoxime from those due to organophosphorus poisoning. Symptoms of pralidoxime overdose may include: dizziness, blurred vision, diplopia, headache, impaired accommodation, nausea, and slight tachycardia. Transient hypertension due to pralidoxime may last several hours.

**Treatment:** For atropine overdose, supportive treatment should be administered. If respiration is depressed, artificial respiration with oxygen is necessary. Ice bags, a hypothermia blanket, or other methods of cooling may be required to reduce atropine-induced fever, especially in children. Catheterization may be necessary if urinary retention occurs. Since atropine elimination takes place through the kidney, urinary output must be maintained and increased if possible; intravenous fluids may be indicated. Because of atropine-induced photophobia, the room should be darkened.

A short-acting barbiturate or diazepam may be needed to control marked excitement and convulsions. However, large doses for sedation should be avoided because central depressant action may coincide with the depression occurring late in severe atropine poisoning. Central stimulants are not recommended.

Physostigmine, given as an atropine antidote by slow intravenous injection of 1 to 4 mg (0.5 to 1.0 mg in children) rapidly abolishes delirium and coma caused by large doses of atropine. Since physostigmine has a short duration of action, the patient may again lapse into coma after 1 or 2 hours, and require repeated doses. Neostigmine, pilocarpine, and methacholine are of little benefit, since they do not penetrate the blood-brain barrier.

Pralidoxime-induced hypertension has been treated by administering phentolamine 5 mg intravenously, repeated if necessary due to phentolamine's short duration of action. In the absence of substantial clinical data regarding use of phentolamine to treat pralidoxime-induced hypertension, consider slow infusion to avoid precipitous corrections in blood pressure.

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destruction facilities and reveals just how large (27,143 tons) the U.S. stockpile of chemical weapons was at its peak.

In the 20th and 21st centuries, more than 70 chemicals have been stockpiled globally in state-sponsored chemical weapons programs. The most notable and most recent uses of chemical weapons have been by Israel and Iraq. However, even though the treaties previously mentioned have greatly curbed the global use of *state-sponsored* chemical weapons, at least some terrorist groups have turned to the use of chemicals as their own new weapon of choice. This evolution came about not only because chemical weapons provide the most “bang for the buck” in terms of casualty production, but also because they are comparatively cheap, usually safer to acquire (or produce), and relatively easy to deploy as a weapon. A recent example is the 1995 Sarin (GB) attack on the Tokyo subway by the cult Aum Shinrikyo – which, if nothing else, proved that the fabrication and use of chemical weapons by non-state groups is possible.

### **Readily Available, Low in Cost**

But it is not only traditional chemical weapons that pose a major threat. It is far more likely, in fact, that toxic industrial and commercial chemicals also could be used. Many tons of such chemicals are produced, transported, and stored every day for use in the production of petroleum, textiles, plastics, fertilizers, paper, foods, pesticides, household cleaners, and many other products. The same chemicals are available in relatively large quantities from wholesalers and retailers throughout the country. The chemicals themselves, and the products built from them, are stored in warehouses and on farms – in the

latter they often are kept in rickety old wooden sheds protected by rusty old locks. More importantly, they are easy to deploy. The results of a terrorist attack

**It is not only traditional chemical weapons that pose a major threat; in fact, that toxic industrial and commercial chemicals also could be used**

using weapons built from such chemicals would be a mixed bag. The release of toxic chemicals in closed spaces – e.g., in subways, airports, financial centers, and malls – could deliver doses high enough to injure or kill a large number of people. However, in open areas, a chemical plume would become increasingly less concentrated as it spreads, so would have to be released in very large quantities to produce a significant number of casualties. According to Kyle Olson, a well-known terrorism expert, the methods of delivering such weapons would necessarily vary, but almost certainly would include:

- **The use of building ventilation systems.** The 1993 World Trade Center bombing – in which a 1,500-pound urea nitrate-hydrogen gas enhanced device was intended to knock the North Tower (Tower One) into the South Tower (Tower Two), bringing both towers down and killing thousands of people

– was a colossal disaster for the terrorists themselves. The device failed to do what it was specifically intended to do, but it did kill six people and injured another 1,042.

- **The use of misting, aerosolizing devices, or sprayers.** In 1994, in the Japanese City of Matsumoto, Aum Shinrikyo used a specially designed vehicle to aerosolize Sarin, killing seven people and injuring 300.
- **Passive releases – achieved by, for example, intentionally leaving a chemical container open** – e.g., the 1995 Sarin attack on the Tokyo subway in which twelve people died and more than 5,000 were injured.
- **The use of bombs, mines, or other explosive devices that contain chemicals other than those used to create the explosion itself.** During Operation Desert Storm in Iraq, U.S. troops encountered mines and shells containing the nerve agent VX.
- **The use of improvised chemical devices that combine readily available chemicals to produce a much more dangerous chemical.** During the second invasion of Iraq, U.S. forces found Al Qaeda video tapes showing the effects of cyanide gas on animals. (It also has been reported that Saddam Hussein used chemicals against his own people.)
- **The sabotage of plants or vehicles in which chemicals are produced, transported, or stored.** In 1984, in an apparent act of sabotage, a disgruntled worker in Bhopal, India, tried to ruin a tank of chemicals with a water hose; his criminal attack did not go exactly as planned, but it did

produce some devastating albeit unintended consequences. The incident at the chemical plant released 42 tons of toxic methyl isocyanate (MIC) gas, exposing more than 500,000 people to the lethal fumes created. The Indian government's first "official" death toll was 2,259 victims. Outside experts say, though, that a more probable figure is 16,000 people dead within two weeks after the incident, and that an additional 8,000 probably died later.

### The Grim But Unwelcome Advance of Technology

To briefly summarize: Chemical and biological weapons have been used throughout history. The first recorded use of chemical weapons dates back more than 2400 years to a war fought between Sparta and Athens. It is only in recent times, though, that these weapons have been developed to the point of being considered weapons of mass destruction. The rapid advance of technology in general, combined with global access to massive volumes of scientific information on the internet and the world-wide web, has moved these weapons from being the sole possession of legitimate governments and state-sponsored organizations to being the new tools of the trade of terrorist organizations and individuals.

These changes, which have taken place over many centuries, have greatly increased the possibility that the everyday citizen – of almost any country in the world, but particularly the United States – may now be the target of such weapons.

Which is a fact worth remembering the next time one goes to his or her local warehouse club and passes so many pallets of ammonia and bleach for cleaning, chlorine tablets

for the home or neighborhood pool, or bags of fertilizer for the lawn. There may be someone standing next to the pallet who possesses not only the will and intent but also the knowledge and resources needed to create and deploy the next chemical weapon used against the U.S. homeland.

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# Is Al Qaeda Seeking Weapons of Mass Destruction?

By Neil C. Livingstone, *Viewpoint*



Reports surfaced in early January that approximately forty Al Qaeda members in Algeria died from plague after the deadly bacteria escaped from a surreptitious laboratory where they were attempting to weaponize the disease. Although there has been no official confirmation that that is exactly what happened, it is clear that something out of the ordinary *did* occur in Algeria at that time, and the reports are part of a mounting body of evidence, both circumstantial and confirmed, that Al Qaeda is attempting to acquire weapons of mass destruction – most likely, in this situation, a bio weapon.

It has long been an article of faith that the United States and its allies would get an early warning – through an accidental release or an outbreak of some unusual disease – about the possible misuse of bio agents. Accidental releases are not common, but they have occurred a number of times in the past – most notably in 1979 in the region around a Soviet biological weapons facility in Sverdlovsk, where there was an accidental anthrax release that killed 68 people. The Soviets, of course, denied not only that anthrax had caused the fatalities but also that the facility was engaged in the production of biological weapons – in contravention of the Biological Weapons Convention. The incident remained a matter of controversy during the Reagan administration, but after the fall of the Soviet Union the Russians ultimately acknowledged what happened.

After the 9/11 terrorist attacks in 2001, the U.S. intelligence

community found substantial evidence, in Afghanistan and elsewhere, that Al Qaeda was indeed working on acquiring biological weapons – and, according to the 9/11 Commission, the effort was more advanced than previously believed. Although Al Qaeda had investigated the possible use of other dangerous agents, including plague and even ebola, its more immediate goal seemed to be to create a fully stable and weaponized strain of anthrax.

**Weaponized anthrax represents a formidable scientific challenge, so it is not surprising that Al Qaeda may have focused on bubonic plague, which was known as the “Black Death” in the Middle Ages**

Ebola, however, is a hemorrhagic fever and one of the deadliest diseases in the world – also one of the most contagious. The good news is that there is no known incidence of it being successfully weaponized, and many experts believe that, because it outruns its hosts so quickly, it also dissipates quickly and therefore does not expand beyond a certain critical mass. The Japanese Am Shinrikyo cult – which carried out the 1995 Tokyo subway attack using Sarin (a G Series nerve agent) – tried

to acquire an ebola culture but ultimately gave up and moved onto more conventional bio agents.

## **The Economics of Weaponization And Related Factors**

Weaponized anthrax also represents a formidable scientific challenge, so it is not surprising that Al Qaeda may have focused on plague – most likely bubonic plague, which was known as the “Black Death” in the Middle Ages, is considerably easier to develop, and can be created in a modest laboratory with commercially available equipment. Plague is still a problem in Africa, so it would not have been too difficult for Al Qaeda to have acquired a sample culture. Plague also would require less scientific expertise than trying to create weaponized anthrax or smallpox.

In that context, it should be remembered that Ayman al-Zawahiri (Al Qaeda’s number-two man after Osama bin Laden) is not only a trained medical doctor with a master’s degree in surgery, but also the son of a pharmacologist and a chemistry professor. In addition, he is known to have had an interest in biowarfare – and, interestingly, spent time in Russia in the 1990s. According to the former Russian spy Alexander Litvinenko, al-Zawahiri received training from the FSB, the successor organization to the KGB, and was the FSB’s principal connection to Al Qaeda. Litvinenko, of course, became internationally famous, belatedly, when he was murdered by a dose of polonium-210, an extremely rare and costly radiological agent that, it is believed, had been slipped into

his food in a Soho sushi restaurant in London.

Plague is disseminated via a “vector,” most commonly an infected flea carried by a rat, which is known as the reservoir host. Traditionally, the best way of controlling the plague has been the creation and implementation of effective rodent-management programs. Largely for that reason, most Western countries are believed to be – thanks to their modern hygiene standards and medical facilities – far less at risk from plague than are the so-called “lesser developed” countries of Africa, Asia, and Latin America.

## Mounting Evidence

### Plus a Mountain of Evidence

In addition to hard drives, floppy discs, and material gleaned from interrogations, the United States has accumulated a great deal of evidence related to Al Qaeda’s continuing, and apparently increasing, interest not only in bio weapons, but also in chemical and radiological weapons (especially RDDs, better known as Radiological Dispersion Devices – i.e., “dirty bombs”). Among the more substantive evidence confirming this theory are some NBC (nuclear, biological, and chemical) protective suits seized by British police during a raid on a Finsbury Park mosque in 2003. In addition, Jordanian authorities claimed to have thwarted a major chemical attack in 2004, and there have been credible reports that Abu Musab Zarqawi, Al Qaeda’s late leader in Iraq, had managed to acquire or develop ricin, one of the three deadliest substances on earth (the others being plutonium and botulinum toxin).

Although difficult to deliver to a widely dispersed group of human targets, ricin, a derivative of the

lowly castor bean, is an excellent assassination weapon and may have been used by the Soviets to murder several heads of state and other leading Third World politicians. Another telling clue is that Al Qaeda in Iraq hired two chemists in 2004 and tasked them with trying to develop crude chemical and biological weapons. Fortunately, U.S. Marines discovered their laboratory (in Falluja) before any weapons had been manufactured. The Marines did find materials, however, that could have been used to make hydrogen cyanide. Other U.S. troops discovered caged dogs and other animals that they believed were going to be used by Al Qaeda as “guinea pigs” to test either chemical or biological weapons.

## Future Threats:

### No Longer “If” But “When”

Jihadists believe that Muslims have a religious duty to wage an “offensive jihad” against infidels, and there seems to have been no lessening of Muslim antipathy toward the West in recent years. Many observers believe, in fact, that the threat of a Jihadist attack employing weapons of mass destruction (WMDs) is growing rather than receding, despite the recent presidential election in the United States and the dramatic growth of homeland-security precautions against terrorism. Former U.S. Senator Sam Nunn (D-Ga.) said even prior to 9/11 that the possibility of a terrorist WMD attack against the United States is no longer a question of “if” but “when” such an attack might occur.

Nunn’s statement was echoed by former Vice President Dick Cheney in an interview two weeks after leaving office. According to Cheney,

there is a “high probability” of a nuclear or biological attack against the United States within the next few years. That chilling possibility is backed up by a study cited by Gary Ackerman, research director of the National Consortium for the Study of Terrorism and Responses to Terrorism, in which respondents indicated that they believe there is a thirty percent probability of a WMD attack against the United States within the next five years. (The “probability” estimate grew to nearly seventy percent when the time period was increased to twenty-five years.)

It is now popular in some circles to believe that the war on terrorism is all but over and that Al Qaeda is and will remain hunkered down in the mountains along the Afghanistan-Pakistan border and for that reason is no longer a “real threat” to U.S. security. But if the reports coming out of Algeria are true, and Al Qaeda is in fact experimenting with plague and/or other diseases as a potential weapon, the Obama Administration needs to aggressively address the potential threat posed against the United States by a terrorist group armed with one or more WMDs.

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# Pandemic Preparedness: Strategies to Protect the State Workforce

By David G. Henry, Public Health



As cases of highly virulent H5N1 avian influenza have recently resurged in Southeast Asia, scientists continue to warn that the next pandemic, based on all scientific data, is inevitable. In a new issue brief from the National Governors Association's Center for Best Practices, states have developed strategies to protect state workforces and to ensure the continuation of services to the public during a pandemic event.

While mainstream media may have lost interest in the topic of pandemic preparedness, concerns over the threat of a devastating pandemic remain. In the recent assessment of state pandemic planning released by the US Department of Health and Human Services, all but three states planning efforts lagged behind in planning for the operations of state agencies during a pandemic, and protecting the state workforce. Additionally, in 2007 and 2008, the National Governors Association held a series of workshops with 55 states and territories, and the District of Columbia. Workforce planning and resiliency was consistently among the top concerns of pandemic planning officials.

Building workforce resiliency against a pandemic, or other catastrophic event, requires not just reinforcing public health concepts like social distancing, but also examining policies outside the public health community, from employee benefits to collective bargaining agreements, to ensure a basic continuity of government for citizens in a time of crisis. A fluid and adaptable workforce will have resiliency regardless of the

incident — whether pandemic influenza or an act of terrorism.

**Building workforce resiliency against a pandemic requires not just reinforcing public health concepts but also examining policies outside the public health community, from employee benefits to collective bargaining agreements**

## Maintaining Essential Government Operations

Governors have engaged in mitigation strategies that buttress the workforce against a pandemic threat, care for state employees and their families, and protect the general public from a diminished quality of life. Some of these strategies include:

- Creating multiagency steering committees to identify those services that must be maintained during a pandemic and, in collaboration with public health agencies, develop statewide government workforce policies;
- Assessing the state workforce against those essential services to determine which personnel are essential, which personnel can be easily reassigned, and which departments, agencies, or offices could close during

a pandemic emergency during the planning phase;

- Addressing worker shortages in essential areas by reassigning healthy employees, drawing on alternative worker pools — such as recently retired state employees and private temporary workers — and seeking volunteers from nonessential staff during the pandemic period;
- Stopping the spread of a pandemic in the workplace by providing adequate leave and incentives for ill employees to stay at home, promote social distancing measures and sanitary work environments, and allow for alternative work schedules — including telecommuting and flexible scheduling; and
- Exploring partnerships with labor unions and private sector partners to raise awareness of the threat and develop coordinated and consistent workforce strategies to avoid perceptions of unequal treatment.

As the state workforce provides the services that maintain society, a resilient workforce bolstered by smart policies will serve as the first line of defense against the debilitating effects of pandemic, guiding communities back from the brink by providing essential services and hastening a return to normalcy once the pandemic has subsided.

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*David G. Henry is a homeland security and technology policy analyst with the National Governors Association Center for Best Practices. In this role, Mr. Henry provides technical assistance to governors' policy advisors and other state officials on public health preparedness, homeland security, emergency management and wireless interoperable communications.*

# Everyone Must Go: The Anatomy of an Evacuation

By Joseph C. Cahill, EMS



No response, no matter how successful, is ever complete without an honest after-action review, which if properly carried out leads to the extension of successful tactics and discontinuation of the unsuccessful ones. It also allows sharing this information with response partners and other agencies that could use the information to improve their own emergency plans and therefore enhance the overall safety of the entire country.

After the disastrous hurricane season of 2005, U.S. local, state, and federal responder agencies not only retooled their previous plans but also formed several strategic alliances, applying the lessons learned from Katrina to improve preparations to meet future disasters of similar magnitude – or close to it. The Gulf Coast did not have to wait long to see these “new and improved” plans tested by Mother Nature in the form of new hurricanes today known as Rita, Gustav, and Ike.

The Post-Katrina Emergency Response Act reaffirms the primary role played in a Katrina-type disaster by the Department of Homeland Security’s Federal Emergency Management Agency (FEMA): namely, coordinating the federal response with the responses of the state or states directly involved; providing appropriate federal resources quickly, effectively, and in the quantities required; and disseminating information as and when needed about the overall availability of federal resources.

Prior to Katrina, FEMA’s principal role before a disaster was, and continues to be, to provide guidance

and assistance to state, local, and other response officials. One of the most effective ways in which FEMA does this is through its “gap analysis” program, which focuses on identifying potential future needs of various cities and states, and sharing that information with the jurisdictions likely to be affected. Thanks in large part to their increased level of awareness, state

**Immediately after Katrina the New Orleans Office of Homeland Security and Emergency Preparedness began work on the development of a new plan for “citizen-assisted evacuation”**

and local planners are now able to enter into agreements with federal agencies – and with other partners on the state and local levels, as well as with the private sector – to increase the availability of essential resources in future times of need.

## **Three Goals, Annual Exercises, And Unstinting Effort**

A milestone gap analysis program for Louisiana was completed in June 2007. After the experiences of Katrina, FEMA spent considerable time and effort on the development of pre-event gap analyses with Louisiana’s state and local agencies, giving special

priority to evacuation routes and shelters, fuel and emergency power requirements, virtually all modes of transportation, and other literally life-or-death essentials.

Immediately after Katrina the New Orleans Office of Homeland Security and Emergency Preparedness began work on the development of a new plan for “citizen-assisted evacuation.” That plan started with three primary goals, as follows: (1) Provide greater support to citizens who need special assistance; (2) Create and maintain an environment in which the always difficult decision to evacuate becomes more desirable than remaining behind; and (3) Implement the measures needed to significantly enhance the security of the city’s own material and personnel resources.

New Orleans worked throughout this forward-looking period in close cooperation with the four parishes (Orleans, Jefferson, Saint Bernard and Plaquemines) in the UASI (Urban Area Security Initiative) region on both short- and long-term planning; various components of the plan were evaluated during annual exercises developed and carried out in coordination with the Department of Homeland Security.

## **Planes, Trains, Buses, and Automobiles**

In order to empty a city officials must use any and all means of transportation available. Any relatively large evacuation should and usually does start with encouraging (or ordering) the population that has the resources to do so to move themselves out of the city. The very first thing to do, though, is to prepare the population for the possibility of an evacuation before a plausible threat is even on



the horizon. With the “pre-education process” in place an emphatic order to evacuate, issued fairly early in the disaster scenario, will significantly improve the effectiveness of the process.

Everyone who is left in the city must be moved by the emergency resources available to the city itself. As a major tourist destination New Orleans must account not only for the evacuation of its own citizens but also for moving out the tourist population and other visitors. The long-term ramifications to the tourist business stemming from the deaths of tourists cannot be overstated. In New Orleans, additional flights of passenger aircraft were put onto the schedule to allow many visitors to leave the city earlier than they had planned.

Amtrak trains also were used to move large numbers of people – visitors and residents alike – away from the city. In addition, special emphasis was placed on the parishes as the decision makers during the pre-planning period set for evacuating the communities nearest to the coast. The collection points for the pickup of evacuees by buses were set by local leaders and incorporated into the regional plans. It was considered particularly important that each parish make its own decision on the evacuations.

### **Well-Fed Buses, Well-Spoken Roads**

Feeding these several modes of long-range transportation out of the area was the task of the regional bus system, which was augmented by buses originally destined for the Department of Defense (DOD) but made available for hurricane evacuations under contracts issued through the federal government’s General Service Administration (GSA). The individual parishes

designate the specific “collection” locations for people who could not evacuate themselves. The parishes request buses on an “as needed” basis and the Louisiana Department of Transportation and Development dispatches the buses to move the people (some 27,000 of them during Hurricane Gustav).

Trying to empty a city as large as New Orleans is not an easy task

by any standard of measurement. Most American cities are built with a system of highways spreading out from the center city like the spokes of a wheel – a perhaps unimaginative but quite functional way that allows most suburban commuters in most cities to get to and from work every day without too much difficulty. Every one of those commuters knows soon enough, though, that there are

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frequent slowdowns on every one of the highways used for their daily drives (or rides) into and out of the city.

Contraflow, the term used to describe the use of inbound lanes for outbound traffic (or vice versa), is an emergency tactic that effectively doubles the one-way capacity of a highway. In an evacuation, contraflow “repurposes” all existing pavement to move as much traffic as possible away from and out of the city both quickly and safely. The use of a contraflow plan is not without its drawbacks, though – all entrance ramps have to be very carefully controlled, for example, so that drivers do not try (usually by accident, but sometimes intentionally) to use the contraflow lanes to drive *into* the city against traffic coming *out* of the city.

Contraflow also is very labor-intensive and, combined with the high emotions and general confusion characteristic of most disaster situations, creates an urgent need for a very large number of experienced law-enforcement officers positioned in twos or threes at almost every traffic exit or entry point on every evacuation route out of the city – one Louisiana State Police official estimated that close to 900 armed policemen would be needed to staff all of the traffic control points out of New Orleans during a mass evacuation of the entire city.

### **An Effective Plan to Deal With Minor Distractions**

Used properly, though, a contraflow evacuation actually serves as a temporary but effective traffic-control plan focused primarily on keeping the cars and buses moving. This is accomplished in a number of ways. “Fuel exits” are clearly identified, for example, so that

drivers running low on fuel will know that when they do have to exit there will be an open gas station nearby and they will not have to spend time, effort, and the little fuel they have left looking for a gas station that may not be there (or may not be open).

A successful evacuation also requires both air- and ground-patrol mobile units to seek out potential obstructions and even some seemingly minor but time-consuming distractions. Any commuter knows that a car disabled on the shoulder, even if it is not actually obstructing the flow of traffic, will almost always slow the flow of traffic and cause a backup.

An important issue that cannot be ignored in planning for the evacuation of a city is determining what to do about the special-needs populations of that city. These populations take many forms: mobility-impaired citizens, for example; non-English speaking residents; and people suffering from complicated medical problems. During Katrina there were many heart-rending articles about the problems encountered during the evacuation of nursing homes and hospitals – but the evacuation of the special-needs population is even more complicated.

Nonetheless, each and every person at risk has the right to expect the community to provide a reasonable opportunity, and way, for him or her to escape an oncoming and predictable disaster. For that reason alone, after a seemingly comprehensive, and workable, evacuation plan has been completed each step in the process must be re-evaluated with particular attention paid to the plight of the city’s special-needs populations.

### **A Well-Deserved Hygienic Validation**

A major share of the time spent in improving and refining the revised Gulf Coast evacuation plans was focused on pre-education and communications – about both the approaching threat and the evacuation order. Both of these matters have to be: (a) addressed in languages that the general population will clearly understand; and (b) made available to the media in formats that they can easily access.

For the same reasons, evacuation plans must ensure and provide for: (1) the availability of routes that are handicapped-accessible; (2) ways to safely and quickly transport injured and bedbound patients from hospitals and other medical facilities; and (3) the sometimes unique accommodations required to safely move other unfortunate citizens lumped under the generic name “special needs population.”

In short, the evacuation of a major metropolitan center is a massive undertaking. The Gulf Coast evacuation process prior to Hurricane Katrina and the somewhat haphazard sheltering of evacuees, as well as the inadequate response to those still trapped in various downtown areas of the Crescent City, made national news with images of people stranded on rooftops and horror stories of shelters seemingly out of control and without any support. Three years later, the worst problem that outside critics could find and write about was inadequate washroom facilities. Seen in that context, any workable plan that can get more than one million people out of the vulnerable Gulf Coast area to higher ground inland, with hygiene being the principal and perhaps only negative, is a major improvement. ▼

## Mexico's Narco-Civil War

# Porous and Perilous – The U.S./Mexican Border Situation

By Joseph Trindal, Law Enforcement



The spillover into the United States of Mexico's drug-cartel wars is straining law-enforcement resources on both sides of the border. Mexico is rapidly becoming one of the most violent countries on earth, and its federal and local law-enforcement agencies have been unable to stem the still escalating surge of violence. Meanwhile, the governors of U.S. border states (Arizona, California, New Mexico, and Texas) are calling for federal assistance in the form of additional U.S. Border Patrol agents and National Guard troops.

Adding more fuel to the fire is the recently released 2009 U.S. National Drug Assessment Report, which describes the Mexican drug-trafficking organizations as the greatest organized crime threat facing the United States itself. U.S. Attorney General Eric Holder even characterized the border violence as a national-security threat. However, not all Obama administration officials agree with that assessment. NSC (National Security Council) spokesman Mike Hammer, for example, recently told reporters that the ongoing violence "is a concern, but not a national-security threat to the United States."

Yesterday (Tuesday, 24 March) may have marked a major turning point in the situation. President Obama authorized numerous sweeping measures designed to stop the violence from further migration northward and to assist Mexico in handling the epidemic of violence south of the border. U.S. aid to Mexico this year will include \$700 million in so-called

"Merida Initiative" funding to bolster Mexico's law-enforcement and judicial capabilities. The U.S. Justice, Homeland Security, and Treasury Departments all are committing major additional resources to the southwest border. The Justice Department will be using more of its own funds and personnel to increase the interdiction and prosecution of cartel activities in the United States through better focused criminal intelligence analysis and better coordinated investigations.

### **A Major Increase In DHS Involvement**

Meanwhile, the Department of Homeland Security (DHS) is assigning more than 350 officers and agents to southwest border interdiction and intelligence activities, according to DHS Secretary Janet Napolitano, a former Arizona governor. In announcing the increased DHS involvement, Napolitano said that the department's actions will be guided "by two very clear objectives: First, we are going to do everything we can to prevent the violence in Mexico from spilling over across the border. And second, we will do all in our power to help [Mexican] President [Felipe] Calderón crack down on these drug cartels in Mexico."

In Mexico itself, the powerful drug cartels have for some time been openly challenging the Mexican police with overwhelming force and terrorist-style intimidation tactics. Several Mexican law-enforcement officials have been assassinated in broad daylight. Last month, the newly appointed drug-enforcement chief for Cancun, retired General Mauro Enrique Tello, was kidnapped,

brutally tortured, and murdered, along with his driver and aide. Their bodies were found in a stolen government-owned truck parked on the outskirts of Cancun.

The manner in which the three men were brutally tortured and murdered was obviously meant as a message of warning to the democratic government in Mexico. Tello's hands, wrists, and knees were broken, and his body showed evidence of having been burned before he was shot – eleven times. Three months earlier, in November 2008, the state police chief for Sonora was ambushed while entering a hotel in Nogales, a mere two miles south of the U.S./Mexican border. Chief Juan Manuel Pavon and three detectives were attacked by a number of gunmen armed with small arms and grenades. The ambush was apparently directed at Pavon in retaliation for recent concentrated and effective police operations against the cartels. A week prior to the attack, not incidentally, Pavon was a guest of honor in Tucson, Arizona, where he was recognized by the U.S. Marshals Service for his leadership in joint U.S./Mexican fugitive operations.

Mexico's narco-terrorism violence is a major problem on both sides of the border. With record homicides reported in Mexico, all four U.S. Border States (and several neighboring states beyond), have been struggling for some time to manage the still increasing surge of violence. Phoenix, which has seen over 500 kidnappings since 2007, now ranks as the kidnapping capital of the United States itself. Meanwhile, a number of U.S. teenagers, some of them as young as

13 years old, have been recruited by Mexican drug cartels and assigned to “enforcer-killer teams.” Acting on orders from their cartel handlers, these teenagers already have committed a number of targeted murders in the United States.

## **The Bloody Hands Of U.S. Arms Dealers**

The criminal activities are not strictly one way, though. Most of the firearms used by the Mexican drug cartels, for example, are obtained through “straw purchases” from legally operated U.S. gun shops. In one arrest of an arms smuggler, the investigation identified at least nine U.S. residents who were purchasing firearms to supply the Mexican drug cartels. Moreover, according to the U.S. Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATF&E), more than 7,000 firearms seized in Mexico last year have been traced back to the United States. In addition, the United States has been the principal source of cash sustaining the Mexican drug-cartel operations.

Under the Justice Department’s Mexican Cartel Strategy, the BATF&E is increasing the number of agents assigned to the department’s Gunrunner Impact Teams (GRITs), which are responsible for intelligence-led regulatory and investigative activities designed to stem the illegal purchase (in the United States) and smuggling (into Mexico) of firearms. In addition, the FBI is increasing the number of special agents and intelligence analysts working out of Phoenix and other southwest border cities to focus on kidnappings, extortion, and public corruption related to the cross-border violence.

South of the border, meanwhile, the Mexican military has responded to

the increased violence and pervasive corruption of Mexican police officers and local military troops by stationing over 40,000 troops throughout Mexico’s northern states. The United States has dramatically increased and improved the activities of coordinated border task force actions involving federal, state, and local law-enforcement agencies. Also, in recent testimony before Congress, DHS officials reported significant increases in the staffing and enforcement efforts of the Border Enforcement Security Task Forces (BESTs), which are assigned to the multi-agency coordination effort targeting the drug cartels’ human and weapons smuggling as well as border infiltrations.

## **BEST Times Two; COPS & Dollars Also Help**

DHS now operates 12 BEST task forces – which, under the sweeping initiatives just announced, will be doubled in size this year (the largest one-year increase in the program’s history). However, and despite these new DHS efforts, Governors Jan Brewer of Arizona and Rick Perry of Texas have asked the Obama administration also to authorize increases in National Guard support for operations such as those already assigned to the U.S. Joint Counter Narco-terrorism Task Force.

State governors already have the authority to activate National Guard troops on their own, but a federal activation is needed to make the states eligible for federal funding support. Governor Perry is on record, moreover, as considering border security, especially during periods of heightened threat, as primarily a federal issue requiring federally funded solutions. It seems certain, though, that any federal decision to call up the National Guard for border-interdiction operations would

emphasize that their duties would be limited to such operations as aerial surveillance, intelligence analysis, logistical assistance, and other support activities.

The sweeping initiatives approved by President Obama and announced yesterday stopped short of committing additional National Guard troops for border interdiction and other operational duties. However, the president still has the option of authorizing additional, and more direct, National Guard support if the new measures fail to achieve a marked decrease in violence on both sides of the border.

Meanwhile, the U.S. Department of Defense continues working on contingency plans for deploying U.S. military forces to assist in implementing the DHS Southwest Border Violence Operations Plan (SWB-V OPLAN) and Department of Justice’s Mexican Cartel Strategy. In addition, U.S. Secretary of State Hillary Clinton is visiting Mexico City and Monterrey on a fact-finding mission this week, and both Secretary Napolitano and Attorney General Holder are scheduled to attend a conference in Mexico next week to discuss, among other issues, a number of new joint border counter-smuggling initiatives.

State, local, and tribal law-enforcement relief also is on the way in the form of up to \$59 million in a carryover of Operation Stonegarden funds as well as availability funding support from the \$3 billion COPS (Community Oriented Policing Services) grant program. Responding to the funding increases and other forward-looking changes, Yuma County (Arizona) Sheriff Ralph Ogden commented that “The [Obama] administration is realizing how important the border is.”

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President Calderón, whose political survival is at stake, also is realizing some progress, thanks at least in part to assigning 7,500 soldiers and 2,500 federal police to strengthen anti-cartel operations in Ciudad Juárez earlier this month. The Mexican government has already reported a 70 percent decline in homicides in Ciudad Juárez, which is just across the Rio Grande River from El Paso, Texas.

Finally, after nearly two years of steadily increasing violence among Mexican drug cartels – violence that has bloodily spilled over into the United States – there is national attention being brought to this issue. Mexican drug-cartel violence in the United States, coupled with the potential destabilization of the Mexico government, is in many respects the Obama administration’s first major test in the interlocked fields of U.S. domestic security and western hemisphere diplomacy. Precisely when the current violence will be ended is still not certain, but one important truth seems abundantly clear: Only through unprecedented bilateral cooperation between Mexico and the United States can true and lasting border security between the two nations be achieved.

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*Joseph W. Trindal recently retired as chief of the Inspections & Enforcement Branch of DHS’s Infrastructure Security Compliance Division. That branch is responsible for administering and enforcing the Chemical Facility Anti-Terrorism Standards. A career federal law-enforcement investigator and executive, Trindal served with the U.S. Marshals Service for 20 years before accepting the position of director for the National Capital Region, Federal Protective Service, DHS. He is presently serving as Director of the Critical Infrastructure Protection Division of Covenant Security International, a well established firm providing assessments, protection, security, and training across a broad spectrum of critical-infrastructure sectors.*

## NIMS & ICS –

### A Road Map for U.S. Health Departments

By Raphael Barishansky, Public Health



The terms “Incident Command System” (ICS) and “National Incident Management System” (NIMS) have been used and heard in various emergency-services forums with growing frequency in recent years. Homeland Security Presidential Directive (HSPD) #5 dictates that local and state government agencies adopt the National Incident Management System as the preferred model for emergency-response policies, procedures, and protocol development and practice – but there are varying realities in how a health department can make the jump from NIMS/ICS *awareness to implementation and compliance* to actual *competence* in everyday operations.

Effective implementation and use of the Incident Command System can be difficult at best, and it is important to remember that ICS was originally developed specifically to help fire departments and law-enforcement agencies communicate and coordinate better during large-scale incidents. For that reason, a local health department (traditionally a social service agency, but with some regulatory responsibilities) will have to take a system originally developed for emergency-response agencies and organizations (with other distinct roles and responsibilities) and bring all of the pieces together into a comprehensive, organized system that is reasonably well prepared to cope with any incidents or events that may confront it. But for a health department to pull all of the components together, it must have a significant commitment to the ICS concept from the top levels of management.

This means that the department head, his or her principal assistants, and director-level managers also must understand and embrace ICS implementation and utilization. That common-sense requirement translates into allowing various levels of employees the time and opportunity to go through training and participate in emergency-preparedness exercises and drills.

#### From Ground Level to the Command Superstructure

However, that is only what might be called the ground-level requirement. It is not enough, though, for a health department’s entire ICS structure to be trained in basic or even intermediate-level courses such as ICS 100 and 200 or even 700 and 800; the department’s *command-level* staff must also have the knowledge obtained in the more advanced ICS 300 and 400 level classes. In addition, health departments must establish an ICS structure based on what is sometimes called the FLOP (finance, logistics, operations, and planning) line for all emergency operations. This means actually using the department’s planning section when planning for a mass event or incident.

It also means using a motivated operations section possessing strong operational experience and an understanding of what actually has to get done. It means that the department’s finance staff will usually come from the administration section of the health department and have a true understanding of costs, personnel, and several other areas of responsibility, and it means that the logistics section should consist of those individuals whose day-to-day

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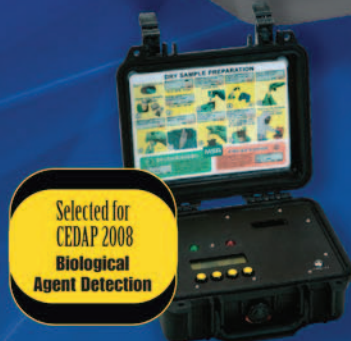
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jobs involve the logistical realities – e.g., supplies, facilities, and communications – of a large social-service agency.

Following are some suggestions for staffing of the command-level positions:

- The incident commander could be the health department administrator, bioterrorism coordinator, emergency preparedness coordinator, health officer, or senior administrative officer.
- The liaison officer (or government liaison official) could be the health department's administrator, bioterrorism coordinator, emergency-preparedness coordinator, community outreach specialist, bureau/unit director, or a senior administrative officer.
- The public information officer could be the health department's administrator (or its PIO), emergency-preparedness coordinator, community outreach specialist, bureau/unit director, or a senior administrative officer.

But even incorporating the ICS structure is not enough – the department also needs to use ICS not only in the development of plans and policies, but also in everyday operations. Experience has shown that this is the best and in many situations only way to develop, improve, and retain the ICS skills of the department's staff. Those skills can be acquired and/or improved by classroom training and actual participation in all levels of exercises – tabletop, functional, and full-scale – as well as through monthly or quarterly section (including command-level staff) meetings. Another way to actually use ICS skills is to handle *all events* as ICS events – so that planning, funding, and running annual events such as flu

clinics (or even non-annual events such as an inauguration or other VIP situation) should be handled through the various ICS sections.

### **First Responders – An Updated Definition**

A question that arises time and again is the following: Are health department staff considered first responders? The questions can be answered like this: Since the terrorist attacks of 11 September 2001 the world of emergency services has seen the previously somewhat loose definition of “first responders” expand from the traditional answer – firefighters, law-enforcement personnel, and emergency-services technicians (EMTs) – to include representatives at almost all levels of such non-traditional responder agencies and organizations such as local or state Offices of Aging, Departments of Transportation, and Health Departments.

There will be many challenges, of course, as today's health departments move toward the NIMS/ICS competence level mentioned earlier. Some of those challenges may have to do with labor/union issues, some may be based on the less-than-familiar ICS terminology, and some may be related to a learning curve as the department's personnel become accustomed to the differences between their previous (and continuing) day-to-day roles and their ICS roles

But understanding and using NIMS policies and principles, along with those of its major component, the Incident Command System (ICS), will enable healthcare workers – in all agencies at all levels of government – to work in a comprehensive, cooperative, and cohesive framework when dealing with other agencies during large-

scale incidents and events of all types, specifically including major disasters, both natural and man-made. The system will also assist the healthcare community at large in planning for, preventing, and/or mitigating a healthcare emergency such as influenza or other disease epidemics or outbreaks.

In short, by implementing NIMS/ICS policies, principles, and operational guidelines, healthcare agencies and organizations will be much better prepared to promote and improve interoperability, compatibility, and communication between and among their federal, state, and local partners. They also will have a better, and continuing, awareness of the greater “emergency management” structure to which they now belong. This knowledge will assist them in knowing who needs what information to make better decisions in responding to, and containing, an event.

This happy result will not only be true at the state level, but will pay even greater dividends at the local level, where local and community agencies can truly assist and, if need be, lead the response to an event. Once trained in NIMS/ICS, health departments could and should be major contributors to planning, and to response operations, and through their input will have greater overall impact in the development and implementation of responses appropriate to the greater good of the public they serve.

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# DHS – Moving Forward; And Moving Out

By Kay C. Goss, Emergency Management



On her first day in office, Janet Napolitano, the new DHS (Department of Homeland Security) Secretary, issued five “Action Directives” covering the department’s highest-priority concerns: Critical Infrastructure Protection; Risk Analysis; State and Local Intelligence Sharing; Transportation Security; and State, Local, and Tribal Integration.

Among her other top priorities, Napolitano also indicated, according to a DHS press release issued on 21 January 2009 – the day after President Barack Obama’s inauguration and, not incidentally, the date when Napolitano herself was sworn in – are “to unify the department and create a common culture.”

Those goals will be helped considerably by implementation of a previously announced plan to consolidate the department’s numerous bureaus and agencies – now temporarily headquartered in buildings and offices at numerous sites in and around the greater Washington, D.C., area – at a fairly large and well guarded federally owned property in Southeast Washington across the Anacostia River and a short distance downstream from the Washington Navy Yard.

## The Near, Mid-Term, And Longer-Range Future

Implementation of a longer-range and still tentative proposal – the building of a “DHS Academy” or university similar to the U.S. service academies – would eventually (but not automatically) create the much-desired “common culture” referred to by Secretary Napolitano. In the meantime, cross-training drills and

exercises, joint planning, and even split “tours of duty” – assigning firefighters to police departments, for example, and/or EMTs to the Border Patrol – would help immensely in breaking down current institutional barriers between and among the various DHS agencies and their state and local counterparts.

The long-term effort to build a DHS common culture might even go international. Earlier this week, in fact, according to a Reuters article of 17 March, the United States “proposed to European Union leaders ... [that] they adopt a joint approach to fight terrorism and ... write together a memorandum of understanding enunciating the principles that should inspire our common fight against terrorism.” The same joint-approach principle could just as easily be applied, of course – and already is, to some extent – in an international effort to cope with a pandemic flu outbreak and/or other mass-casualty diseases.

Similar multinational programs dealing with illegal immigration, the interdiction of drugs and small arms, cybersecurity, and tamper-proof international identity cards may be a long way off, but would solve a host of other problems. DHS would play a key role, perhaps the dominant role, in each of these programs.

## A Rare Unanimity of Purpose

Meanwhile, the current highest-priority DHS concerns spelled out by the new DHS secretary seem to be shared, fortunately, by almost all state governors, city mayors, emergency-management officials at all levels of government, and the department’s own personnel, and not

only could but should be achieved rather easily within the foreseeable future – thanks in large part to Napolitano’s own well focused vision and leadership experience (Time Magazine recognized her in 2005, during her first term as governor of Arizona, as one of the nation’s “five best governors”).

Most state and local emergency managers, law-enforcement and fire-service officials, and EMS (emergency medical services) leaders – as well as elected officials representing states, tribes, and various other communities, agencies, and organizations throughout the country – have been pushing hard for several years for more, and better, *intelligence sharing and integration* in the overall process. This specific goal is, in fact, at the top of the agendas set by, among other national organizations and associations, the National Governors Association, the National Association of Counties, the International Association of Emergency Managers, the National Emergency Management Association, the National League of Cities, the U.S. Conference of Mayors, the League of Cities and Towns, the National Congress of American Indians, the U.S. Conference of State Legislators, the Council of State Governments, the International Association of Fire Chiefs, the International Association of Police Chiefs, the International Association of Firefighters, the National Council of Volunteer Firefighters, and the National Association of Emergency Medical Technicians.

There also has been a significant amount of federal planning, and federal funding, particularly in recent years, to improve intelligence sharing and integration. The payoff to state, tribal, and local entities and individual citizens has been slow

to come, however. For that reason alone it will be an extremely welcome “new day” in homeland security and emergency management if this long-awaited integration and intelligence-sharing effort, amounting to true collaboration and outreach, can be achieved over the next several years.

### **Protection: The Critical Foundation of Future Progress**

Like most state governors and city mayors, Napolitano clearly sees *critical infrastructure protection* as the department’s core mission, and her action directive covering that area of her responsibilities translates into a broad mandate to manage the vulnerabilities, threats, and hazards as effectively, and as cost-effectively, as possible – primarily by developing a workable *risk-analysis* methodology and using it to build a robust risk-management system. These two priorities would

link together smoothly and form a major component of the department’s organizational foundation.

Finally, *transportation-security* officials – in the private sector as well as in government – and TSA (the Transportation Security Administration) are charged by Napolitano with examining, in depth, all modes of the U.S. transportation system, and the overall threat environment, to ensure that all aspects, organizations, agencies, and businesses in the field of transportation are working together and clearly focused, as a team, on a common set of goals.

Assuming that all of these areas have clear strategies, tactics, and operational agendas provided and encouraged under Napolitano’s guidance, all professionals in the fields of emergency management

and homeland security – as well as the department’s own personnel – the emergency-management community and elected leaders across the nation will be able to see, some of them for the first time, a basic, positive way forward. If and when that happens the now sometimes disparate homeland-defense stakeholders will be able to work as a true team capable of assessing risk, managing risk, and providing a framework for a cohesive partnership at and throughout the national, state, tribal, and local levels of government.

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*Kay C. Goss, CEM, possesses more than 30 years of experience – as a federal and state administrator and in the private sector – in the fields of emergency management, homeland security, and both public finance and intergovernmental operations. A former associate FEMA director in charge of national preparedness training and exercises, she is a noted lecturer as well as author.* ▼

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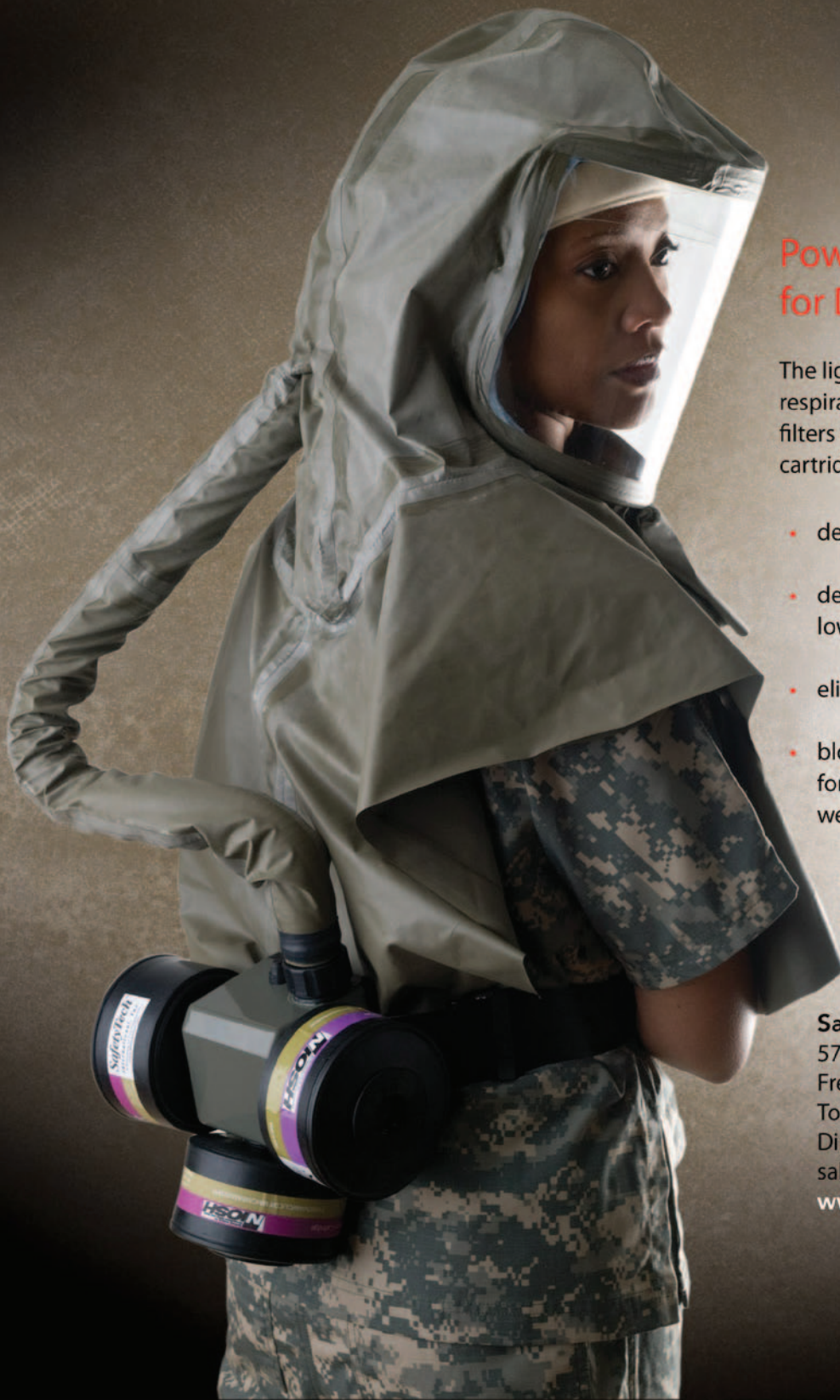
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# Bioterrorism Exercise: A Taste of the Real Thing

By Stephanie Ostrowski & Crystal Castillo, Public Health



By 8:30 a.m. on Monday, 23 June 2008, members of the staff of the South Dakota Office of Disease Prevention (SD ODP) in Pierre, South Dakota, had received dozens of notifications from around the state informing them that many people had become ill following the “Taste of Central South Dakota,” an annual cultural event in Pierre that last year had been attended by more than 75,000 people. The most common symptoms reported were vomiting, diarrhea, blurred vision, and dry mouth and throat.

As additional reports came in, the SD ODP staff began to suspect that what initially had been perceived as a foodborne outbreak of a still unknown disease might actually be a bioterrorism event. The staff first assessed the common-risk factors among the sick, then initiated active disease surveillance in order to investigate further. Epidemiologists decided to conduct a so-called “cohort study” by using the SD ODP’s web-based Confidential Food History Questionnaire to gather additional information.

Fortunately, the situation described above was only a tabletop exercise using simulated scenarios to assess existing plans, policies, and the operational procedures to be followed should this type of event actually occur “in real life.” The exercise was designed by Vickie Horan, bioterrorism/influenza surveillance coordinator for the South Dakota Department of Health (SD DOH) and Dr. Nato Tarkhashvili, a CDC (Centers for Disease Control and Prevention) Career Epidemiology Field Officer (CEFO) assigned to South Dakota.

The purpose of the exercise was to test the preparedness protocols of the SD DOH for a foodborne bioterrorism outbreak, with a particular focus on response operations. The SD DOH was tasked with applying the basic methods used in epidemiological outbreak investigations to the data collected, using the department’s web-based questionnaire to determine whether there was an association between the symptoms and the specific foods eaten at the annual event.

## Building Strengths Out of Weakness

Participants in the exercise evaluated not only the strengths but also the weaknesses noted during the exercise to determine what would and/or would not work during actual emergency operations. One important gap was identified when some of the participants who were acting as patients were unable to log on to the website used in the exercise and fill out the questionnaire, as they had been told to do. In addition, it became apparent that the information technology (IT) component of the exercise scenario had been over-promised; IT staff members were unable to meet the four-hour deadline that had been set for web-posting of the questionnaire, thus missing the benchmark for IT support that had been set.

Because the data collection could not be completed within the time allotted, SD DOH epidemiologists did not receive the promised data to analyze, and therefore not only could not determine whether the symptoms noted were strongly associated with a specific food item but also could not identify other common factors in the outbreak.

Fortunately, Dr. Tarkhashvili and the other exercise controllers and planners were well prepared for that possibility, so were able to provide summarized data and tables as an exercise “inject,” or simulated outcome. The players eventually determined that chokecherry salsa was the source of *Clostridium botulinum* Type A – the most severe type of botulism – that had provoked the previously mentioned symptoms.

After reviewing the lessons learned, Dr. Tarkhashvili concluded that it was “clearly more beneficial to iron out as many wrinkles as possible during an exercise rather than learn in the middle of an actual event” – which is, of course, the reason most such exercises are planned and carried out. And having used this opportunity to correct the problems that had been identified means that the South Dakota Office of Disease Prevention is better prepared to respond in the future to a large-scale foodborne bio-terrorism outbreak, should one become more than just a simulation.

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*Captain (USPHS) Stephanie R. Ostrowski (pictured) is one of two national-level CDC (Centers for Disease Control and Prevention) supervisory epidemiologists for field assignees of the CDC’s CEFO (Career Epidemiology Field Officer) program. Before joining the CEFO staff she served for six years as an emergency-response coordinator in CDC’s Coordinating Center for Environmental Health and Injury Prevention, Office of Terrorism Preparedness and Emergency Response. During that period she served as a headquarters technical coordinator and/or field responder in programs and activities involving, among other potentially lethal agents and materials: anthrax; ricin; the H5N1 Avian Influenza; and foot and mouth disease. She also participated in several programs involving various hazmat events.*

*Crystal Castillo co-authored the article.* ▼

## Pamper and Protect

# A Professional's Guide to Personal-Security Details

By Derrick Mayes & Cynthia Tsai, Viewpoint



*Istanbul*, 28 July 2008: Unbeknownst to the 50,000 fans screaming for the mega-famous heavy metal band that is rocking the stadium, the band has received a death threat from the Warriors of Mohammed: “We will get one of you,” the note warned, “and send you to the fires of hell.” Shortly after midnight there is an announcement that 17 people have been killed and 150 injured in terrorist explosions just 12 miles away. The security team must get the four band members back to their private jet immediately.

In just minutes, following one of several contingency options in a carefully drawn escape plan, three ready-and-waiting mini-vans quickly summoned by the Security Team Leader raced up to a backstage loading area where, under the well-rehearsed direction of a team of five local security guards, the band members scrambled into the vehicles and within minutes were at the airport and boarding their jet. Settling into their seats, the band members noticed that their security consultants had not forgotten to restock the plane with their favorite “comfort” items, among them the band leader’s beloved green jelly beans and the drummer’s Evian water and Shirley Temples.

Was such a quick getaway a lucky break, a rare moment when everything fell into place? Hardly. In the 21st Century, the Modern Age of Terror, no major band travels without a crack team of professional security advisors who leave nothing to chance. The same is true of famous actors, world-class athletes,

and company CEOs. In today’s world, the need for professional protection is paramount. (But when taking care of high-profile celebrities and/or sports or business luminaries, the protection provided must also be *pampered* protection.)

**The key to successful security protection is preparedness, and preparedness depends on three essential factors: knowing the jurisdiction; knowing the chain of command; and knowing the local culture**

Today, stars of the NBA and the NFL are frequent targets, not only of robbery but also of kidnapping, and *Forbes* Magazine has reported that two-thirds of the corporations on the Fortune 500 list carry “K&R” insurance – the innocent-sounding K&R stands for “kidnapping and ransom.” In the worlds of big-time entertainment and professional sports, the dangers are multiplying rapidly.

### **The Variables of Preparedness: Knowledge Times Three**

As the best security professionals know from experience and training, there is no substitute for *thorough* preparation that takes into account

all possible variables. For example, the security team in Istanbul knew that the band’s private jet was safe because the team leader had directed one of his best trained and most capable security personnel to remain with the plane ever since it touched down ten hours earlier. In a world so fraught with danger, the key to successful security protection is preparedness, and preparedness depends on three essential factors: knowing the jurisdiction; knowing the chain of command; and knowing the local culture.

A truly professional security provider is one who works both ends of the event – before and after. Prior to the concert or conference, he (or sometimes she): assesses the venue and makes recommendations; carries out background screenings, if necessary; recommends and hires expert “event” security specialists; and develops an all-contingency (and very closely held) crisis-management plan that includes an evacuation annex. When the event is over, the security provider: analyzes what (and who) worked and, often of greater importance, what and who did not; gathers a massive amount of information from all members of the security team; uses it to develop meaningful and substantive recommendations; and then provides an after-action report.

All of which is not to suggest that a top-flight security advisor neglects the clients’ creature comforts or ignores their special requests. If they want a Gulfstream V, then they are provided a Gulfstream V. Tropicana orange juice in the Green

Room? No problem. SKYY Vodka the only one the client will drink? Then SKYY it is. But first make sure that consuming alcoholic beverages in the Green Room is allowed. In some countries the consumption of alcoholic beverages is against the law. (The solution to that aspect of the problem is to find a nearby alternative site that is not quite as rigid about such matters.)

There are always, of course, some personal requests, even seemingly acceptable requests, that simply cannot be honored – not because the request is unreasonable (or, in some instances, outrageous), but because a “yes” answer would or could create an unsafe environment. If, for example, the VIPs being protected want blackout paper on the windows of their aircraft (or limousine) so they can sleep while enroute, they have to be told that blacking out the windows would be an obvious tip-off to paparazzi, thieves, and terrorists.

Personal-security experts often find it necessary to walk a rather narrow tightrope between protecting their celebrity clients and pampering them. Most of these clients work tremendously hard to satisfy their fans and their boards of directors, and when it is time for them to travel and/or simply relax they understandably want the best of amenities. And they usually are (and should be) given what they want – but their security needs must still be kept uppermost, and that requires thinking at least one step ahead. Is there a Plan B for evacuating a city or a venue? And is there a back-up plan for escaping the paparazzi? (Here it should be noted that, although the paparazzi can sometimes be outsmarted, they cannot be outrun,

as Princess Diana and Dodi Fayed learned so tragically.)

## Protection & Preparedness Trump Party Favors

Although most of today’s celebrities are becoming increasingly aware of these threats, that does not mean that they will always take the advice of their security team and do the right (and sensible) thing. Some stars want the ego boost of the stretch limo, the room filled with flowers and Fiji water, and on occasion some “party favors” as well (these are normally provided by the celebrities’ own inner circle of independent contractors and distributors).

In regard to the previously cited “danger area” – out-of-line requests – security providers must make it absolutely clear to their clients, no matter how big or important they may be, that there are certain lines the security providers will not cross. It is *never* the job of security personnel, to cite the most obvious example, to provide goods or services (i.e., the party favors mentioned above) that are inappropriate or illegal – or both. Granted, that can become a real dilemma, but only if the security providers let it. In any case, the time to make sure the lines are clear is upfront, not after a problem arises.

As also mentioned above, there are three key areas of information that first responders must keep in mind at all times. The first is *Jurisdiction* – or who’s in charge? Is it the customs officials, the hotel’s own security, or the local police? Not knowing the answer to that question can lead to chaos – or worse. The second area is *Chain of Command* – who is the right person to call when something (big or small) goes wrong? The person who can fix a flat is not the

person to call in a medical emergency. And in Mumbai, calling 911 will not help. Key area of information number three is *Culture* – i.e., what crucial differences are there in a new venue? A smart security provider has someone on the team who can speak not just the national language of the country being visited, but the local dialect as well – and who also knows that in many countries the use of foul language can trigger a crisis.

Many law-enforcement professionals and other first responders have been, are, or in the future may be directly involved in personal-security details, so must be fully aware of what might well happen if the dangers discussed above suddenly change from threat to reality. At those moments, protection always trumps pampering. But up to and until those moments occur, security providers often have to deal with some very large egos making equally large (and/or sometimes impossible) demands. The truly professional first responder is one who can accept a difficult assignment with full knowledge of what is involved – which usually means keeping the clients happy, and *always*, first and foremost, keeping them safe.

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*Derrick Mayes (pictured), CEO and Director of ExecutiveAction Sports and Entertainment, is a nationally known TV host and commentator, a former NFL football player, and a highly successful businessman. He holds a bachelor’s degree in film and television from the University of Notre Dame, where he broke several of the school’s all-time receiving records. Cynthia Tsai Tsai is executive vice president for business development of Executive Action LLC, a former vice president of Merrill Lynch and Kidder Peabody, and the founder and CEO of HealthExpo, the largest consumer healthcare event in the United States. She holds a bachelor’s degree in psychology from the University of Missouri and has served on numerous boards and committees of internationally known U.S. financial and economic organizations.*

# South Carolina, Texas, Colorado, and Missouri

By Adam McLaughlin, State Homeland News



## **South Carolina Hosts Preparedness Workshop for 2009 Hurricane Season**

“One team, one fight” is the mantra being used by local, state, and federal leaders preparing for a 2009 hurricane season that forecasters say could include nine major storms. “If that forecast is even close to being accurate, the timing of this [workshop] is vital to us being ready,” Gen. Craig R. McKinley, chief of the Air Force’s National Guard Bureau, said in late February at a hurricane planning workshop in Hilton Head, S.C. “The American public expects this team to pull together to do the job right.”

National Guard leaders from 11 hurricane-prone states have met annually for several years to coordinate plans and exchange ideas for the upcoming storm season. This year was the first time they were joined by so many federal and state partners – a team drawn from 27 states, five major naval and military commands, three U.S. territories, and the District of Columbia. “This is an historic event,” said Army Maj. Gen. Stanhope Spears, adjutant general of the South Carolina National Guard, which hosted the workshop.

Air Force Gen. Victor E. Renuart Jr., commander of the U.S. Northern Command (NorthCom) and North American Aerospace Defense Command, and Robert Powers, acting assistant administrator (disaster operations) for the Department of Homeland Security’s Federal Emergency Management Agency (FEMA), also attended the workshop, as did senior officers and civilian leaders from U.S. Army

North, 1st Air Force, and other military commands and federal agencies that would team up in the aftermath of a storm.

“We learned after Katrina that the only way to ensure that you do not repeat those lessons is to pull together all of the players and to pre-plan the kinds of responses that will be necessary,” Renuart said. “Clearly, the governors, the state emergency managers, the adjutants general will have the lead ... but

**Emergency officials throughout the area, are urging all families to have an emergency plan prepared and an emergency supply kit stocked with medicine and food for themselves and their pets**

bringing in the federal partners ... allows us to integrate our efforts ahead of time so that the response can be more effective and certainly more timely.”

Hilton Head, a barrier island on the Atlantic Coast that hosts more than 2.4 million tourists, vacationers, and other visitors annually, is on the front lines of almost a dozen states in the traditional paths of the potentially deadly and damaging storms. Hurricane planners who attended the workshop wore Army and Air National Guard as well as active-duty Army, Navy, Marine

Corps, Air Force, and Coast Guard uniforms. But they all agreed that Hilton Head’s residents do not care how responders are dressed or what agency they are from – they just want them to agree on an efficient and unified response that will save lives and property after a storm.

Workshop attendees strengthened existing relationships, discussed force-package planning for supported as well as supporting states, and heard about existing hurricane-response capabilities – as well as a few gaps in capabilities that have to be addressed. Enlisted leaders and adjutants general broke off from the general discussions to focus on preparedness plans at the decision-making and operational levels of the chain of command.

All incidents are local, the planners emphasized – meaning that almost all emergency-response operations start with a 911 call to a local agency, and that local responders are therefore usually the first responders at the scene of an incident. In the event of a major hurricane, for which there are usually several days of advance warning, that response is quickly supplemented with additional state and federal resources – e.g., the 460,000-strong National Guard and NorthCom personnel who have worked in the past to support FEMA operations of various types.

## **Texas Inland Region Develops Standards for Outdoor Warning System**

Emergency officials in several major cities in the northern central area of Texas have announced new guidelines for outdoor warning

systems that establish a uniform standard for notifying residents of severe weather and other potentially catastrophic events across the region. The North Central Texas Council of Governments formally unveiled the recommendations in the last week of February to kick off the area's "severe-weather awareness week." The outdoor warning systems covered by the guidelines are usually referred to as tornado sirens, but the systems can be activated for other reasons.

Gregg Dawson, the council's director of emergency preparedness, said that most state agencies in Dallas, Tarrant, Collin, and Denton counties have agreed to adopt the guidelines – which, among other things, call for officials to activate warning systems in any of the following situations:

- The National Weather Service issues a tornado warning, or severe-thunderstorm warning, with likely winds in excess of 70 mph; and/or
- Trained storm spotters have reported a tornado in a specific city or county jurisdiction, or in a neighboring jurisdiction, that might have a harmful effect on the immediate community; and/or
- Hail measuring 1.25 inches in diameter or greater has been reported.

"Each city also has discretion to use ... [its own] warning system for any other reason," said Summer Wilhelm of Lewisville's emergency management department.

Dawson said it is also important for residents to seek information from local media outlets and/or to tune into their radios for additional information about severe weather conditions that are expected. Emergency officials throughout the area, he said, are

urging all families to have both an emergency plan prepared in an advance and an emergency supply kit ready – stocked with medicine and food for themselves and their pets. "It is very important to take personal responsibility to take heed to warnings and know what's going on with the weather," he said.

The regional emergency managers also announced the creation of an educational website (*KnoWhat2Do.com*) that will provide preparation tips and other information about coping with weather conditions threatening homes and businesses in the northern central area of the state.

### **Colorado** **Researchers Find Social NetSites Useful During Disasters**

Social networking sites such as Facebook, MySpace, and Twitter are changing the way an increasing number of disaster situations are being handled. Dr. Jeannette Sutton of the Natural Hazards Center at Colorado University Boulder has been conducting joint research, with the school's Department of Computer Science, on how such sites can be, and are, used during disaster situations. The researchers determined that when disaster strikes the Web-savvy are more and more frequently seeking out and forwarding helpful information via various social networking sites.

Sutton said that one of the first documented signs of this emerging phenomenon occurred in the first hours after the shootings on the Virginia Tech campus in April 2007. Some crucial news about the shootings was reported not through law-enforcement agencies or even the news media, but through

Facebook. "People who were distributed across these networks were able to identify all of the names of the deceased before the official announcement came out" (about who had been killed or wounded during the shootings), Sutton said. She said that emergency-management specialists would be able, when faced with similar situations in the future, to immediately contact a much larger audience by using the social networking sites as additional information outlets.

Boulder County already has developed a Twitter account that it used extensively after the Olde Stage Coach fire broke out in January. "By the end of that fire we had 100 new ... [contacts] who were following us on Twitter, and other organizations were re-tweeting us, including FEMA [the Federal Emergency Management Agency]," said Boulder County Commission spokeswoman Patricia Demchak.

Sutton noted that FEMA, which already has started its own YouTube channel, is an exception to the government norm. Many and perhaps most other federal agencies remain skeptical about the usefulness of social networking, fearing (or so it seems) that the sites foster more rumor than reality. But Sutton's research found that most citizens are extremely cautious about fact-checking important information before disseminating it. Sophia B. Liu, a graduate student in computer science, is a perfect example. As a member of the Alliance for Technology, Learning, and Society at CU Boulder, Liu has for some time been tracking the use of social networking during disaster situations. A Boulder resident herself, she was evacuated after the Olde Stage Coach fire broke out, and immediately started Twittering to keep better track of the information



she was hearing. “That local knowledge of citizens who live in the area can be key in terms of providing quick information,” Liu said.

Sutton conceded that there is always a danger that rumor or gossip could have a negative impact, but she said the benefits of social networking in disaster situations usually far outweigh the risks involved. “It’s a way to tune in and find out, ‘How is my warning being perceived?’ and ‘How is the info actually coming across to the public?’” Sutton said.

Some other federal agencies – e.g., the Centers for Disease Control and Prevention (CDC) – also are well tuned in to the communications possibilities available through social networking. The same is true at various state and local levels of government. The city of Castle Rock, for example, already has a Twitter account, Commerce City is in the process of developing one, and Boulder County is now developing a tentative social networking policy. If the policy is approved, officials said, the county will open its own Facebook and MySpace accounts as well. In addition, TheDenverChannel.com has two Twitter feeds: one for breaking news, @breakingnewskmg; and one, @denverchannel, for news headlines and updates.

### **Missouri Hosts Third Annual Fusion Center Conference**

In early March, DHS (Department of Homeland Security) Secretary Janet Napolitano addressed over a thousand federal, state, and local officials attending the third annual National Fusion Center Conference in Kansas City.

During the conference she pledged that efforts to extend and upgrade “fusion centers” – state and major-city facilities that enable federal, state, local, tribal, and territorial governments, and the owners and operators of critical infrastructure, to share information and intelligence about terrorist threats, criminal activities, and other “manmade” hazards – will be a high-priority DHS goal during her tenure.

**Improving intelligence development and sharing, not only on the federal level but on the state and local levels as well, has emerged as a key goal of the Obama administration’s homeland-security strategy**

Improving intelligence development and sharing, not only on the federal level but on the state and local levels as well, has emerged as a key goal of the Obama administration’s homeland-security strategy. The president’s fiscal year 2010 budget plan provides a significant boost in funding to support efforts to improve information and intelligence-sharing between and among state, local, and federal authorities.

“At DHS, information and intelligence sharing is a top priority, and fusion centers play an important role in helping to make that happen,” Napolitano said.

“In the world we live in today, it is critical for federal, state, local, and tribal entities to know what the others are doing so that each can operate effectively and efficiently.”

Fusion centers have occasionally been criticized as a potential threat to civil liberties and privacy, Napolitano acknowledged, but she insisted that the centers were neither intended, nor will they be allowed, to become “domestic spy agencies.” “They are not designed to invade the privacy of American citizens,” she said. The specific goal assigned to the fusion centers, she continued, is not to launch independent domestic-surveillance operations but, rather, to help “connect the dots” between legally obtained information that is already available in fragmented “siloes” databases.

Since the fusion-center initiative began in 2006, a large number of states, and many major cities, have established an estimated 70 centers across the country, with the federal government providing a number of personnel, as well as financial and technical support, to help operate them. It is too early, Napolitano said, to predict the ultimate number of fusion centers likely to be operational nationwide, but she expressed confidence that fusion-center initiatives will become much more widespread within the next several years.

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