

The Current Middle East Terror Potential to American Facilities

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Duct tape and plastic, water and gasoline, what measures do you need to take to protect your facility and when should you take them?

The first thing that you need to remember is that while the responsibility of maintaining a safe facility falls directly on your shoulders, the reality is that you have about 4 times better chance of being struck by lightning than by being a victim of a terrorist act. The next pages will try to explain the risk and provide you with a place to begin developing a plan for your facility.

There are two directions to providing a safe environment on your campus. There is the protection from liability and then there is the protection from the threat. In most cases the protection from liability law suits is a bigger threat than the actual incident. Educating a customer in not spilling hot coffee in their lap can become more time consuming and expensive than making the coffee.

While no mentally balanced person wants to see another harmed and the management of Higher Education Facilities that I am familiar with all understand the preciousness of the students to their families and loved ones, there are cases each day that put students and staff at risk.

We all understand that the liability issue will be investigated by the families of any victims and that if we have not taken the proper preventive and reactionary actions to the incident, we will most probably end up in a civil court case. For this article and for the sake of time we are going to only discuss the actual types of attacks and your vulnerability to them.

One of the major items that we are hearing about on the news each day are the threat of Nuclear or Biological devices being used to disrupt business and kill Americans either in the United States or at American Businesses abroad.

Military Nuclear bombs are very little risk to any of us. These weapons are tightly controlled and most airports and shipping areas have alerting devices that would react to the radiation. Similarly, the United States Government has ways of tracking radioactive materials being moved around the world. This brings us back to the "Dirty Bombs" that all the news people are speaking of.

The purpose of Terrorism is to instill fear. As we have noticed from speaking to our friend's coworkers and neighbors, many of them are scared to death of something that has not even happened. Similar to the 9-11 incidents, the psychological damage is much more damaging than the physical damage. After the 9-11 attack we have seen businesses that still have not come back to where they were on 9-10.

The main thing to remember about a dirty bomb is that it does not have to kill a lot of people or do a lot of damage to be successful. If the media got news of an incident with radiation, they would keep that news in the media 24 hours a day doing the job for the terrorist. As a result, parents would pull their children from your school. Staff would not come to work and the clean up from such an incident could take years. In the mean time, many of your jobs would be at risk due to the fact that the facility was closed. The building in Florida that received the first Anthrax letter is still locked down over a year and a half later.

A dirty bomb can be made from using any conventional explosives with radioactive material attached or near the explosives so that when detonated, it will send the radioactive material into the air thus causing exposure by anyone coming in contact with the Gamma rays.

Last year there were hundreds of reports of industrial and medical radioactive materials missing or stolen from businesses in the United States. There are also reports of "suspicious" individuals attempting to purchase exceptionally large quantities of items like Smoke detectors or other items that have very small amounts of radioactive material. While not as easy as just stealing the fuel rods from a reactor or stealing some cobalt-60 which is used in cancer therapy, recovering the small amounts of radioactive material from legal items can be less risky and leave less chance of being arrested.

Without going into any more detail on how to manufacture these weapons, let's look at what the risk would be to your facility.

There has been much written about the old Soviet Union and the weapons that they have lost track of and or sold to other countries that in turn can not account for them. The main storage facility for Biological weapons, Obolensk Research Center for Applied Microbiology, has been the center of attention in the Biological field for the last 11 months when they filed for bankruptcy.

If someone attached spent fuel rods to 100 pounds of commercial explosives, you would have a blast zone of between 250 and 300 feet. The Gamma rays in this area would be between 2,500 and 3,000 rem, this is 5 to 6 times the estimated lethal dosage.

Outside the blast area the winds could carry the lethal plume close to a mile with radiation levels high enough to penetrate the human body. In the areas away from the plume but within the 1 mile area, you could get 10 to 15 rem. This would be enough to make you sick but would not likely cause radiation related deaths. Much of this will depend on the weather conditions to determine how the radioactive fallout will disseminate.

If you are outside the blast area but near the area, you would want to turn off your Heat or Air conditioning system and stay inside. Avoid contact with any air

or dust that has been contaminated. In most cases, you will find that the radioactive particles have attached themselves to dust particles that then stick to your skin or are inhaled. These particles would be small enough to be inhaled and could cause long-term health problems with the level of illness rising with the amount of particles ingested.

Biological agents and toxins are the other threat that we have been warned about. The CDC has listed 6 agents or toxins that they rank as high risk or "High Priority".

Biological agents are odorless, tasteless and invisible to the human eye and many times more potent than a Chemical weapon.

Our research has determined that there are several products that would be well worth the cost to have on hand in case of a contamination problem. The IMIX company in Norcross Georgia has several products that are FDA approved and non toxic that will stop the growth of Mold as well as several of the Toxins causing concern today.

There are also companies that make decontamination kits for your employees that provide paper clothing and plastic bags that are designed to be hold contaminated clothing and jewelry and give your employee non contaminated paper cloths to wear home.

The Centers for Disease Control and Prevention in the United States lists six biological diseases as "high-priority" biological agents that pose a risk to national security. At this time we will discuss Anthrax, Botulism and Smallpox.

ANTHRAX



Anthrax is a spore that produces a toxin that can be fatal. It is an acute infectious disease caused by the a spore forming bacterium *Bacillus anthracis*.

The most fatal form of the spores is spread by inhalation, other forms of exposure are ingestion and contact with an abrasion on the skin.

Symptoms usually appear within a week. Inhalation anthrax infection can start out like a common cold before acute symptoms such as severe breathing problems and shock. Cutaneous (skin) infection can look like an insect bite at first but within days develops into an ulcer with a characteristic black center. Infection by consuming contaminated food is characterized by inflammation of the intestinal tract, leading to vomiting of blood and severe diarrhea.

The key to treatment is to be treated with strong antibiotics as soon as possible. Antibiotics, such as Cipro and penicillin are used; a delay in the use of antibiotics may severely lessen chances of recovery.

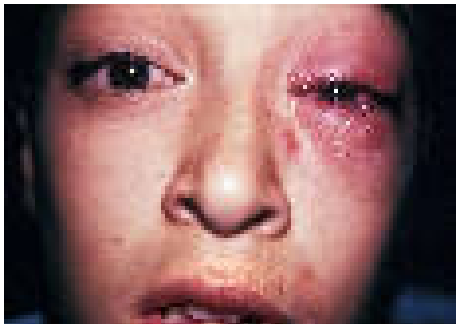
The known prevention methods are vaccine.

The infective dose is 8,000 to 50,000 spores. One billionth of a gram can be lethal to a human being. In one study it was determined that between 130,000 to 3 million deaths would follow the release of 100 kg of anthrax with as many deaths as that of a hydrogen bomb.

Depending on the potency, once symptoms develop, death can follow 1-3 days later.

The spores can be dispensed by aerosol, custom -made missiles, spray tanks attached to low-flying airplanes or helicopters.

SMALLPOX



The variola virus, more commonly known as smallpox, was eradicated from the world in 1977. The only places that the virus remains are in medical research labs and stocks of it kept in two World Health Organization reference labs. There is a policy by the World Health Organization that no other lab can possess the virus. It is not know for sure if it is being held by other labs but has been suspected to be in the possession of terrorist groups.

The virus comes in two the form of variola minor or the more deadly variola major. It can be spread by saliva droplets of infected people as well as aerosol release.

Symptoms include fever, fatigue and aches, followed by a rash with lesions and can lead to death within the first two weeks of the illness. The incubation period is about 12 days following exposure. There is no proven treatment available at this time, however, it can be prevented by vaccine. The infective dose is assumed at a low 10 to 100 organisms. The most probable method of dispersal is aerosol, it can be from a crop duster or an aerosol can.

BOTULISM



Botulism toxin -- the most potent lethal substance known to man -- is made by the bacterium *Clostridium botulinum*.

Botulism toxin can be inhaled or ingested via contaminated food or water.

Double visions, slurred speech, dry mouth and muscle weakness, which also starts at the top of the body and works its way down. Symptoms begin from six hours up to two weeks after exposure. Death can be caused by paralysis of the breathing muscles within 24 hours.

The CDC maintains Botulism anti-toxin that victims can be treated with. Botulism can be prevented with vaccine. It has been said that the only thing that is known about Botulism is that it is unknown how small a dose can kill you. CDC reports that one billionth of a gram is equivalent to a lethal dose.

Botulinum toxin is the most poisonous substance known. A single gram of crystalline toxin, evenly dispersed and inhaled, would kill more than 1 million people.

Botulism toxin can be spread by aerosol, sabotage food/water supply, ballistic missiles (scud and cruise), and spray tanks attached to low-flying airplanes or helicopters

Source: USARMY, CDC; American Medical Association, UK Health Department Center for Defense and International Security Studies.

One of the most frightening things that we must face is that the Al-Qaida has made public comments that they are recruiting "Disenchanted Americans" to carry out their goals so that they will not be "Profiled" and intercepted. It has been proven that the Al-Qaida have been actively recruiting from the Universities

in Europe. This makes the above toxins much more frightening due to the fact that these toxins are found in many University research departments. This fact must be kept in mind when developing a security program to comply with the USA PATRIOT ACT or the Public Health Security and Bioterrorism Preparedness Response Act of 2002, H.R, 3448. When hiring a consultant to conduct your security and compliance audits, you may want to insure that they are accredited by the Anti Terrorism Accreditation Board www.4cas.org or are certified by the Institute for Terrorism Response and Analysis.

With the many changes in the Security situation and the type of threat that we all face today, you must insure that you have a Terrorism Specialist look at your facility and not just a safety expert. The threat today is different than anything that America has had to protect its self from in the past and needs to have special experience and training.

I hope that this information will assist you and if you need more detailed information you can contact me at IDRC@att.net. In the next issue we will discuss the methods for protecting against chemical agents that could be used in a terrorist attack.

If there is anything that we need to understand it is that the procedures that we have used for years to protect our facilities is no longer adequate to provide a secure environment for the students and staff.