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The Most Likely Terrorist Use of Chemical or Biological Agents

By L Rivera, PhD

Terrorists have elevated their operations to an all out war against the US and the free world. Part of their strategy for the future will most likely include an increase in traditional terrorists' actions such as kidnappings, assassinations, bombings, and sabotage against US citizens and interests. In addition to acts like the mass shooting that took place on November 5, 2009, at Ft Hood, Tx in which Nidal Malik Hasan killed 13 people and wounded 30 others, as well as the attempted car bomb attack, by Mohamed Osman Mohamud in Oregon—18 minutes before the traditional Christmas tree lighting occurred (Cherry & Vercammen, 2010); one can also expect terrorists to try to obtain and use chemical and biological agents as WMD's.

Chemical Weapons

The use of chemicals as weapons of mass destruction represents a real threat, as well as a



clear and present danger to western societies. As exemplified by the March 20, 1995 gas attack in the Tokyo Subway, these chemicals can be delivered in ways that requires little sophistication making it very appealing to terrorists. The agent, or chemical used in Tokyo was liquid Sarin. Sarin is a nerve agent—highly toxic—that was developed by the Nazis in the 1930's. Unlike other chemicals—such as VX—Sarin can be produced with chemicals readily available to the public (Rivera, 2004). The method of delivery was also not very sophisticated; The Sarin was contained in plastic bags and delivered by five

individuals carrying two bags of the chemical each wrapped in newspapers—except for one that carried three. They also carried umbrellas with sharpened tips which they used to puncture the plastic bags in order to propagate the Sarin. The attack claimed the lives of twelve people and injured another 6000, which in proportion to the amount of Sarin used was not the worst outcome possible—simply because the perpetrators lacked the training/knowledge required to conduct a decent target analysis and consequently failed to consider the fact that chemical agents gradually decrease their lethality as they are dispersed and diluted. On the other hand, the psychological effects of the attack have gone way beyond the immediate casualties and the physical damage. A survey of victims of this attack indicated that many of the victims of the attack are suffering from Post Traumatic Stress Disorder (PTSD) (McKay, 2007).

Another factor which will contribute to the possibility of terrorist's use of chemical weapons is the spread of chemical weapons capability to third world countries which may have connections with terrorists. Iran, Libya, N. Korea and Syria—all listed by the State Department as supporters of terrorism—are believed to possess some capability for chemical and biological warfare, and are possible sources of chemical weapons for terrorists. Although the Chemical Weapons Conference has reduced the proliferation of chemical weapons and, in fact, made it illegal to develop and stockpile chemical weapons, the amount of chemical agent necessary for a terrorist operation would be extremely difficult to detect and can even be justified by claiming it as research material (Godber, 2001). Given the aforementioned constraints, it is assessed the most dangerous, possible and probable course of action for terrorist is to develop and employ a rudimentary chemical weapon/device, that although deadly, will lack in sophistication and therefore, the capability of producing mass casualties—as was the case with the 1995 Sarin attack in Tokyo, Japan.

Biological Weapons

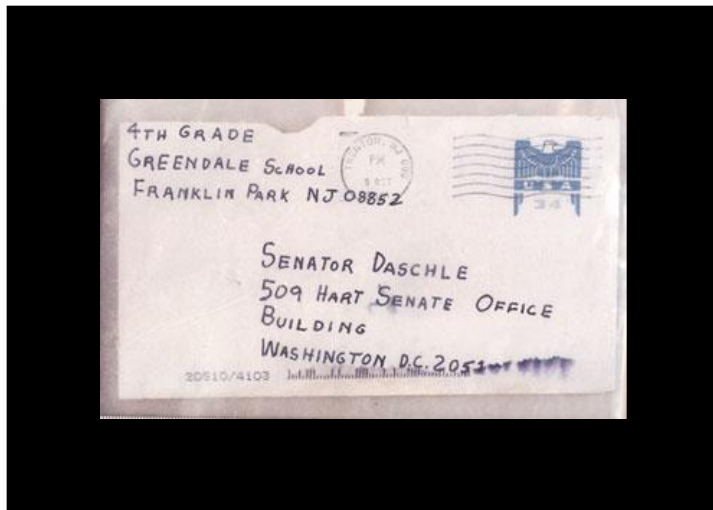
Biological weapons are infectious agents such as bacteria or viruses used intentionally to inflict harm upon others. These weapons consist of pathogenic microbes, toxins, and bioregulator compounds.

Bioterrorism poses an enormous threat and is difficult to prevent. A small vial of anthrax or smallpox could be released and cause tens of thousands of casualties. Terrorists are most likely to use organisms that cause infections disease because they are easily spread. (Don Philport in an article titled “Pandemic Threats—Are We Safe?” Published in the September 2005 issue of the Homeland Defense Journal).

Biological agents are rather attractive to terrorists as some of them are inexpensive and simple to produce compared to other weapons of mass destruction. These weapons are often referred to as the *“poor man’s nuke.”* With only a few hundred dollars to purchase fermentation equipment for “home brewing,” one could grow large amounts of viable bacteria in a few days. With a few thousand dollars, one would have sufficient funds to acquire, produce, and deploy bacterial agents that could kill thousands of people (Davis & Johnson, 2004). Such force can also come in the form of deadly communicable diseases that can ravage communities and potentially threaten the fabric of societies. This is compounded by the fact that modern wonders of science and technology enable dangerous individuals and groups to harvest these potential forces turning them into actual WMD’s (Chertoff, 2008).

The best know form of biological agent is probably “Anthrax” mainly because of its versatility as a biological weapon. Anthrax; is an acute disease caused by the spore-forming bacterium “Bacillus anthracis” (Currence, 2005). It primarily affects domesticated and wild animals—by and large herbivorous animals such as cattle, sheep, horses, mules, and goats.

Contamination of humans usually happens upon contact with animals that are infected with the disease.



In 2001, biological attacks were perpetrated shortly after the 9/11 terrorists acts against the World Trade Center in New York. The method of operation was simple and effective. The agent was placed in letters and sent to media organizations in New York City; ABC, CBS, NBC, the New York Post, Florida; the National

Enquirer and a number of US Senators—Tom Daschel and Patrick Leahy—through the US

Postal Service (Rivera, 2004). Nevertheless, the attacks did not yield many casualties, simply because achieving greater impact requires a greater amount of the agent and a more effective delivery system that would achieve wider dissemination. As this biological agent needs a highly sophisticated system of manufacturing to be effective, acquiring the necessary amount of weapon grade anthrax would probably require large logistical and technological support that could only come from a host nation, such as Iran, Syria and North Korea. Actions that would provoke a large response for the free world, something the sponsoring countries do not really want.

Conclusions:

Based on the aforementioned information it is reasonable to believe that a likely scenario for use of a chemical and or biological agents in an attack by an international, transnational, or domestic terrorist organization or group, would be to covertly deploy chemical or biological agents in small amounts—similar to the 1984 Rajneesh salmonella attack in Dalles, Oregon and the 1995 Sarin attack in Japan—to create fear among the population and consequently destroy people trust in the government's ability to protect them. Another possible scenario, with a different objective is for a group of terrorists, or terrorist's sympathizers, that has access and placement to strategic targets—economic, military, key government agencies—to infect themselves with a virus, such as a new strain of the Influenza Virus, and start a chain reaction that would cripple the nation. The bottom line is that while this course of action will not directly damage physical infrastructure such as power lines or computer systems, it threatens the operation of critical systems by potentially removing the essential personnel needed to operate them from the workplace for weeks or months (Philport, 2005). This attack could also be used as part of a larger coordinated offensive action; for example, disseminating a biological or chemical agent on a key/strategic location, while another branch of the terrorist organization conducts a large scale conventional attack, such as a truck bombing at a different strategic location (Xomba, 2010).

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