

Chapter 15

The Biological Threat

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"Mere months before the attack on Pearl Harbor shocked America out of its slumber, millions listened to and preferred to believe, those who told them that they need not rouse themselves, and that all will be well if only they continue to do all the pleasant and profitable and comfortable things they would like to do best." – Walter Lippmann

History of Biological Warfare

The first recorded instance of biological warfare goes back to 1348 and 1349. The Tartars used catapults to hurl the bodies of black plague victims (*yersenia pestis*) over the walls into the city of Caffa in the Ukraine. The black plague eventually spread from this city to Europe where it killed one third to one half of Europe's population. Bubonic plague has killed hundreds of millions of people during the span of recorded history. In 1754 American colonists intentionally distributed blankets from people infected with smallpox to the Indians. Due to their lack of immunity, the resulting smallpox epidemic killed 90% of the Indians exposed. Over the next 100 years the epidemic continued to move westward and facilitated the expansion of European populations on the North American continent. The Spaniards likewise brought smallpox and measles to Mexico and South America. The total death toll to Native Americans by white



man's diseases is estimated to have been about 75 million. It was the white man's diseases more than his technological edge that caused the decimation of the indigenous populations on the North and South American continents.

The Japanese had an extensive biological warfare research program during World War II. Evidence indicates that the Japanese used biological warfare in China against the nationalist forces there.

Biological Terrorism

*"Biological terrorism is now considered by the US government to be a credible threat."*¹ Early in the 1990's CIA Director John Deutch said that the threat of chemical and/ or biological attack in the U.S. was *"the most pressing intelligence challenge we face."* According to John Gannon, a senior intelligence officer, chemical and biological weapons are a clear and present danger for the United States. *"America's prestige*

*and high profile as a global power make us the world's biggest and most dispersed target."*² According to Defense Secretary William S. Cohen, *"A lone madman or a nest of fanatics with a bottle of chemicals, [or] a batch of plague-inducing bacteria...can threaten to kill thousands."* In September of 1999 the Commission on National Security, sponsored by President Clinton and the US Congress, released a report on the prospect of terrorism in the United States. According to the report, *"For many years to come, Americans will become increasingly less secure. America will become increasingly vulnerable to hostile attack on our homeland and our military superiority will not entirely protect us. Americans will likely die on American soil, possibly in large numbers. Threats to American security will be more diffuse, harder to anticipate and more difficult to neutralize than ever before."* According to Colonel Dr. Edward Etizen Jr., with the U.S. Army Medical Corps at Fort Detrick, Maryland, the greatest threat to the U.S. in the early part of the 21st century, *"will not come from a military confrontation, rather it will come from an attack from within our borders from a single individual or group that has access to weapons of mass destruction."* The September 1999 report from the Commission on National Security said that the U.S. government was concerned about the possible use of biological weapons by terrorists and that terrorist groups were known to be acquiring the material and the technical ability necessary to implement acts of biological terrorism. The report said, *"The most serious threat to our security may consist of unannounced attacks on American cities by sub-national groups using genetically engineered*

pathogens. In the hands of despots, the new science could become a tool of genocide on an unprecedented scale." Dr. Christopher F. Richards from the Brigham and Woman's Hospital in Boston, Massachusetts gave some further insight into this *"genocide on an unprecedented scale"* when he wrote, *"A biological attack on a major city could approximate the lethality of a nuclear explosion."*³

There is nothing exotic about the technology. Several college-educated terrorists with access to technical libraries and financial backing could make large amounts of the biological weapon Anthrax. Anthrax can be easily isolated from the soil in some parts of the United States. One van loaded with tanks of Anthrax could drive around Manhattan and spray enough contaminates to kill several million people within one week. One cargo aircraft flying a pattern over the populated areas of central and eastern United States could result in 20 million deaths within one week. The problem with Anthrax is that once you feel the symptoms, it is too late for treatment. Anthrax's long incubation period would allow the terrorists to escape long before the victims even realized they had been attacked.

So what do we do about this seeming sword of Damocles that is hanging over the heads of humanity? According to a March 1996 statement on the biological threat by Georgia Senator Sam Nun, the U.S. had a *"remarkable lack of domestic preparedness."* The advice of Scott Lillibridge, director of the Bioterrorism Preparedness Program for the Center for Disease Control and Prevention is to, *"Be prepared for the unexpected — whether it be a naturally occurring event such as a worldwide influenza pandemic or a deliberate*

release of anthrax by a terrorist.

According to a taskforce of the American College of Emergency Physicians, ***“Without awareness and planning, a bioterrorism event may be unrecognized or dismissed as a natural epidemic until the scope of such a disaster becomes catastrophic.”*** In July of 1999 Secretary of Defense William S. Cohen said, ***“The race is on between our preparations and those of our adversaries. We are preparing for the possibility of a chemical or biological attack on American soil because we must. There is not a moment to lose.”***

These are strong words from a man who is privy to the highest levels of classified information! Not only do they reflect urgency, but they also suggest that the worse case is very probable. In many ways the U.S. government seems to be stuck in a Catch-22 situation. The government has to deal with the threat, but no administration wants to give the public too much bad news, lest it upset investor confidence and create a crisis on Wall Street.

The U.S. government has been doing more than just talking about the problem. According to Dr. Jeff Kopland, head of the U.S. Center for Disease Control and Prevention, the CDC has put together eight of what they call “Push Packages.” Each Push Package includes 109 air cargo containers filled with antibiotics and related medical supplies that can be flown to any site of a bioterrorist incident in the U.S. within twelve hours. The CDC has also set up 81 labs around the U.S. that are equipped to test for six of the most likely biological agents that terrorists might use: plague, tularemia, botulin toxin, smallpox, Ebola and anthrax.

The Economics of Mass Destruction

If a government or group wanted to exterminate all human life in a given square kilometer of land using nuclear weapons it would cost them about \$2000. To exterminate all human life in the same square kilometer using area chemical weapon like nerve gas, it would cost about \$800. But it would only cost \$1 to exterminate all human life in that same square kilometer area using biological weapons like anthrax spores or ricin. What a bargain!

Protecting Yourself from Biological Terrorism

In terms of bio-warfare the only solution is some sort of airtight safe room or shelter equipped with an air filtration system that has a HEPPA quality filter. During the Gulf War when Saddam Hussein's army was firing scud missiles at Israel, there was major concern that Iraq might be arming these scuds with chemical and biological weapons. What the Israeli population did, besides getting issued a gas mask, was to construct safe rooms. These rooms were a designated room in a house that was lined and sealed off from the outside with 4-6 mil poly sheeting that comes in rolls. The sheeting was sealed at the edges with duct tape. The whole idea was to create a sort of makeshift clean room. One important factor here is that this room needs to have an air filtration unit, with a HEPA filter, bringing air into the sealed room. If the room is sealed, people will eventually suffocate if there isn't a dependable source of filtered air.

Most air filtration devices require some sort of power. In an all out bio-warfare event