How likely is a biochemical or nuclear attack? Is it worth the resources to prepare for such an event?

There is growing concern among scholars, public health officials, defense experts, politicians, and emergency personnel that the United States is ill prepared for a biochemical or nuclear attack. These same people argue for substantial U.S. investment in defense systems, detection equipment, planning, and emergency preparedness training to stop or minimize the damage from a biochemical or nuclear attack. Proponents of such a program argue that changes since the Cold War have worked to increase the likelihood that the U.S. will come under attack. Such attacks could come from other nations, internal terrorist organizations, or external terrorist organizations.

While the risk of conventional war has been minimized since the end of the Cold War, the threat of attack from fringe groups or countries of concern using weapons of mass destruction has grown. Shifts in the global strategic environment have motivated the United States to re-evaluate its national security priorities. The dissolution of the Cold War combined with rising ethnic and religious nationalism has intensified regional conflicts. The centralized control and discipline associated with the Cold War has given way to power vacuums and decentralized globalism. Add to this situation the continued rise of extremist groups, both within and outside the United States, the proliferation of weapons of mass destruction, and the blurring of national boundaries as globalism takes hold. These factors lead to destabilization and increase opportunities for countries of concern or terrorists to attack the U.S. with biochemical or nuclear weapons.

Russia's unstable transition to democracy along with its severe economic problems has made the country's arsenal vulnerable to leaks, theft, and illegal transportation of key weapons technologies. Despite the best efforts of major military powers, weapons of mass destruction continue to spread. Recent tests in Pakistan and India indicate that the nuclear arms race is not over. Nations such as Iran, Iraq, North Korea, and Syria are developing or have developed weapons of mass destruction U.S. security.

Most experts consider the threat of a biological and/or chemical weapons attack much more likely than a nuclear attack. Nuclear attacks require highly advanced technology and complex delivery systems. Nuclear weapons are bulkier and much more difficult to smuggle into the United States than biological or chemical weapons. Biochemical weapons, on the other hand, are easier to obtain, distribute, convert into weapons, and deliver in an effective and potentially catastrophic manner. However, a nuclear attack with a "dirty bomb"—a conventional explosive bomb that scatters nuclear materials to contaminate a site and expose people in the area to radiation sickness is much more probable than a fission or fusion nuclear bomb.

One could argue that a biochemical attack is very unlikely given the various international treaties, conventions, and enforcement mechanisms in place to control and limit their production and distribution. The international community has made strides in eliminating stockpiles, restricting further production, and instituting monitoring and inspection mechanisms. Those who argue against substantial biochemical defense and preparedness in the United States also point out that groups are less likely to release biological and chemical weapons because they can not be strategically deployed. A biological weapons release such as smallpox could just as easily decimate the party releasing it as the intended target. The effects are neither predictable nor controlled, and the use of such a weapon is seen by all civilized nations as morally unacceptable. Therefore a biochemical weapon is unlikely to be used to further a political agenda. On the other hand, so-called "apocalyptic" groups for whom destruction is an end, not a means, as well as interstate conflicts or national factions wanting to "cleanse" an ethnic population are not only extremely likely to use biochemical weapons, but may have already done so. The use of sarin by Aum Shinrikyo is the most famous example, but chemical weapons are believed to have been used in the Iran-Iraq war of 1980-88. The apartheid government of South Africa may have used biochemical weapons against native tribes. Examples of biochemical weapons use are uncommon compared to conventional weapons but have definitely occurred.

Proponents of a coordinated federal program to prepare for weapons of mass destruction point not only to changes in the international strategic environment, but also to the devastating health, economic, and societal impact such weapons can have. The price of being unprepared is incalculable. The initial infrastructure, technologies, and knowledge base to deal with an attack are already being developed and implemented. It is now simply a matter of devoting enough time and resources to implement a full-scale program. Proponents also point to recent studies that prove early intervention, proper training, and rapid medical response are the keys to limiting the casualties, economic costs, and security risks associated with a biochemical or nuclear attack.

There are a number of approaches the United States can employ individually or in concert to defend against a biochemical or nuclear attack. One is to prevent and reduce the spread of weapons of mass destruction along with the technology necessary to manufacture them. This goal can be accomplished through treaties, monitoring, and international enforcement. A second option is to deter the threat of attack through adequate defensive measures and the threat of retribution. There is growing sentiment for the U.S. to renegotiate the ABM treaty currently in place and to begin developing a fully operational anti-ballistic missile defense system. The third possibility is to prepare fully operational emergency response systems for biochemical and nuclear attacks. This is where proponents of an overall program see the greatest need. Local, state, and federal authorities must be properly trained and funded if the U.S. is to withstand biochemical and nuclear attacks on our soil. Although there is debate over how best to spend tax dollars to defend against biochemical or nuclear attack, or if we should even prepare for such an unlikely event, the potential consequences of being unprepared are great. The risk of a biochemical or nuclear attack perpetrated against the United States has a profound psychological impact. The threat of a silent, but deadly, killer that can be released in heavily populated areas terrifies the common person. In the current international environment, the threat of a biochemical or nuclear attack on the United States is a reality. As the U.S. enters the beginning stages of dealing with biochemical and nuclear attacks on our soil, the question becomes not if we should prepare, but how much and in what ways.

Questions for Discussion:

- 1. A key first responder group is the medical personnel who are first to diagnose and treat the injuries and illness that result from a nuclear, biological or chemical attack. The most effective preparation is continuing education, staged attacks and simulations. However, we live in a complex environment with rising cancer and heart disease rates, injuries from accidents, and other threats to national health. How important is additional training for a nuclear, biological or chemical attack response, compared to the competing claims for continuing education in other areas, such as cancer and trauma?
- 2. While the threat of WMD attacks is growing, some believe the U.S. government does not adequately protect its citizens from known weapons, such as handguns and conventional explosives. Given the publicized gun attacks such as the attack on Columbine High School, do you feel the government is doing enough to protect you against known threats—guns and bombs?
- **3.** At the end of the 20th century, there have been a flurry of anthrax hoaxes, which have diverted emergency resources from possible response to actual emergencies. At first, reactions were strong and the press publicized the attacks heavily. Recent hoaxes received much less media attention. This question is twofold: Does the attention paid to WMD use by terrorists encourage dangerous hoaxes? Is the decreasing media and public attention to hoaxes a good thing that will discourage pranksters or a sign of dangerous complacency that will lead to inadequate response to a dangerous emergency?
- 4. First responder training currently focuses on large American cities. However, an attack on a small city or town would garner considerable media attention, be less easily investigated and more easily controlled by terrorists. Obviously, the United States must start somewhere, and large cities with busy airports are an obvious place to start. However, it may be years before training and equipment "trickle down" to small towns and rural areas, many of

whom depend on volunteer emergency services. What can be done about national security in the small town? Do you see this as a problem at all?

5. The Clinton administration considers protection against a weapons of mass destruction or information warfare attack to be a critical priority for funding and federal agency attention. This emphasis can change with a new administration. In any event, adequate protective measures are expensive and time-consuming, possibly diverting agency resources from other responsibilities. For example, the Environmental Protection Agency must prepare to identify and handle hazardous biochemical materials for a WMD attack, but its ongoing responsibilities are clean air, clean water and safeguarding natural resources. The Department of Energy must work to safeguard the command and control facilities of energy supplies from attack and yet also manage the country's scarce energy resources and actively search for alternative energy resources for the future. Other departments have similar competing demands for their attention, such as Health and Human Services, the Federal Emergency Management Association and the Department of Transportation, to name a few. Adding national security issues to agency agendas will mean increased staffing and funding or else departments will be forced to overcommit their resources which can result in inadequate performance. Should we devote serious funds and attention for national security in this volatile first decade of the new millennium, or should we concentrate our federal agency resources on well-known problems and issues that we still have not adequately resolved?