

Chapter 7

THE GLOBAL CHALLENGE OF WMD TERRORISM

Introduction

The nexus of weapons of mass destruction (WMD) and terrorism poses one of the gravest potential risks to the national security of the United States and its global partners. A successful WMD terrorist attack could result in hundreds of thousands of casualties and produce far-reaching economic and political consequences that would affect all members of the international community. This chapter outlines:

- The various types of materials terrorists may use in a WMD attack;
- The potential that the sophisticated resources of a state could be directed or diverted to facilitate WMD terrorism;
- The emerging WMD terrorism threat presented by non-state facilitators; and
- Ongoing U.S. initiatives to combat this growing global risk.

The U.S. Government places the highest priority on working with a broad range of international partners to develop effective policies and initiatives to meet the global challenge of WMD terrorism.

The Material Threats

There are four generally accepted categories of weapons of mass destruction that terrorists may seek to acquire and use in a WMD terrorist attack: nuclear, radiological, biological, and chemical. (Note: The White House 2002 “National Strategy to Combat Weapons of Mass Destruction”^{*} defines WMD as nuclear, biological and chemical weapons, excluding radiological.)

Nuclear

“The greatest threat before humanity today is the possibility of a secret and sudden attack with chemical, biological, or radiological, or nuclear weapons.” President George W. Bush, February 11, 2004.

Some terrorist organizations, such as al-Qaida, have openly stated their desire to acquire and use nuclear weapons. The diffusion of scientific and technical information regarding the assembly of nuclear weapons, some of which is now available on the Internet, has increased the risk that a terrorist organization with the right material could develop its own nuclear weapon. The complete production of a nuclear weapon likely remains beyond the reach of terrorists for the foreseeable future. Terrorists may, however, seek to link up with a variety of facilitators to develop their own nuclear capability. These facilitators include black market

^{*} <http://www.whitehouse.gov/news/releases/2002/12/WMDStrategy.pdf>

proliferators or transnational criminal networks that may seek to profit from the sale of nuclear material, a weaponized device, or technical knowledge gathered from alienated individuals of a national nuclear program.

Radiological

Some terrorists seek to acquire radiological materials for use in a radiological dispersal device (RDD), or “dirty bomb.” Most radiological materials lack sufficient strength to present a public health risk, and casualties directly attributable to even the most dangerous radiological materials (cobalt-60 or cesium-137) would likely be limited to dozens of deaths and hundreds of injured if a sufficient amount of material were acquired and dispersed. Radiological material is used across a broad array of industrial settings, including in X-ray machines, well-logging devices, and other measuring instruments. Its widespread use makes radiological material significantly easier to procure than fissile nuclear material

Biological

Another deadly threat, biological weapons, are pathogens carried through food, air, water, or living organisms. If properly released, biological weapons can kill on a massive scale, even spreading across oceans to distant continents and population centers.

Like other WMD, however, developing a biological weapons capability presents scientific and operational challenges. The quality of the biological weapon greatly determines its ability to harm people. It requires substantial technical expertise to assemble a biological weapon such as the one used in the 2001 anthrax attacks. Some terrorist organizations, however, remain interested in developing a bioweapons capability.

“Bioterrorism is a real threat to our country. It’s a threat to every nation that loves freedom. Terrorist groups seek biological weapons; we know some rogue states already have them . . . It’s important that we confront these real threats to our country and prepare for future emergencies.” President George W. Bush, June 12, 2002

Among present-day terrorist organizations, al-Qaida is believed to have made the greatest effort to acquire and develop biological weapons. U.S. forces discovered a partially built biological weapon laboratory near Kandahar after expelling the Taliban from Afghanistan. Although it was not conclusive that al-Qaida succeeded in obtaining a biological weapon, the discovery demonstrated a concerted effort to acquire a biological weapons capability. Terrorist development of a more advanced biological weapon capability would likely require direct assistance from disenfranchised technicians or scientists formerly affiliated with a state program.

Chemical

Chemical weapons represent another highly dangerous potential tool in the hands of terrorists. Effectively dispersed and in sufficient dosages, chemical weapons could kill tens of thousands and cause severe and long-term health and environmental hazards. Not since the 1995 sarin

attack conducted by Aum Shinrikyo in the Tokyo subway system has an attack been conducted with a sophisticated chemical weapon. Since then, only materials with legitimate dual uses, such as pesticides, poisons, and industrial chemicals, have been used. Most chemical weapons are difficult to handle and employ, but as demonstrated by materials uncovered in Afghanistan in 2001 and by French officials in 2002, terrorists remain keen to obtain and use chemical weapons. The growth and sophistication of the worldwide chemical industry, including the development of complex synthetic and dual-use materials driven in part by the emergence of nanotechnology, may make the task of preventing and protecting against this threat more difficult. Preventing chemical terrorism is particularly challenging as terrorists can, with relative ease, use commercial industrial toxins, pesticides, and other commonly available chemical agents as low-cost alternatives to conventional attacks.

State Sponsorship of Terrorism: A Key Concern

A state that directs WMD resources to terrorists, or one from which enabling resources are clandestinely diverted, may pose a potentially grave WMD terrorism threat. While terrorist organizations will continue to seek a WMD capability independent of state programs, the sophisticated WMD knowledge and resources of a state could enable a terrorist capability. State sponsors of terrorism and all nations that fail to live up to their international obligations deserve greater scrutiny as potential facilitators of WMD terrorism. Iran presents a particular concern, given its active sponsorship of terrorism and its continued development of a nuclear program.

Non-State Facilitators: An Emerging Threat

State sponsors of terrorism represent just one facet of the overall risk of WMD terrorism. Non-state facilitators have emerged as a growing WMD proliferation threat in recent years. In 2003, the United States and its international partners succeeded in interdicting a shipment of WMD-related material destined for Libya's nuclear program. As facts emerged regarding this shipment and its origin, the U.S. Government gained insight into an emerging WMD terrorism risk. Pakistani nuclear scientist A.Q. Khan had developed a transnational nuclear proliferation network reaching from Southeast Asia to Europe, and was making available sensitive technology and WMD-related materials to rogue nations willing to pay.

"In recent years, another path of proliferation has become clear, as well. America and other nations are learning more about black-market operatives who deal in equipment and expertise related to weapons of mass destruction...And with deadly technology and expertise going on the market, there's the terrible possibility that terrorist groups could obtain the ultimate weapons they desire most." President George W. Bush, February 11, 2004.

The dismantling of the A.Q. Khan network revealed an uncomfortable truth about globalization. The very trends driving globalization – improved communications and transportation links – can enable development of extended proliferation networks that may facilitate the terrorist acquisition of WMD. Globalization requires that partner nations work together closely to prevent, detect, and disrupt linkages that may develop between terrorists and facilitators such as A.Q. Khan.

Taking Action to Combat WMD Terrorism

Since September 11, 2001, the international community has taken significant strides in responding to the threat of WMD terrorism. States are working together bilaterally and multilaterally to address these threats and protect their populations. The United States has taken concrete measures to build a layered defense against the WMD terrorism threat. In 2003, the U.S. Government announced the first National Strategy to Combat Weapons of Mass Destruction. Through a variety of multinational initiatives such as the Global Partnership against the Spread of Weapons of Mass Destruction, the Global Threat Reduction Initiative, and the Proliferation Security Initiative (PSI), the United States has taken a leadership role in reducing the threat of WMD in the hands of non-state actors and terrorists.

The Proliferation Security Initiative

Announced by President Bush in 2003, the Proliferation Security Initiative (PSI) deserves special mention as a particularly well received and effective international initiative. The PSI is a global effort that aims to stop the trafficking of WMD, their delivery systems, and related materials to and from states and non-state actors of proliferation concern worldwide. States that wish to join the PSI are asked to endorse a Statement of Interdiction Principles that identifies specific measures participants intend to undertake for the interdiction of WMD and related materials. PSI participants also conduct exercises to improve their operational capabilities to conduct interdictions, and meet periodically to develop new operational concepts and share information. PSI has led to a number of important interdictions over the last two years, and is an important tool in the overall U.S. strategy to combat WMD terrorism.

U.S. Partnerships Supporting a Global Defense-in-Depth

The United States has also worked with partner nations through the United Nations and the International Atomic Energy Agency (IAEA) to reduce the threat of WMD in the hands of terrorists. In the past few years, the UN Security Council has passed two important resolutions related to the prevention of terrorism and the proliferation of WMD. In 2001, the Security Council adopted Resolution 1373, which requires all UN member states to refrain from providing any support, active or passive, to terrorists, and to work together to limit terrorist movement and safe haven. In 2004, the Security Council adopted Resolution 1540, which requires all UN member states to refrain from providing support to non-state actors that attempt to develop or acquire WMD and their means of delivery. Taken together, these two UN Security Council Resolutions demonstrate the commitment of the international community to work collaboratively to prevent terrorists from acquiring WMD.

In 2005, the UN General Assembly adopted the Convention on the Suppression of Acts of Nuclear Terrorism (Nuclear Terrorism Convention). The United States was one of the first signatories. As of January 1, 2006, the Nuclear Terrorism Convention had been signed by almost 100 countries. The adoption of the Nuclear Terrorism Convention, and the recent adoption of the Amendment to the Convention on the Physical Protection of Nuclear Material and the Protocol to the Convention for the Suppression of Unlawful Acts against the Safety of

Maritime Navigation, both U.S. initiatives, underscored the recognition of many countries to the risk of WMD terrorism.

In late 2005, as part of a reorganization approved by Secretary Rice and endorsed by Senator Richard Lugar, Chairman of the Senate Foreign Relations Committee, the Department of State created the Office of Weapons of Mass Destruction Terrorism in the newly formed International Security and Nonproliferation Bureau. In close partnership with the Office of the Coordinator for Counterterrorism and other State Department offices, the mission of the Office of WMD Terrorism is to work with domestic and international partners to develop a global layered defense in-depth to prevent, protect against, and respond to the threat or use of WMD by terrorists.

Conclusion

The potential threat of terrorists acquiring and using WMD poses one of the greatest security challenges facing the United States today. During the past year, the U.S. Government has built on a range of activities and launched new efforts to prevent, protect against, and respond to the threat or use of WMD. Together with partner nations and international organizations, the United States will continue to take the initiative to reduce the global risk of WMD terrorism.