

# Country Reports on Terrorism -Report Home Page

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#### Chapter 4 -- 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 major WMD terrorist attack could result in mass casualty events and produce far-reaching economic and political consequences that would affect all members of the international community. This chapter outlines:

- The key elements of the United States' National Strategy for Combating WMD Terrorism;
- The various types of materials terrorists may use in a WMD attack:
- The potential that resources of a state could be directed or diverted to facilitate WMD terrorism;
- The emerging WMD terrorism threat presented by non-state facilitators; and
- Transformational U.S. partnerships to combat this growing global risk.

The United States places the highest priority on working with a broad range of national governments, international organizations, local governments, and private sector organizations, to develop effective partnerships to confront the global challenge of WMD terrorism.

#### DIPLOMATIC AND STRATEGIC PRIORITIES FOR COMBATING WMD TERRORISM

U.S. diplomatic priorities for combating WMD terrorism build on the comprehensive approach set forth in the U.S. National Strategy for Combating WMD Terrorism. Specifically, our strategic approach hinges on the six objectives outlined in the National Strategy. We work across all objectives simultaneously to maximize our ability to eliminate the threat.

- Determine terrorists' intentions, capabilities, and plans to develop or acquire WMD. We need to understand and assess the credibility of threat reporting and
  provide technical assessments of terrorists' WMD capabilities.
- Deny terrorists access to the materials, expertise, and other enabling capabilities required to develop WMD, with a particular focus on weapons-usable fissile
  materials, dangerous pathogens, and poisonous chemicals; as well as methods of transport, sources of funds, and other capabilities that facilitate the execution of
  a WMD attack. In addition to building upon existing initiatives to secure materials, we are developing innovative approaches that blend classic counterproliferation,
  nonproliferation, and counterterrorism efforts.
- Deter terrorists from employing WMD. A new deterrence calculus combines the need to deter terrorists, facilitators, and supporters from contemplating a WMD attack and, failing that, would need to dissuade them from actually conducting an attack. Traditional threats may not work because terrorists generally show a wanton disregard for the lives of innocents and, in some cases, for their own lives. We require a range of deterrence strategies that are tailored to the various WMD threats and the individual actors who facilitate or enable those threats. We will employ diplomatic strategies that seek to address extremism and defuse volatile conditions to discourage consideration of WMD as an appropriate tool to address perceived injustices.
- Detect and disrupt terrorists' attempted movement of WMD-related materials, weapons, and personnel. We will seek to expand our global capability for detecting
  illicit materials, weapons, and personnel transiting abroad. We will use our global partnerships, international agreements, and ongoing border security and
  interdiction efforts. We also will continue to work with countries to enact and enforce strict penalties for WMD trafficking and other suspect WMD-related activities.
- Prevent and respond to a WMD-related terrorist attack. Once the possibility of a WMD attack has been detected, we will seek to contain, interdict, and eliminate
  the threat. We will continue to develop requisite capabilities to eliminate the possibility of a WMD operation and to prevent a possible follow-on attack. We will
  prepare ourselves for possible WMD incidents by developing capabilities to manage the range of consequences that may result from such an attack.
- Define the nature and source of a terrorist-employed WMD device. Should a WMD terrorist attack occur, the rapid identification of the source and perpetrator of an
  attack would facilitate our response efforts and may be critical in disrupting follow-on attacks. We will maintain and improve our capability to determine
  responsibility for the intended or actual use of WMD via accurate attribution, using the rapid fusion of technical forensic data with intelligence and law enforcement
  information.

As we move forward in the implementation of our diplomatic strategic priorities for combating WMD terrorism, we will take special care to work closely with the full range of foreign partners to prioritize and to tailor our capacity-building approaches to the regional and local conditions we face across the world.

## 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.

## Nuclear

Some terrorist organizations, such as al-Qa'ida (AQ), 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 in possession of sufficient fissile material could develop its own crude nuclear weapon. The complete production of a nuclear weapon strongly depends on the terrorist group's access to fissile material and scientific expertise. Terrorists may, however, seek to link up with a variety of facilitators to develop their own nuclear capability. These facilitators include black market proliferators or transnational criminal networks that may seek to profit from the sale of nuclear material, a weaponized device, or technical knowledge gathered from nuclear experts involved in a national nuclear program.

#### Radiological

Some terrorists seek to acquire radioactive materials for use in a radiological dispersal device (RDD) or "dirty bomb." Most radioactive materials lack sufficient strength to present a significant public health risk once dispersed, and the materials posing the greatest hazard would require terrorists to have the expertise to handle them without getting radiation sickness and possibly dying or being detected. Public panic and economic disruption caused by setting off a radiological dispersal device, however, could be substantial, even if a weak radioactive source is used. Radioactive materials are used widely in industrial, medical, and research applications and include devices used for power supply in remote locations, cancer therapy, food and blood irradiation, and radiography. Their widespread use in nearly every country makes radioactive materials much more accessible than fissile material.

## Biological

Bioterrorism, another deadly threat, is the deliberate dispersal of pathogens through food, air, water, or living organisms to cause disease and, potentially more devastating, trigger alarm in a population. If properly produced and released, biological agents can kill on a massive scale and, if terrorists use a pathogen that can be transmitted from person to person, the disease can quickly spread across oceans and continents through air travel before authorities realize their nations have been attacked.

Developing a bioterrorism capability presents some scientific and operational challenges. However, the required scientific capabilities are not beyond the expertise of motivated biologists with basic university-level training. And, unlike other types of WMD, the materials required to produce a weapon are widely available – some are even found in nature. Even a badly-designed weapon resulting in limited health impact can cause significant uncertainty. Even though a small-scale bioterrorism attack, such as the 2001 anthrax attacks in the United States, can produce a relatively small number of cases of the disease, the costs of decontamination, medical treatment for the "worried well," decreased commercial activity, social distress, and lost productivity can be considerable. The terrorists can often meet their objective of creating disruption and fear without large numbers of casualties.

Among present-day terrorist organizations, AQ is believed to have made the greatest effort to acquire and develop a bioterrorism program. U.S. forces discovered a partially built biological weapons laboratory near Kandahar after expelling the Taliban from Afghanistan. Although it was not conclusive that AQ succeeded in obtaining a biological weapon, the discovery demonstrated a concerted effort to acquire a biological weapons capability.

#### Chemical

Chemical weapons represent another highly dangerous potential tool in the hands of terrorists. Effectively dispersed and in sufficient dosages, chemical agents could cause mass casualties as demonstrated by the use of chemical weapons during World War I. Today's terrorist threat ranges from the potential acquisition and use of militarized chemical weapons and delivery systems, to the production and use of improvised chemical agents and dissemination systems like the 1995 attack conducted by Aum Shinrikyo in the Tokyo subway system. Perpetrators of that attack employed an improvised nerve agent (sarin) with plastic bottles taped together, and the pointed end of an umbrella to puncture the containers, which caused mixing and dissemination of the materials. More recently, terrorists have concentrated on acquiring and employing chemical materials with dual uses, such as pesticides, poisons, and industrial chemicals, in their operations (see below). The growth and sophistication of the worldwide chemical industry, including the development of complex synthetic and dual-use materials, 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 and materials as low-cost alternatives to militarized weapons and delivery systems, though likely with more limited effects.

## Dual-Use Materials, Equipment, Research, and Technologies of Concern

Reducing the risk of terrorist acquisition of, access to, and use of dual-use materials, equipment, research, and technologies also remains a critical challenge. Terrorists have shown an interest in developing improvised devices leveraging such capabilities, and the diffusion of information on the Internet regarding dual-use research has compounded this challenge. Recent attacks in Iraq involving improvised devices containing chlorine, a dual-use chemical used in water treatment facilities, offer a notable example. Effective partnerships with private sector organizations, industry, academia, and the scientific research community, as well as with local governments, will play an important role in mitigating the risk of dual-use capabilities falling into the wrong hands.

## 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. Although 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 counterterrorism and nonproliferation obligations deserve greater scrutiny as potential facilitators of WMD terrorism.

## 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, and could eventually provide terrorists with conduits to materials and expertise that are particularly hard to acquire. In 2003, the United States and its international partners succeeded in interdicting a shipment of WMD-related material destined for Libya's then-active nuclear weapons program. As facts emerged regarding this shipment and its origin, the United States 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 nations willing to pay.

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 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.

#### TRANSFORMATIONAL PARTNERSHIPS TO COMBAT WMD TERRORISM

Since September 11, 2001, the international community has made 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 United States 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, the Proliferation Security Initiative, and the Global Initiative to Combat Nuclear Terrorism, 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, WMD 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 its Statement of Interdiction Principles, which identifies specific measures participants intend to undertake for the interdiction of WMD and related materials. As of December 31, 2007, 86 states have endorsed the statement. PSI participants also conduct exercises to improve their operational capabilities to conduct interdictions and meet periodically to share information and develop new operational concepts. The PSI has led to a number of important interdictions over the last five years and is an important tool in the overall U.S. strategy to combat WMD terrorism

The Global Initiative to Combat Nuclear Terrorism. President Bush and Russian Federation President Putin announced the Global Initiative to Combat Nuclear

Terrorism on July 15, 2006, to expand and accelerate the development of partnership capacity against one of the most serious threats to international security. The Global Initiative offers a comprehensive approach to strengthening all defensive layers necessary to prevent, protect against, and respond comprehensively to the nuclear terrorist threat.

By agreeing to the Global Initiative's Statement of Principles, partner nations commit themselves to:

- Develop, if necessary, and improve accounting, control, and physical protection systems for nuclear and other radioactive materials and substances;
- Enhance security of civilian nuclear facilities;
- Improve the ability to detect nuclear and other radioactive materials and substances in order to prevent illicit trafficking in such materials and substances, to
  include cooperation in the research and development of national detection capabilities that would be interoperable;
- Improve capabilities of participants to search for, confiscate, and establish safe control over unlawfully held nuclear or other radioactive materials and substances or devices using them;
- Prevent the provision of safe haven and financial or economic resources to terrorists seeking to acquire or use nuclear and other radioactive materials and substances;
- Ensure respective national legal and regulatory frameworks, which are sufficient to provide for the implementation of appropriate criminal and, if applicable, civil liability for terrorists and those who facilitate acts of nuclear terrorism;
- Improve capabilities of participants for response, mitigation, and investigation in cases of terrorist attacks involving the use of nuclear and other radioactive
  materials and substances, including the development of technical means to identify nuclear and other radioactive materials and substances that are, or may be,
  involved in the incident; and
- Promote information sharing pertaining to the suppression of acts of nuclear terrorism and their facilitation, taking appropriate measures consistent with their national laws and international obligations to protect the confidentiality of any information which they exchange in confidence.

In the beginning of 2007, the partnership consisted of 13 nations; by December 31, the partnership had grown to 66 partner nations representing all regions of the world. The IAEA and the EU also participated as observers. Partner nations created a Plan of Work, committing themselves to host or co-sponsor events in furtherance of the goals in the Statement of Principles. In 2007, seven countries conducted nine Plan of Work activities implementing all eight of the Principles. The Global Initiative also engaged the private sector and local governments, both of which have an important role to play in preventing, protecting against, and responding to acts of nuclear terrorism

The Global Threat Reduction Initiative (GTRI). The goal of GTRI, announced by the United States on May 26, 2004, in Vienna, Austria, is to identify, secure, remove, or facilitate the disposition, as quickly and expeditiously as possible, of vulnerable nuclear and radioactive materials and equipment around the world that pose a potential threat to the international community. International partners are key participants in this initiative, and GTRI has undertaken cooperative activities in over 90 countries. In particular, GTRI seeks to facilitate globally the reduction or elimination of the use of highly enriched uranium in civilian nuclear applications and to remove or protect other vulnerable nuclear and radiological materials at civilian sites worldwide. Specific activities include the conversion of reactors used for research, testing, and medicalisotope production from the use of highly enriched uranium (HEU) fuel to low enriched (LEU); repatriation of fresh and spent HEU fuel to its country of origin (the United States or Russian Federation); enhancing the physical protection at sites utilizing such materials; and removal of unwanted radiological sources and other nuclear materials not otherwise covered by the fuel-return programs.

Additional U.S. Efforts Supporting a Global Layered Defense. The United States has also worked with partner nations through the UN and the IAEA to reduce the threat of WMD in the hands of terrorists. 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. The United States remains committed to full implementation of both UN Security Council Resolutions 1373 and 1540.

The Convention on the Suppression of Acts of Nuclear Terrorism (Nuclear Terrorism Convention) entered into force on July 7, 2007. The USG submitted the Nuclear Terrorism Convention to the Senate for advice and consent to ratification in 2007, along with three other multilateral counterterrorism instruments: the Amendment to the Convention on the Physical Protection of Nuclear Material, the Protocol of 2005 to the Convention on the Suppression of Unlawful Acts Against the Safety of Maritime Navigation, and the Protocol of 2005 to the Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf. Collectively, these treaties will enhance international cooperation with regard to the prevention of WMD terrorism and proliferation of WMD, as well as the investigation and prosecution of such acts.

Conclusion. The potential threat of terrorists acquiring and using WMD poses one of the greatest security challenges facing the United States and our international partners today. During the past year, the USG 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.

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