United States General Accounting Office

GAO

Report to Congressional Requesters

June 1999

COMBATING TERRORISM

Analysis of Potential Emergency Response Equipment and Sustainment Costs

GAO/NSIAD-99-151

GAO
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United States General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-282618

June 9, 1999

The Honorable Ike Skelton
Ranking Minority Member
Committee on Armed Services
House of Representatives

The Honorable Christopher Shays
Chairman, Subcommittee on National
Security, Veterans Affairs and International Relations
Committee on Government Reform
House of Representatives

Under the Nunn-Lugar-Domenici Domestic Preparedness program,[1] the Department of Defense (DOD) and others provide training, equipment, and advice to enhance the capability of civilian emergency response personnel to respond to a possible terrorist incident involving a chemical, biological, radiological, or nuclear device (CBRN). In 1998, we reported that some local jurisdictions were deciding on equipment purchases without the benefit of formal threat and risk assessments based on valid threat data.[2] In the absence of defined requirements, you asked us to determine the potential cost of equipping and maintaining the capability of cities to respond to a terrorist incident involving CBRN. Specifically, we (1) obtained the views of federal, state, and local officials on equipment they believed would provide various levels of capability to respond to a CBRN incident and (2) determined the potential procurement and sustainment costs of these items.

To conduct our work, we developed a preliminary equipment list based on our prior work and discussions with DOD, Federal Bureau of Investigation, and local officials. We then surveyed 36 federal, state, and local officials

[1]This program was authorized in the National Defense Authorization Act for Fiscal Year 1997 (title XIV of P.L. 104-201, Sept. 23, 1996) and is commonly referred to by its sponsors' names, Senators Nunn, Lugar, and Domenici.

[2]Combating Terrorism: Observations on Crosscutting Issues (GAO/T-NSIAD-98-164, Apr. 23, 1998); Combating Terrorism: Threat and Risk Assessments Can Help Prioritize and Target Program Investments (GAO/NSIAD-98-74, Apr. 9, 1998); Combating Terrorism: Observations on the Nunn-Lugar-Domenici Domestic Preparedness Program (GAO/T-NSIAD-99-16, Oct. 2, 1998); and Combating Terrorism: Opportunities to Improve Domestic Preparedness Program Focus and Efficiency (GAO/NSIAD-99-3, Nov. 12, 1998).

with hazardous materials (HAZMAT) expertise—24 of whom responded—to determine the equipment they believed would provide various levels of response capability. Based on the 24 responses, we revised the equipment list. The list is for illustrative purposes, is not meant to represent a minimum or maximum of equipment needs for local jurisdictions, and may not reflect the actual equipment costs for a local jurisdiction. Appendix I further describes our scope and methodology.

Results in Brief

We identified over 200 equipment items that federal, state, and local officials believed would enhance their capability to respond to a CBRN incident. These items ranged from standard items such as duct tape and gloves to more sophisticated devices such as mobile command posts and climate control systems. The officials we surveyed categorized the items to represent different levels of capability—basic and modest, moderate, and high in comparison to the basic level. A modest increase over basic HAZMAT would include additional detection and decontamination equipment. A moderate increase would include a greater array of detection equipment than the modest level. The high level of increased equipment capability would include additional and more expensive detection equipment.

We estimated the potential cost of initially procuring and sustaining the equipment items over a 10-year period using a notional city of 500,000. As table 1 shows, these costs ranged from a total of about $4.6 million for items considered to provide a basic capability to about $43 million for items considered to provide a high capability.

Table 1: Possible Cost to Equip a Notional City of 500,000 to Respond to a CBRN Event

Dollars in millions

Equipment level	Initial procurement cost	Sustainment cost over 10 years	Total cost
Basic HAZMAT	$1.3	$3.3	$4.6
Modest	$5.2	$13.1	$18.3
Moderate	$8.3	$20.9	$29.2
High	$12.2	$30.7	$42.9

This table represents a baseline and does not include some costs, such as those associated with equipment maintained as a stockpile, equipment training and certification, or some hospital and emergency medical response services.

Background

According to the U.S. intelligence community, conventional explosives and firearms are the weapons of choice for terrorists at least partly because chemical and biological weapons are more difficult to weaponize and the results are unpredictable. However, intelligence agencies state that terrorists' use of chemical and biological materials may increase over the next decade. Despite differing views, Congress authorized and funded over $200 million in fiscal year 1999 for numerous training and equipment programs, including those offered by the Departments of Justice and Defense and the Federal Emergency Management Agency, to prepare local jurisdictions for a CBRN incident. Some jurisdictions are deciding on equipment purchases without the benefit of formal threat and risk assessments using valid threat data. As we have emphasized in our April 1998 report and testimony, a critical component of establishing and expanding programs to combat terrorism is an analytically sound threat and risk assessment using valid inputs from the intelligence community and other agencies. Such an assessment is widely recognized as an effective decision support tool for prioritizing security investments and would help local jurisdictions select equipment that would provide the greatest benefit whether purchased with federal, state, or local funds.

While no valid set of equipment requirements has been defined or established for equipping a local jurisdiction to respond to a CBRN terrorist incident, the InterAgency Board[3] for Equipment Standardization and InterOperability recently developed a list of standardized equipment. The list can be used by emergency personnel as a guideline when acquiring CBRN response equipment and is intended to promote interoperability and standardization among the response community at the local, state, and federal levels. Use of the list, however, is voluntary, and state or local jurisdictions decide the manufacturers, types, and quantities of the items to be selected to meet their perceived operational needs.

No Defined Requirements and Little Consensus on Needed Equipment

There is no assessment that would provide a basis for clearly defined and prioritized equipment requirements based on threat and risk, and there is little consensus among federal, state, and local officials on the types of equipment needed for a city to prepare for a CBRN terrorist incident at various levels. Based on our previous work, the Board's list, and discussions with agency officials, we identified about 200 equipment items that might be used to respond to a CBRN incident. We then surveyed 36 federal, state, and local officials on the equipment they believed would provide a basic HAZMAT equipment capability and various increments of increased equipment capabilities to respond to industrial chemical spills and/or CBRN terrorist events. Twenty-four of these officials responded.

The results of our survey identified additional protective, detection, decontamination, and communications equipment to illustrate incremental increases in equipment capability over basic HAZMAT. The modest increase in equipment capability included more detection, communications, and decontamination equipment, such as decontamination showers. The moderate increase in equipment capability included additional detection and decontamination items, such as gas chromatograph/mass spectrometers. The high level in equipment capability included more expensive detection equipment, such as perimeter sampling systems and a Fox vehicle.

[3]The Board is an advisory board to the National Domestic Preparedness Office at the Federal Bureau of Investigation and consists of officials from local, state, and federal government organizations, including the Federal Bureau of Investigation, the Department of Justice, and the Director of Military Support, Department of the Army. Its charter is to establish, maintain, and update a standard equipment list that the interagency community could use to prepare for and respond to terrorism.

All 24 survey respondents agreed that boundary marking tape was a basic HAZMAT item. Respondents varied widely as to the level of capability other equipment could provide. For example, six respondents designated a chemical agent water test kit[4] as basic HAZMAT equipment, four indicated that it represented a modest increased capability above basic HAZMAT, three indicated that it represented a moderate level of increased capability, and seven indicated it represented a high level of increased capability. Four respondents did not place the kit in any category. The thermal imaging camera also received a varied response. For basic HAZMAT and modest, moderate, and high levels of increased capability over basic HAZMAT, the responses were eight, two, seven, and five, respectively. Two respondents did not place this item in any category.

Procurement and Sustainment Costs

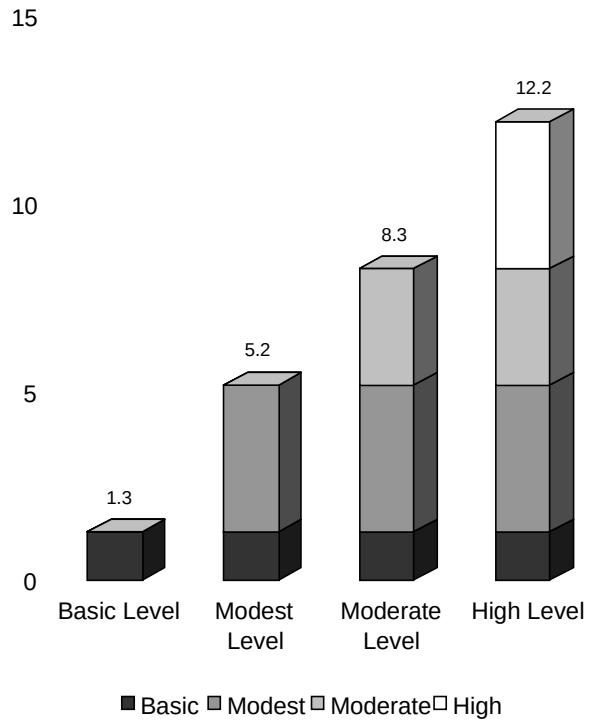
No one has created a validated list of equipment to provide a sound basis for determining costs to initially equip and sustain various levels of equipment capability for a local jurisdiction to deal with a CBRN incident. However, using the weighted results of our survey to establish which equipment would go into which category, we estimated the potential costs to initially equip a notional city of 500,000 people.[5] The notional city has 1,337 first responders, 112 of which are technically trained.[6] As shown in figure 1, the estimated costs range from $1.3 million (basic HAZMAT) to $12.2 million (high level of increased equipment capability).

[4]A chemical agent water test kit evaluates any chemical warfare agent contamination in a water source.

[5]Because of the widely varying opinions on which equipment belonged in which category, we reconciled the results through weighting. Based on how a respondent rated each item in our survey, we assigned a score to that response and then divided the total by the number of responses.

[6]The numbers of first responders, the size of response teams, and our equipment list were derived from assumptions discussed in our scope and methodology and are for estimating purposes only. We do not intend to imply our concurrence with the appropriateness of such resources for responding to a CBRN incident, and our cost estimate is not to be considered a recommendation for how a city should be structured or equipped.

Figure 1: Estimated Procurement Costs

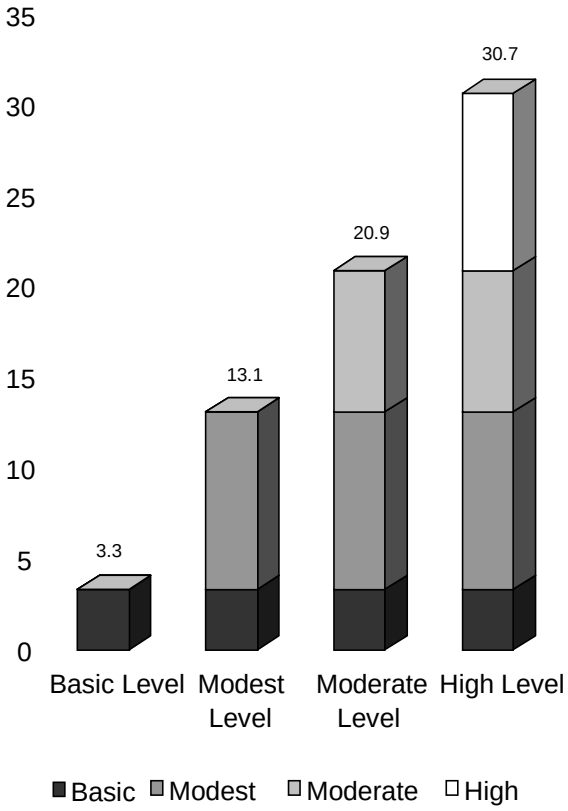


Source: Our analysis.

Each local jurisdiction has its own perceived HAZMAT needs and opinions on what types of equipment it would need to respond to a CBRN incident. Depending on the types of equipment, the number of items, the manufacturer, and discounts for quantity purchases, the actual costs to equip a city to respond to a CBRN incident could vary greatly. For example, a level A protective suit can cost between $600 and $2,000.

As shown in figure 2, the estimated cumulative costs to sustain the equipment (in current year dollars) over a 10-year period range from $3.3 million for basic HAZMAT equipment to $30.7 million for a high level increased capability.

Figure 2: Estimated 10-Year Sustainment Costs



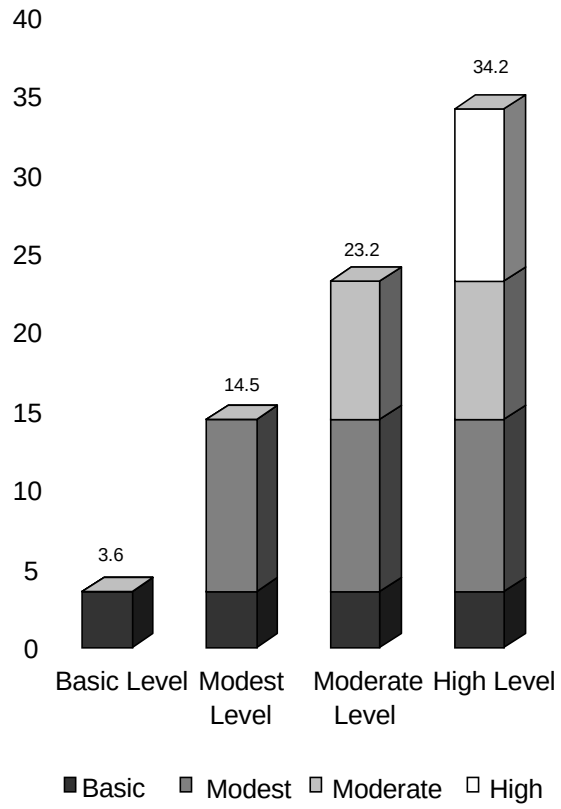
Source: Our analysis.

Sustainment costs, however, can also vary because some items have an indefinite shelf life (e.g. traffic cones and hard hats) while others have a limited shelf life. For example, level A protective suits have a shelf life of up to 5 years, while chlorine bleach, which is used for decontamination, has a shelf life of 6 months. In addition, the environment and/or the frequency that items are used can affect their useful life. For example, according to Los Angeles County Operational Terrorism Working Group officials, from mid-December 1998 to mid-April 1999, first responders from the Los Angeles County operational area addressed approximately 60 chemical and biological threats that were hoaxes. When responding to these hoaxes, first responders routinely wore hooded chemical resistant clothing or other appropriate clothing. Some hooded chemical resistant clothing can be worn only one time. As such, the county has had to replace

approximately 200 of these items within the past 4 months. Furthermore, technical equipment has to be calibrated periodically to ensure that it functions properly, and some equipment becomes obsolete and is replaced by improved models. All of these factors can affect sustainment costs for items and equipment used to deal with a possible CBRN terrorist incident. The cost factor we used to estimate our sustainment costs included most of these issues, factoring in various assumptions about shelf life and usage.

If an average inflation rate of 2.1 percent is included, the cumulative estimated sustainment costs range from $3.6 million for basic HAZMAT equipment to $34.2 million for the highest level of equipment capability (see fig. 3).

Figure 3: Estimated 10-Year Sustainment Costs



Source: Our analysis.

Agency Comments

In written comments on a draft of this report, DOD concurred and noted the difficulties of developing procurement and sustainment costs for equipment needed to enhance the response capability of cities to respond to a terrorist incident involving CBRN. DOD also noted that our report provided a good base for decision-making entities to work from. DOD's comments are included as appendix V. DOD provided technical comments, which we have addressed in our report where appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution of this report until 30 days after its issue date. At that time, we will send copies to the appropriate congressional committees; the Honorable Jacob J. Lew, Director, Office of Management and Budget; the Honorable Louis J. Freeh, Director, Federal Bureau of Investigation; the Honorable William S. Cohen, Secretary of Defense; the Honorable Louis Caldera, Secretary of the Army; other federal agencies discussed in this report; and other interested parties.

If you or your staff have any questions about this report, please contact me at (202) 512–5140. The major contributors to this report were Carol R. Schuster, Davi M. D'Agostino, James F. Reid, and Lisa M.Quinn.

Mark E. Gebicke
Director, National Security
Preparedness Issues

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Abbreviations

CBRN	chemical, biological, radiological, or nuclear device
DOD	Department of Defense
HAZMAT	hazardous materials

Scope and Methodology

To estimate the procurement costs for equipment that might be required by a city responding to a chemical, biological, radiological, or nuclear device (CBRN) incident, we first developed a preliminary equipment list based on our previous work and input from the Army's Director of Military Support and its Technical Escort Unit, the Federal Bureau of Investigation, and Virginia's Fairfax County Hazardous Materials Unit. This list formed the basis for our survey of city, state, and federal officials with expertise in the field of hazardous materials (HAZMAT) and/or CBRN response equipment. The survey requested an evaluation of equipment that represented the four levels of capability, defined on page 2, that we constructed to analyze and illustrate potential costs. On the basis of our analysis of the survey responses, we compiled a master equipment list that reflected the different levels of capability. Because of the varying opinions on which equipment belonged in which category, we reconciled the results through weighting.[1] Appendix III contains a list of survey respondents and appendix IV contains a list of additional offices that we consulted for our review.

We then determined the amount and types of items and equipment that could be used by choosing a notional city and identifying the number of first responders. We chose a population size of 500,000 for a notional city, which is slightly above the median size of the 100 most populous U.S. cities. Cleveland, Ohio, and New Orleans, Louisiana, are within about 5,000 people of the notional city population size; therefore, we included them in our analysis to obtain the number and types of first responders—including their levels of training—assigned to their respective jurisdictions. From this information, we derived an average number of first responders for the notional city. We then consulted with local and federal officials, such as the Hazardous Materials Coordinators for the cities of Chicago, New York, and Baltimore and the Army's Director of Military Support, to identify the amount of equipment, at each level of capability, that could be used by first responders. Our master equipment list, notional city size, and numbers of first responders are for illustrative purposes only and are not meant to imply that we agree with the appropriateness of such equipment or with how a city should be structured.

[1]Because of the widely varying opinions on which equipment belonged in which category, we reconciled the results through weighting. Based on how a respondent rated each item in our survey, we assigned a score to that response and then divided the total by the number of responses.

We are aware that many items on our equipment list are being used in local jurisdictions for fire fighting and HAZMAT operations; however, for the purposes of identifying procurement costs, we assumed the notional city would have no preexisting HAZMAT capabilities. We consulted with federal government officials to derive procurement costs. As mentioned previously, our procurement costs are for operational equipment, do not reflect additional equipment that might be maintained as a stockpile, and may not reflect the actual prices a local jurisdiction might pay. Differences might occur based on the equipment manufacturer, quantity discounts, or the use of alternative equipment to serve the same function.

To calculate the equipment sustainment costs, we applied a factor of 25 percent of the initial procurement cost (in current-year and then-year dollars) to each item for every year of our analysis. This factor was derived from discussions with local and federal officials, and it represents an average sustainment factor. A heavy vehicle would actually require a higher relative sustainment cost than an article of clothing. The average sustainment factor accounts for (1) general wear and tear, instrument calibration, and general maintenance costs of the equipment and (2) replacement costs for small-scale incidents and hoaxes. For example, a small-scale incident would be in a localized area and would not include mass casualties. Replacement costs due to a large-scale incident, such as the Oklahoma City bombing, were not considered. We did not include training and certification costs in our sustainment estimates.

Equipment List Sorted by Equipment Capability Level

Basic HAZMAT Equipment Capability

Level A fully encapsulated chemical resistant suit ensemble
Hooded chemical resistant clothing
Chemical resistant gloves (Butyl)
Chemical resistant gloves (Nitrile)
Inner gloves
Hard-hat with face shield
Safety glasses
Duct tape
Chemical resistant boots, steel or fiberglass toe and shank
Outer booties
Safety boots or shoes
Two-way local communications, push to talk
Personal alarm system to alert for downed personnel
HAZMAT gear bag
Surgical masks
Appropriate air monitoring instruments
Boundary marking tape: yellow-caution/red-danger
Restricted access and caution warning signs
Combination meter
Combustible gas indicator
pH paper and water finding test paper
Radiation monitoring equipment
Leak detectors (soap solution, ammonium hydroxide, etc.)
pH meter or pen
Water finding paste
Gauging stick
Squirt bottle
Distilled water
Ammonia for chlorine detection
Drum thieves
Grab sampling tubes
Glass or plastic pipettes with aspiration bulb
Tweezers, plastic
Flags, wire stakes
Wind socks
Contaminated material disposal containers
Traffic cones
Brushes, long handle
Garden hose with nozzles
Polyethylene sheeting
Containment basins, vehicle and personnel sized

5-gallon buckets
55-gallon plastic bags
Disinfectant, detergent, bleach, and sodium bicarbonate
Hand-operated diaphragm pumps with hoses
Small garden sprayers
Backless stools
Folding tables, folding (6 foot)
Trauma-type first aid kit
Emergency eye wash
Timer or stopwatch
Safety harness with 150 foot dry line retrieval ropes, 9.5mm-10.5mm.
Locking carabiners
20-lb. ABC fire extinguisher
Hand lights, explosive proof
Portable lights
Air compressors and generators, 8kw, 15kw, and 50kw
Electric cord reels
Copper grounding rods, ¾ x 4 feet (minimum length)
Grounding cables, point-type clamps on both ends, 1/8 stainless steel (uninsulated) 50-foot minimum
Traffic safety vests
Megaphone/ public address system
Overpacks: 35, 55, and 85 gallon poly-drums
Miscellaneous non-sparking tool kit, to include bun and spanner wrenches
Small, medium, and large equipment bags
Handheld illumination
Cellular telephone (satellite capability is optimal)
Facsimile, copier, computer printer, and scanner (combined or individual machines)
Binoculars
Camera, self-developing
Computers (laptop, desktop, or docking station) with common data and word processing software for stand-alone, local, and wide area networks
Office supply kit (notepads, pencils, etc)
Personal Protective Equipment Selection Guide
CHRIS Manual, 1993 edition
Merck Index, 12th edition
Emergency Action Guides, Association of American Railroads
Emergency Handling of Hazardous Materials in Surface Transportation

Association of American Railroads, 1996 edition
Farm Chemicals Handbook, Meister Publishing, 1997 edition
First Responder's Guide to Agriculture Chemicals Accidents, Foden-Weddell, 1993 edition
NIOSH Pocket Guide to Chemical Hazards, 1995 edition
GATX Tank Car Manual, GATX 6th edition
Hawley's Condensed Chemical Dictionary, Sax & Lewis, 13th edition
Handbook of Toxic and Hazardous Chemicals and Carcinogens, Sittig, 3rd edition
TLVs and BELs Guidebook, ACGIH, 1996 edition
Quick Selection Guide to Chemical Protective Clothing, Forsberg, 3rd edition
Household Chemicals and Emergency First Aid, Foden-Weddell, 1993
Gardner's Chemical Synonyms and Trade Names, Ash, 10th edition

Modest Increase in Equipment Capability

Personal cooling system; vest or full suit
Bio-pack rebreather (2-, 3-, or 4-hour supply, preferred)
Self-contained breathing apparatus (SCBA)
Chemical/biological resistant coveralls
Spare ice packs for cooling systems
Extraction gear
Level A pressure test kit
Full Face air purifying respirators with appropriate cartridges
Emergency escape breathing apparatus (EEBA)
Paper/disposable chemical/biological overgarments, including gloves and booties
Hazard categorizing (HazCat) kit
Air and liquid detector tube system
Colormetric tube kit with additional tubes
Photoionization detector (PID)
Flame ionization detector (FID)
Pesticide screening kit
PCB test kits
Petroleum finding paste
Chemical spill classifier kit
Waste water classifier kit
Heat sensor, infrared
Surface thermometer

Plastic or brass scoops and trowels
Sample jars: 8 oz. wide mouth, with Teflon lids, 16 oz. wide mouth with Teflon lids
Thermal imaging camera
Meteorological stations (temperature, wind, and humidity)
Decontamination shower for individual and mass application
Decontamination system supplies (secondary)
Water bladder, decontamination shower waste collection
Spill containment pillows and devices
Contaminated water run-off and collection pools
Water pumps, hoses, couplers, and nozzles (electric and manual)
Emergency decontamination shelter
Air inflatable tents
Sodium hypochlorite powder (15 lb. buckets)
85 gallon poly over pak drums
Disposable personal property bags
Paper hospital gowns
Colored/nonviewable cadaver bags (Center for Disease Control standard)
HEPA (high-efficiency particulate air) vacuum for dry decontamination
Ambu bag, chemical filtered
Green line/red line battery activated marking system
Class D fire extinguisher
Ohm meter, intrinsically safe
Ground resistance tester
Explosive-proof exhaust fans
Stretcher, litter decontamination mass casualty and field cart
General purpose freezer/refrigerator
Head area lighting system
Portable area illumination
Water trailers/source (potable and nonpotable)
Heat stress monitor
Hazardous material shipping containers
Vehicle support
Chlorine A (cylinder), B (1-ton cylinder), and C kit (railcar) w/appropriate tools
Portable air cylinder carts
Modular back packs
Duty gear and modular load bearing systems/operational vests
Medical/casualty bags
Optics: day and limited visibility

Multi-channel (UHF/VHF) encrypted, push to talk radios with chargers and two extra batteries and accessories and trickle chargers with field programming capability
Micro-tape recorders with audio in/out feature
Camera, 35mm with flash, telephoto lens
Camera, digital
Camera, video, VHS
Light amplification lenses
Standardized NBC/commercial chemical hazard software and response system
Portable repeater
Two-way pagers (secure preferred)
Miscellaneous adapter cables and connectors
Bull horns and portable sound system.
Matheson Gas Data Book , Matheson, 6th edition
Effects of Exposure to Toxic Gases; First Aid and Medical Treatment, Matheson, 3rd edition
Hazardous Material Injuries, Stutz, 3rd edition
Emergency Care for Hazardous Materials Exposure, Bronstein, 2nd edition
Clinical Toxicology of Commercial Products, Williams & Wilkens, 5th edition
Joint Information Center (JIC) Manual
Gloves Plus (computer program)
Medical Management of Bio Casualty Book
Medical Management of Chemical Casualty Book

Moderate Increase in Equipment Capability

Escape mask
Tents, standard or air inflatable with climate control and chemical/biological liners
M-8 detection paper for chemical agent (weapons grade) detection
M-9 detection paper (roll) for chemical agent (weapons grade) detection
M-256 detection kit for chemical agent (weapons grade) detection
M-18 series, chemical agent detector kit for surface and vapor chemical agent
Point chemical agent detector and alarm
Stand-off chemical detector, FTIR
Hand-held chemical agent monitor with training set
Chemical agent water test kit, M-272

Container, sample transfer/small infectious substance
Gas chromatograph/mass spectrometer (GC/MS)
JPO-BD immunoassay tickets
Sampling kit with aerosol collector
Aerosol samplers
M-295 equipment decontamination kit for chemical warfare agents
M-291 skin decontamination kit
Cryogenic shipment containers
Liquid nitrogen for cryogenic shipment containers
Decontamination trailer, multi-water source, and prime mover
High pressure hot water system
Ultraviolet lighting
Tents for contaminant containment|
Vaporized hydrogen peroxide solution
2PAM chloride autoinjector
Atropine 2mg/ml, 25ml vial
Atropine autoinjector
CANA (Diazepam) autoinjector
Commercial vehicles with run-flat tires: vans, sport utility vehicles and trucks for personal transportation and equipment
Mobile command post or chemical, biological, radiological, or nuclear incident response operations center
Portable area climate control system
Forward vehicle and equipment maintenance packages
Solar battery chargers
Vehicle-mounted communication systems for long-range, encrypted, voice, video, and data transmission capable of cross-band repeat
Bi-direction amplifiers
Secure telecomputer encryption

High Level of Equipment Capability List

Automated perimeter sampling system (portal shield)
Portal shield sampling kits
Fox vehicle

Survey Respondents

Local Jurisdictions

Battalion Chief
Downers Grove Fire Department
Downers Grove, Ill.

Department of Emergency Services
Richmond, Va.

District Chief
Montgomery County Fire and Rescue Service
Rockville, Md.

Emergency Operations Bureau
Los Angeles, Calif.

Fire Station 39
Van Nuys, Calif.

HAZMAT Coordinator
Chicago, Ill.

HAZMAT Coordinator
Baltimore County Fire Department
Towson, Md.

Oahu Civil Defense Agency
Honolulu, Hawaii

Office of Emergency Management
Denver, Colo.

Office of Emergency Management
New York, N.Y.

Office of Emergency Management
Philadelphia, Pa.

Office of Emergency Management
Seattle, Wash.

Office of Emergency Preparedness
New Orleans, La.

Office of Public Safety
Columbus, Ohio

Terrorism Coordinator
Los Angeles County Fire Department
Los Angeles, Calif.

Federal Agencies

Commander
Soldier and Biological Chemical Command
Department of Army

Technical Escort Unit
Soldier and Biological Chemical Command
Department of Army

Office of Emergency Response
Department of Energy

Office of the Emergency Coordinator
Environmental Protection Agency

Associations

International Association of Fire Chiefs[1]

International Association of Fire Fighters

National Fire Protection Association

National Institute for Occupational Safety and Health

National Volunteer Fire Council

Contractor

MKI Systems

[1]The HAZMAT Coordinator for Chicago, Illinois, and the International Association of Fire Chiefs submitted a joint response.

Additional Offices Consulted for Our Review

Local Jurisdictions

Department of Public Safety
Cleveland, Ohio

HAZMAT Coordinator
City of Baltimore
Baltimore, Md.

HAZMAT Unit
Fairfax County Fire and Rescue Department
Fairfax, Va.

Federal Agencies

Director of Military Support
Department of the Army

Hazardous Materials Response Unit
Federal Bureau of Investigation

The National Domestic Preparedness Office
Federal Bureau of Investigation

Office of National Security Affairs
Federal Emergency Management Agency

Comments From the Department of Defense

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, DC 20301-1500

RESERVE AFFAIRS

21 MAY 1999

Mr. Mark E. Gebicke
Director, National Security Preparedness Issues
National Security and International Affairs Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Gebicke:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "COMBATING TERRORISM: Analysis of Potential Emergency Response Equipment and Sustainment Costs," dated May 6, 1999 (GAO Code 701149/OSD Case 1807).

The DoD concurs with comment on the draft report. However, the DoD is unable to validate the cost estimates in Table 1, and throughout the balance of the report. Developing a matrix of potential initial and sustainment costs for equipment needed to enhance the response capability of cities for terrorist incidents involving a weapon of mass destruction is very difficult. As noted, decisions are required as to which costs to include, what additional equipment constitutes increased capability, and what factors to use for average "wear and tear". In addition, first responders have diverse opinions on which pieces of equipment are necessary. All of these factors have an effect on the estimated cost figures. Each entity that is faced with the decisions on purchasing and maintaining such equipment will have to factor in their particular requirements. This GAO report provides a good base to work from. Suggested technical changes for clarification and accuracy have been provided separately.

The Department appreciates the opportunity to comment on the draft report.

Sincerely,

Charles L. Cragin
Acting

Terrorism Related GAO Products

Combating Terrorism: Use of National Guard Response Teams Is Unclear (GAO/NSIAD-99-110, May 21, 1999)

Combating Terrorism: Issues to Be Resolved to Improve Counterterrorist Operations (GAO/NSIAD-99-135, May 13, 1999)

Combating Terrorism: Observations on Biological Terrorism and Public Health Initiatives (GAO/T-NSIAD-99-112, Mar. 16, 1999).

Combating Terrorism: Observations on Federal Spending to Combat Terrorism (GAO/T-NSIAD/GGD-99-107, Mar. 11, 1999).

Combating Terrorism: FBI's Use of Federal Funds for Counterterrorism-Related Activities (Fiscal years 1995-98) (GAO/GGD-99-7, Nov. 20, 1998).

Combating Terrorism: Opportunities to Improve Domestic Preparedness Program Focus and Efficiency (GAO/NSIAD-99-3, Nov. 12, 1998).

Combating Terrorism: Observations on the Nunn-Lugar-Domenici Domestic Preparedness Program (GAO/T-NSIAD-99-16, Oct. 2, 1998).

Combating Terrorism: Observations on Crosscutting Issues (GAO/T-NSIAD-98-164, Apr. 23, 1998).

Combating Terrorism: Threat and Risk Assessments Can Help Prioritize and Target Program Investments (GAO/NSIAD-98-74, Apr. 9, 1998).

Combating Terrorism: Spending on Governmentwide Programs Requires Better Management and Coordination (GAO/NSIAD-98-39, Dec. 1, 1997).

Combating Terrorism: Efforts to Protect U.S. Forces in Turkey and the Middle East (GAO/T-NSIAD-98-44, Oct. 28, 1997).

Combating Terrorism: Federal Agencies' Efforts to Implement National Policy and Strategy (GAO/NSIAD-97-254, Sept. 26, 1997).

Combating Terrorism: Status of DOD Efforts to Protect Its Forces Overseas (GAO/NSIAD-97-207, July 21, 1997).

Aviation Security: FAA's Procurement of Explosives Detection Devices (GAO/RCED-97-111R, May 1, 1997).

Aviation Security: Commercially Available Advanced Explosives Detection Devices (GAO/RCED-97-119R, Apr. 24, 1997).

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