STATEMENT BY

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

BEFORE

PERMANENT SUBCOMMITTEE ON INVESTIGATIONS

COMMITTEE ON GOVERNMENTAL AFFAIRS

UNITED STATES SENATE

NOVEMBER 1, 1995

Mr. Chairman and Members of the Subcommittee,

Thank you for inviting me here to discuss the global proliferation of weapons of mass destruction, and to provide a public health perspective to your deliberations. As a physician who has addressed these issues in the laboratory, as a government official managing the public health response to terrorism due to chemical poisonings from cyanide, and as the leader of health and medical consequence response in the Federal Response Plan (FRP) under the coordination of the Federal Emergency Management Agency (FEMA), I have been forced to wrestle with this problem from both a technical and a policy basis.

Your emphasis on these issues coincides with a Presidential decision to focus on terrorism because of the increasing terrorist capability and demonstrated use of weapons of mass destruction. In fact much of the action of the Department of Health and Human Services (HHS) is based on the Administration's policies in response to terrorism. It is important to note that there are significant differences among the non-lethal consequences of nuclear, biologic and chemical weapons of mass destruction, and we must be prepared for them.

Background

Chemical weapons of mass destruction, such as mustard, phosgene and chlorine, were first used in World War I, and again in isolated conflicts in the 1960's, 1970's, and 1980's. The Tokyo subway attack in 1995 and the information described

recently in the press about the potential use of these agents in the Middle East during the Gulf War serve as grim reminders of the recent use of biologic and chemical agents as weapons of terrorism.

Biologic agents, like chemical agents, have been addressed in arms control conventions. However, unlike chemical and nuclear agents, the capability to combine biologic agents makes these agents extremely difficult to detect and monitor. Additionally, infectious organisms can multiply and spread to individuals outside the original site of attack and can be engineered to be resistant to multiple antibiotics.

An attack with weapons of mass destruction could occur with or without a known threat as shown in this chart (chart 1). When a threat occurs, the Federal Bureau of Investigation (FBI) leads the integrated Federal crisis management activities. In the case of weapons use without a prior threat, we would be faced with immediate public health consequences.

Crisis and Consequence Management

The Administration established policies to address both foreign and domestic terrorism. My remarks today will focus on the domestic issues only.

The Federal management of domestic crises is the responsibility of the FBI and has been addressed by Mr. O'Neil. FEMA and the other domestic departments and agencies work closely to support the FBI through their crisis management plan.

Specifically, HHS provides technical assistance in threat assessment and emergency consultation. The individuals who provide this assistance must be accessible for consultation within an hour of the request. HHS will also rapidly deploy individuals to supplement the FBI by on-site technical assistance. These experts would also be prepared to deal with consequence management if the need occurred. It is important to note that training and exercises are required to ensure roles are clearly known and the transition from crisis to consequence management occurs smoothly.

FEMA provides overall coordination for consequence management. The FRP, signed by 26 departments and agencies, established primary responsibilities for 12 Emergency Support Functions (ESF) as shown in this chart (chart 2). When the resources of the local and State governments are exhausted, and the President approves a Governor's request for a Federal Disaster Declaration, FEMA activates the FRP and tasks the primary departments and agencies to provide essential services through formal mission assignments.

HHS is responsible for ESF #8 - the health, medical and health related social services support. There are 16 functions included within ESF #8 as illustrated in this chart (chart 3). I have just returned from the Virgin Islands where I led the ESF #8 response to Hurricane Marilyn. Our efforts included the provision of patient care, health support to FEMA managed centers, sanitation, assurance of safe food, potable water,

disease surveillance, vector control, environmental health and mortuary services. This was a coordinated health response that included key support from the Operating Divisions of HHS, and the Departments of Defense (DOD) and Veterans Affairs (DVA).

An essential element in the response to both man-made and natural catastrophic disasters is the National Disaster Medical System (NDMS). This system is made up of four departments and agencies, with HHS as the lead, and includes DVA, DOD and FEMA. The NDMS has three major components: patient care, patient evacuation and patient in-hospital care. Patient care is provided by Disaster Medical Assistance Teams (DMATs). Currently, there are 60 DMATs in existence, as shown in charts 4 and 5 by State membership and deployment. Of these, 21 are level 1 teams that can mobilize within six hours, with supplies and equipment for 72 hours of operation. These level 1 teams are self-sufficient with tents, food and water purification equipment. During Hurricane Marilyn, the DMAT teams provided most of the health care for 2.5 weeks in the aftermath of the storm on St. Thomas, and supplemented care on St. Croix and St. Johns. DVA and DOD personnel also contributed significant support to the islanders during this time. Other major NDMS responses since 1989 are shown in chart 6.

Two types of disasters can occur without warning -- earthquakes and terrorism. In both instances there must be an immediate response, since the number of lives lost will, in large measure, be directly impacted by the rapidity of the immediate

response capabilities. Weapons of mass destruction cause death, injury and environmental destruction. Because loss of life is the paramount concern, the immediate and initial focus on the impact of terrorism must be on the health and medical consequences and the capacity of the first responders to save lives.

Immediately after the Tokyo subway attack, the Coordinating Sub Group of the National Security Council tasked the Public Health Service to develop a plan of operation for the health and medical consequences of chemical and biologic terrorism. To begin to plan to meet these needs, in FY 1995, the Secretary of HHS allocated funds for the initial planning document. The Office of Emergency Preparedness (OEP), as the lead office in HHS, serves as chair and FEMA as the co- chair of the inter-agency committee to develop the immediate health and medical response to terrorism with biologic and chemical agents. Key departments and agencies involved include DOD, DVA, Environmental Protection Agency, U.S. Department of Agriculture, FBI, Department of Transportation, and the General Services Administration. The committee developed a draft interim plan that integrated the immediate health and medical responses of the Federal agencies in support of States and local governments (charts 7-10). A few key components of the plan deserve additional emphasis, including:

- Needs assessment for gaps in response capability;

- Planning, training and exercises are essential to prepare first responders;
- Metro strike teams trained and ready to cope with biologic and chemical agents are essential to support the first responders. These special NDMS teams in high risk metropolitan areas would be able to respond within 30 to 90 minutes (charts 11-13);
- Communication equipment and expertise is likely to be among the weakest links in the response. In the aftermath of the New York Trade Center and Oklahoma City bombings, there was an absence of communications capacity for about 3 hours. Effective communications will be essential in response to terrorism.
- Administration policy requires a review of the adequacy of NDMS. While the level 1 DMATs are appropriately placed for natural disasters (chart 14), there are deficiencies with respect to terrorism in large metropolitan areas.

Presidential Actions and Associated HHS Budget Request

The President requested that HHS support crisis management through technical assistance and development of a rapid deployment team, and consequence management, through the development of plans, identification of shortfalls in plans, and actions to remedy those shortfalls. Because HHS is the lead Federal department in the immediate aftermath of attack, specific

attention was directed to the adequacy of NDMS to respond effectively and deficiencies in stockpiles of medicines.

In response to these additional responsibilities, the President amended the FY 1996 Budget to provide an additional $9 million to begin to plan for the health and medical consequences of domestic terrorism. This funding request was offset by decreases elsewhere in HHS, and was thus, budget neutral. Key elements of this request include:

- Initiating and coordinating integrated planning and evaluation activities with Federal, State and local authorities;
- Training health professionals, emergency responders and emergency managers, at the Federal, State and local levels, to augment the skills of personnel involved in medical response, early detection, surveillance, inspection, sample transportation and laboratory detection.
- Providing medical response coordination through additional medical, scientific and logistic personnel stationed in OEP and HHS regions who would provide technical assistance, procure required antidotes and antibiotics, and establish the medical support unit to coordinate the emergency response (charts 15 and 16).
- Enhancing warning and detection systems to reduce the severe consequences of these destructive agents through rapid medical diagnosis.

- Providing increased capability to identify organisms and identify chemical agents in order to quickly identify and provide the appropriate medical treatment to minimize the morbidity and mortality from a chemical/biological agent.
- Enhance medical and epidemiologic public health activities to be prepared to deal with the public health consequences of a terrorist attack.
- Building and activating four metropolitan strike teams who would be specially trained to meet the needs of patients in high risk communities with health problems related to weapons of mass destruction.

Public Health Concerns

The primary public health concerns include but are not limited to: public health advisories; agent identification; hazard identification; hazard reduction; environmental decontamination; clinical medical support; pharmacy support; worker safety; and mortuary support. In the event of a chemical attack with a highly lethal agent, immediate therapy is essential. It is important to emphasize that the attack in Japan was not with a highly lethal concentration of sarin and that only those in the immediate vicinity of the release were killed. Thus the threat to health and safety of both the first responders and many of the victims was relatively low. However, even in the case of relatively small number of people killed, as in the case of the cyanide tampering of Tylenol in the U.S., there was public

panic that demanded prompt response. First responders have informed us that proper equipment and training is essential to ensure a prompt response and that currently, some metropolitan areas are unprepared. These courageous fire fighters, police, and emergency medical support personnel risk their lives to protect us. It is just wrong to ask them to respond without proper preparation.

With a biologic agent, there is an incubation period followed by a sudden onset of symptoms. The rapid identification of the agent is necessary to save lives through antimicrobial therapy as the organism can spread to individuals outside the original site of attack. Since public anxiety can be expected, accurate public health advisories, an appropriate supply of medicine and the capacity to respond medically are among the most essential activities.

At this time, there is no coordinated public health infrastructure to deal with the medical consequences of terrorism. The budget request would provide the resources to begin to address the following deficiencies:

- Lack of integration at the Federal, State and local levels, of various disciplines required to respond to this type of threat;
- Inadequate number of trained and experienced responders at all levels;
- Medical response not placed in high risk metropolitan areas, such as Washington, D.C.;

- Inadequate infrastructure to respond to the increasing number of emergencies, including an insufficient secure communications facility; and
- Significant gaps in early warning and detection systems, identification of chemical and biologic agents, surveillance, decontamination procedures, and worker safety - both in high risk areas and in Federal facilities.

If funds are not appropriated to fulfill the President's request, the Federal/State/local coordinated response would be compromised.

HHS Plan of Action

The threat of terrorism with weapons of mass destruction is real. While the first line of defense is good intelligence and effective crisis management, the Nation must be prepared for the unthinkable health and medical consequences. Since it is likely that both local and State resources would be overwhelmed in the aftermath of a terrorist attack with weapons of mass destruction, an integrated Federal, State and local response is required. Key ingredients of the plan include, but are not limited to the following:

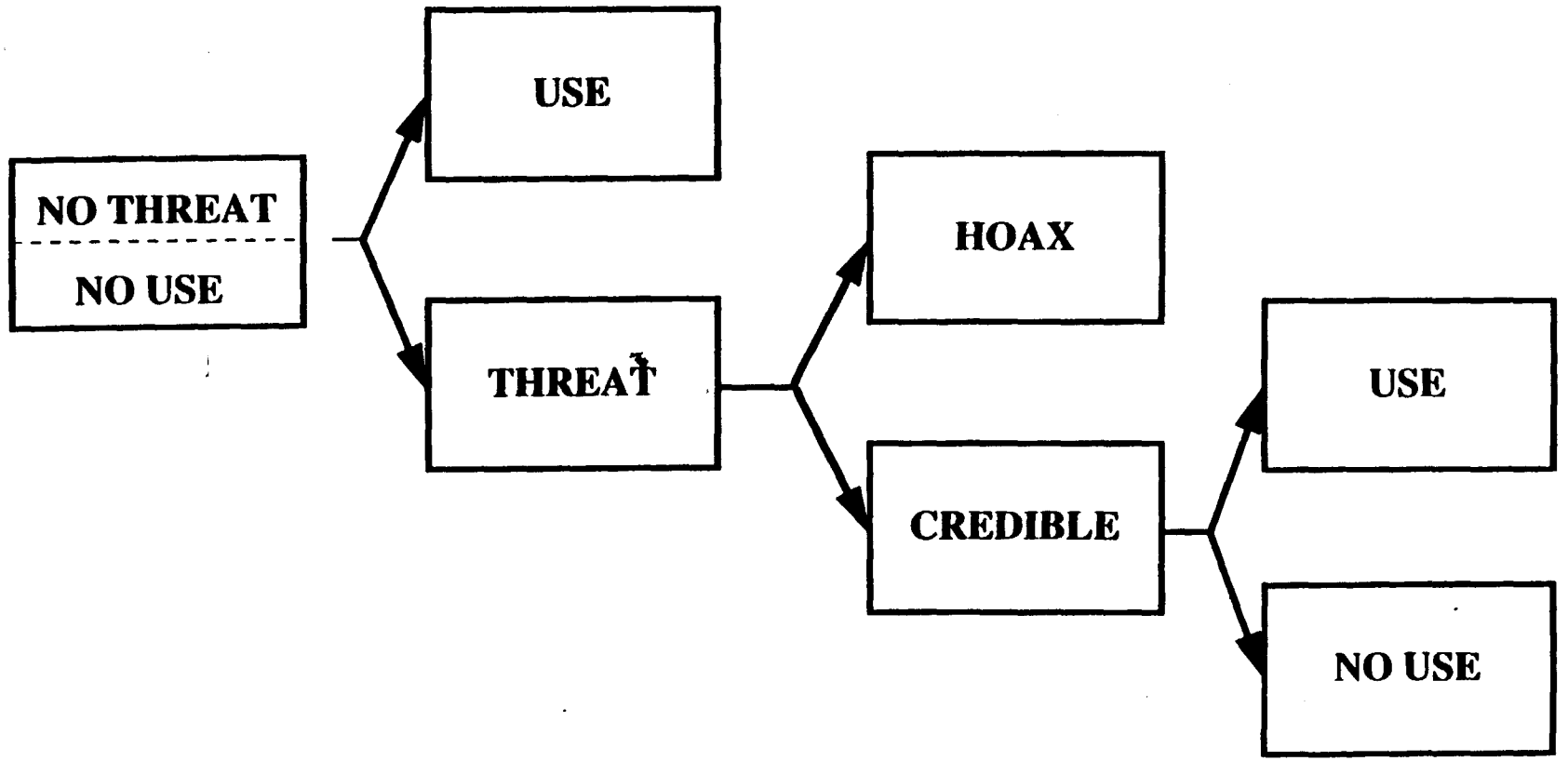
- Coordinated planning of the integrated Federal family of health and medical responders with State and local first responders. It is not acceptable to exchange business cards for the first time at the site of a disaster.

- Identification and development of training and exercise materials.
- Formation of integrated teams of first responders with emphasis on pre hospital care including: triage of patients, decontamination of patients, treatment of patients, and as appropriate, patient evacuation.
- Pre-development of public health advisories and repositories of information that are readily available during crises.
- Augmentation of the infrastructure at the Centers for Disease Control and Prevention, the Food and Drug Administration and the National Institutes of Health to rapidly identify chemical and biologic agents.
- Augmentation of the Federal first responder capability to ensure technical assistance and rapid deployment of NDMS.
- Ensure sufficient supplies of medicines and vaccines to meet potential needs.

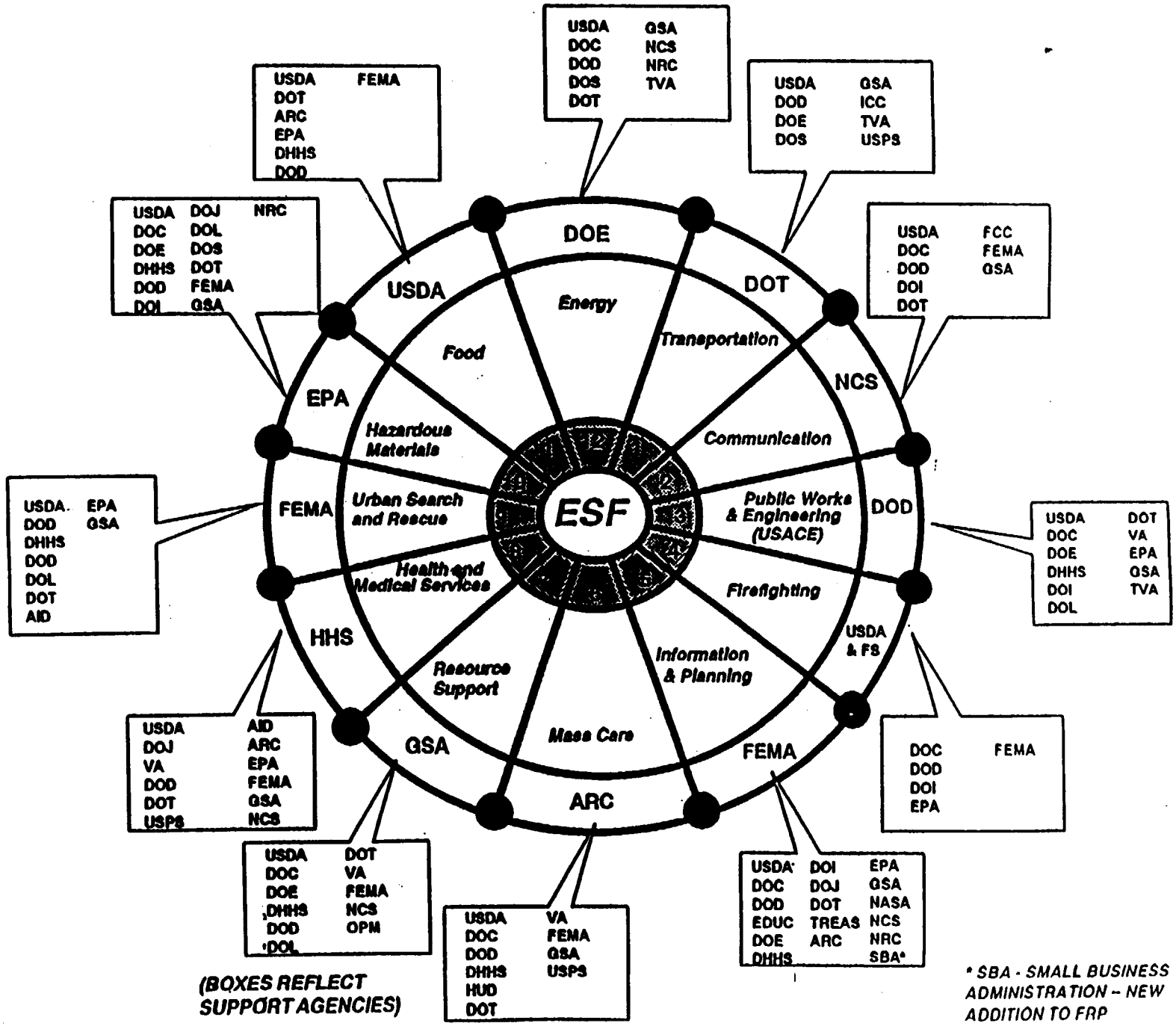
This is an important and large mission. To do less would be a disservice to the American people.

Mr. Chairman, this concludes my opening remarks. I would be happy to answer any questions that you and the Subcommittee members may have.

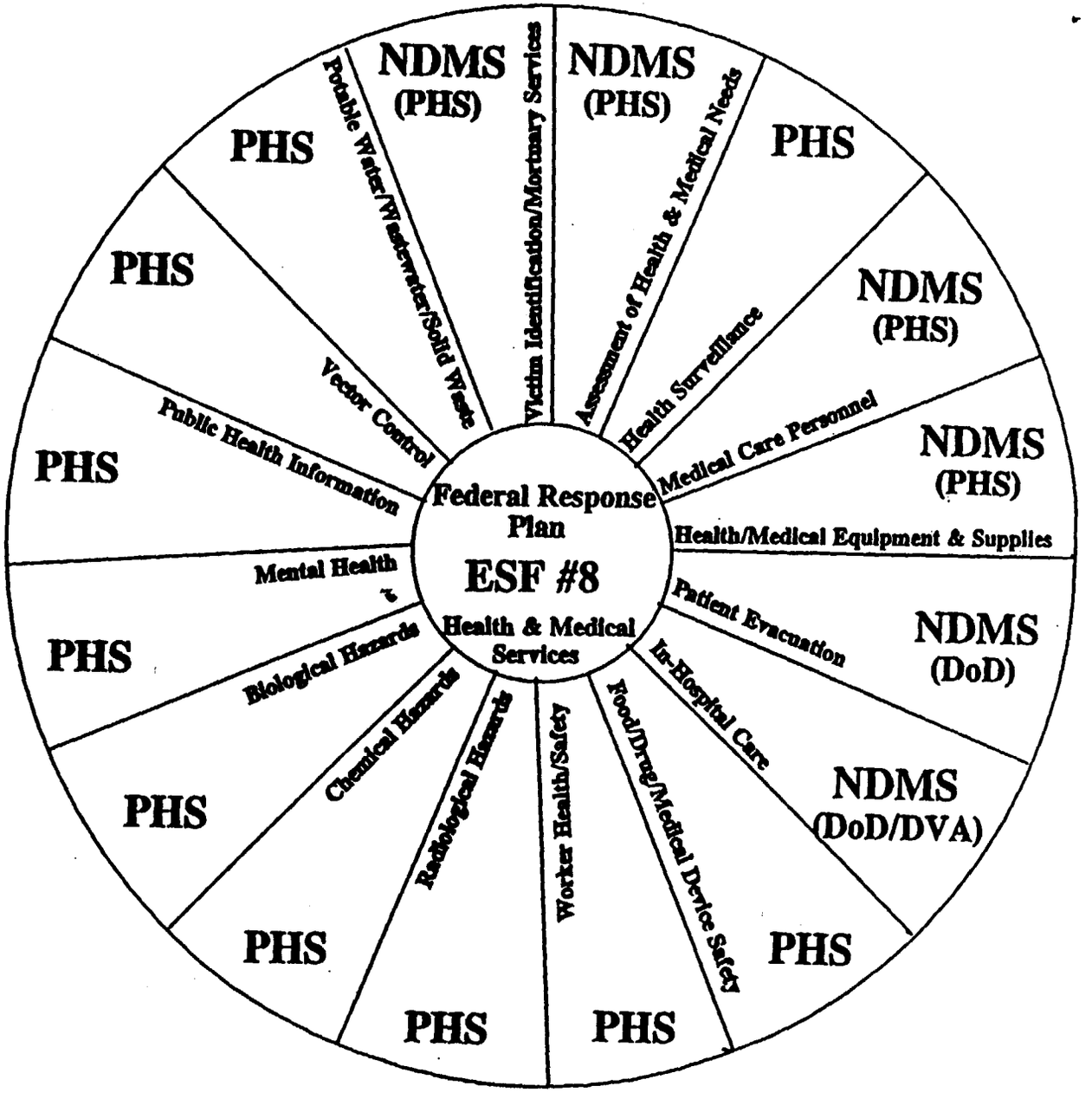
C / B TERRORISM THREAT STAGES



FEDERAL RESPONSE PLAN - Emergency Support Functions



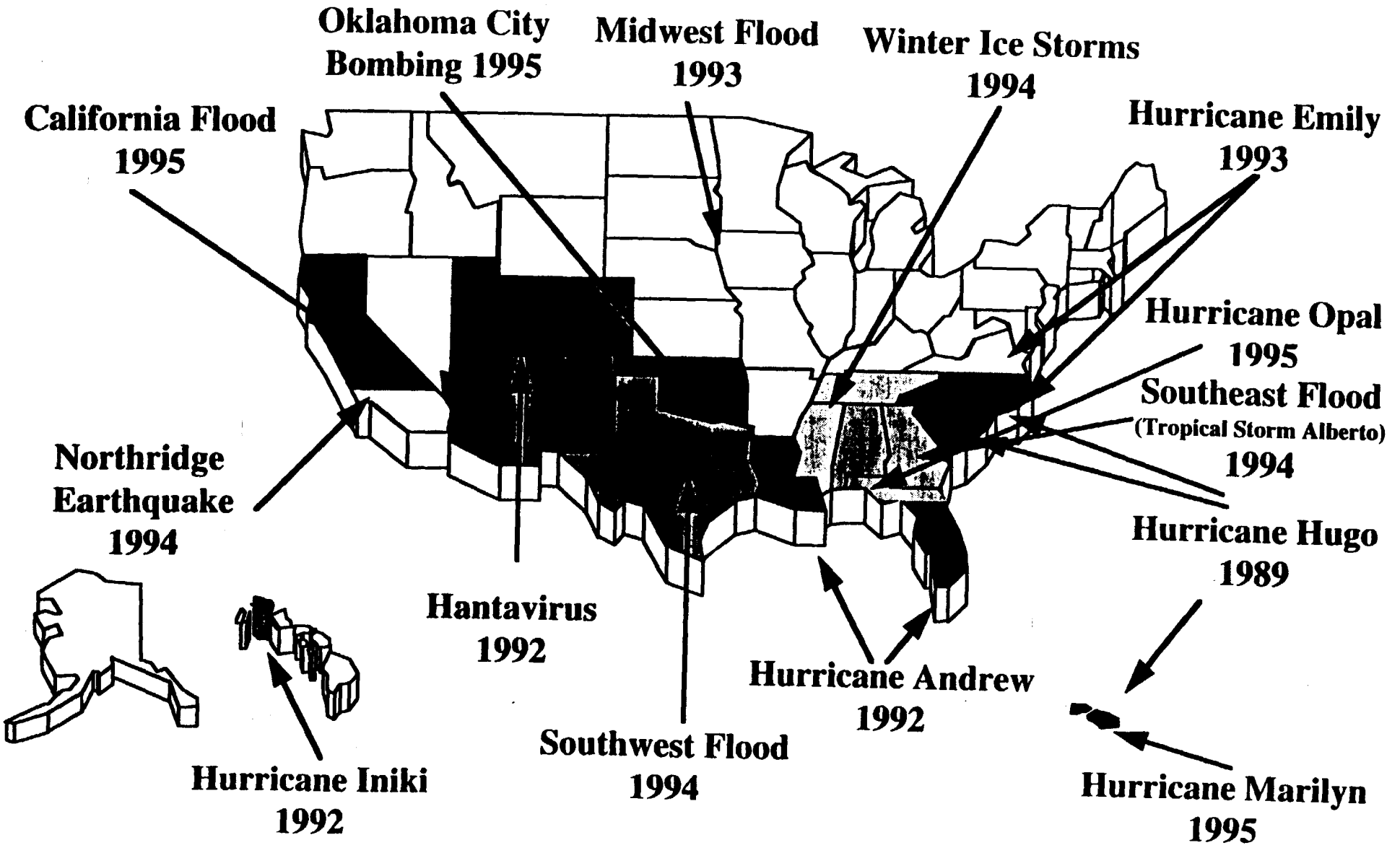
ESF #8 LEAD RESPONSIBILITIES

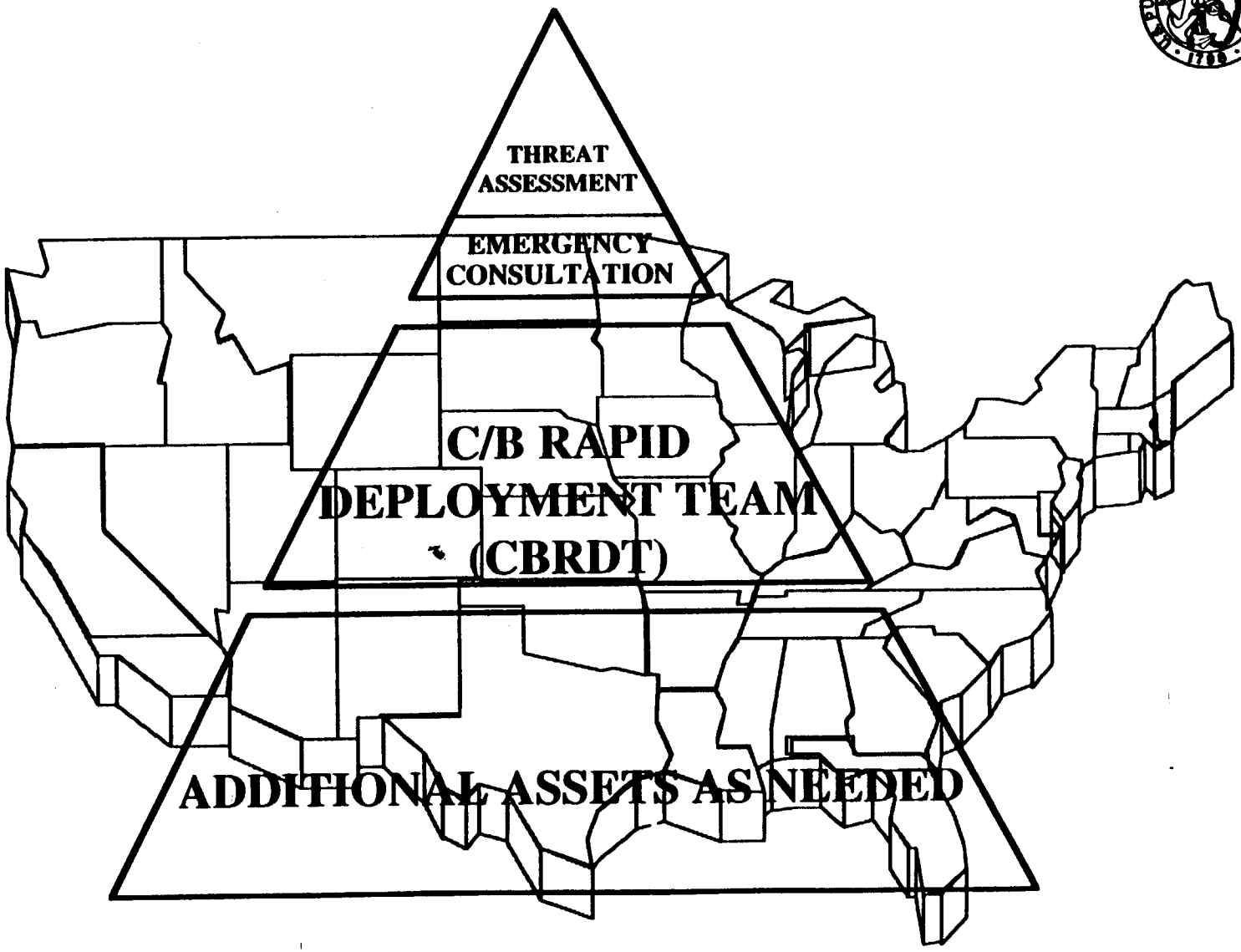


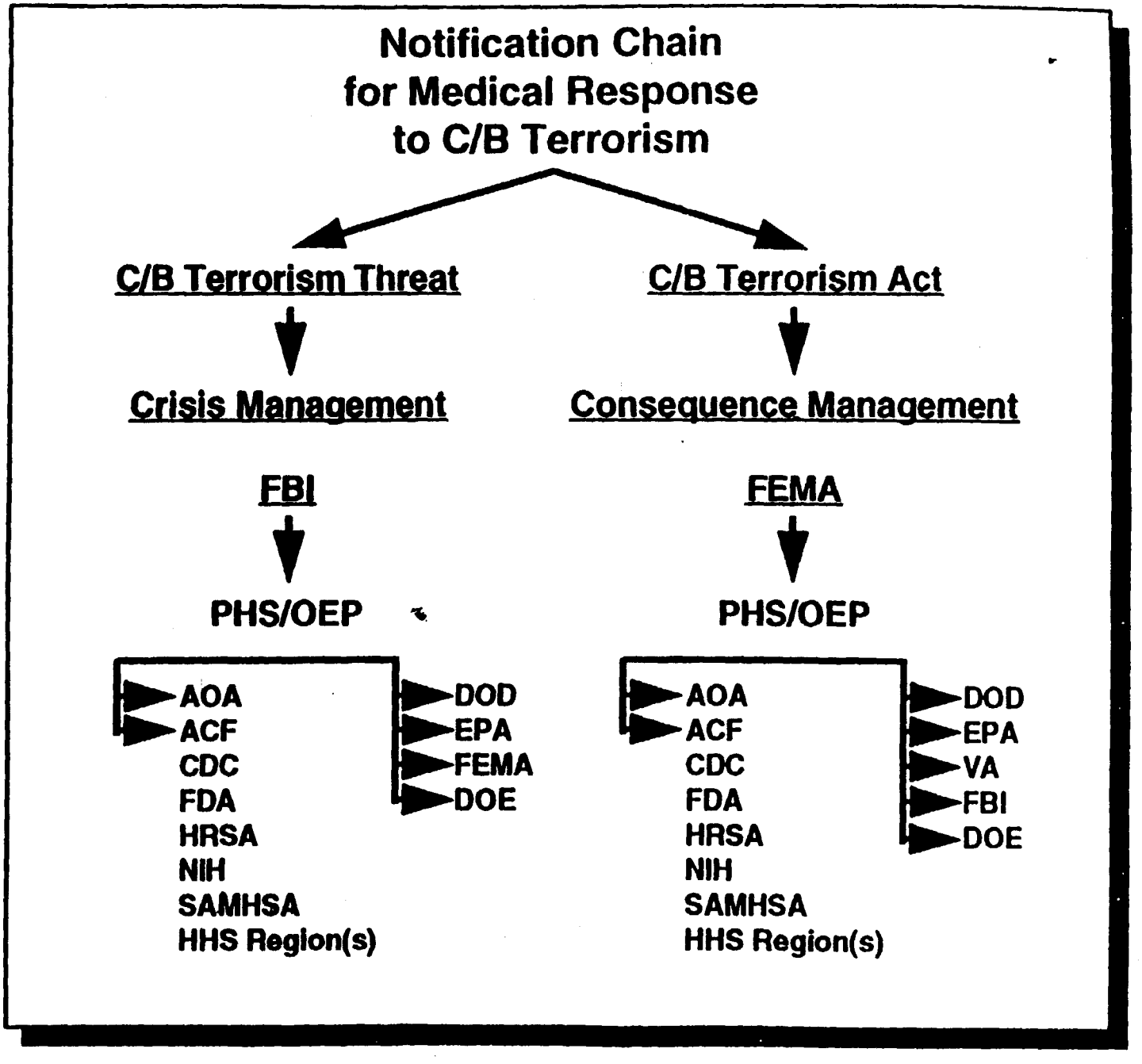
NATIONAL DISASTER MEDICAL SYSTEM DEPLOYMENT

STATE	# OF MEMBERS	HUGO	ANDREW	INIKI	EMILY	MIDWEST FLOOD	CA QUAKE	SOUTHEAST FLOOD	OKLAHOMA CITY	MARILYN	OPAL	TOTAL
Alaska	0											0
Alabama	117											0
Arkansas	90									1	1	2
Arizona	31											0
California (9 teams)	835			1			5			1		7
Colorado	23											0
Florida (4 teams)	611		2							1	4	7
Georgia (3 teams)	280		1					1		1		3
Hawaii	169		1				1			1		3
Illinois	34											0
Indiana (4 teams)	333		1							1		2
Kentucky	91		1	1						1		3
Massachusetts (2 teams)	271		4							1		5
Maryland (5 teams, including PHS 1 & 2)	311	1					2	1	1	2		7
Michigan	130						1					1
Missouri	54					1						1
Mississippi	19											0
North Carolina	145		1		1					1		3
New Jersey	64											0
New Mexico	286	1	2	2			1				1	7

Significant Emergency Responses Involving the U.S. Public Health Service (1989-Present)




THREAT
ASSESSMENT
EMERGENCY
CONSULTATION
C/B RAPID
DEPLOYMENT TEAM
(CBRDT)
ADDITIONAL ASSETS AS NEEDED


Notification Chain
for Medical Response
to C/B Terrorism
C/B Terrorism Threat
C/B Terrorism Act
Crisis Management
Consequence Management
FBI
FEMA
PHS/OEP
PHS/OEP
AOA
ACF
CDC
FDA
HRSA
NIH
SAMHSA
HHS Region(s)
DOD
EPA
FEMA
DOE
AOA
ACF
CDC
FDA
HRSA
NIH
SAMHSA
HHS Region(s)
DOD
EPA
VA
FBI
DOE

COMPOSITION OF C/B RAPID DEPLOYMENT TEAM

- Public Health Service (PHS) - (5)
  - 2 MDs
  - 3 Operations Technicians
- U.S. Army Medical Research Institute for Infectious Diseases (USAMRIID) - (2)
  - 1 MD (Epidemiological Assesment/Biowarfare Expert
  - 1 Scientist (Medical Diagnostics/Medical Samples)
- U.S. Army Medical Research Institute for Chemical Defense (USAMRICD) - (2)
  - 1 MD
  - 1 Scientist (Chemical Warfare Expert)

- U.S. Army Technical Escort Unit (TEU) - (8)
  - 8 Hazardous Environment/Explosive Disposal Operators
- Naval Research Institute (NMRI) - (2)
  - 2 Biological Identification Specialists
- Edgewood Research, Development, and Engineering Center (ERDEC) - (2)
  - 1 Chemical Scientist (C/B Antiterrorist Team)
  - 1 Technician (Remote Meteriological Sensing, Data Bases, Hazard Prediction)
- Environmental Protection Agency (EPA) - (1)
  - 1 Environmental Monitoring Specialist
- Department of Energy (DOE) - (1)
  - 1 Radiological Monitoring Specialist

METRO STRIKE TEAM WORKING GROUP RECOMMENDATION

PREFACE:

Consistent with the need to ensure effective and appropriate consequence management for chemical and biological release-related events; and cognizant that the ramification of such events are overwhelmingly medical in nature; and recognizing that present civilian pre-hospital EMS and in-hospital capabilities lack the proper resources and training to confront what was previously viewed as a military problem; this development team proposes that the following strategy for resolving this potential public health emergency while ensuring the highest level of patient care consistent with existing professional standards of operations be adopted.

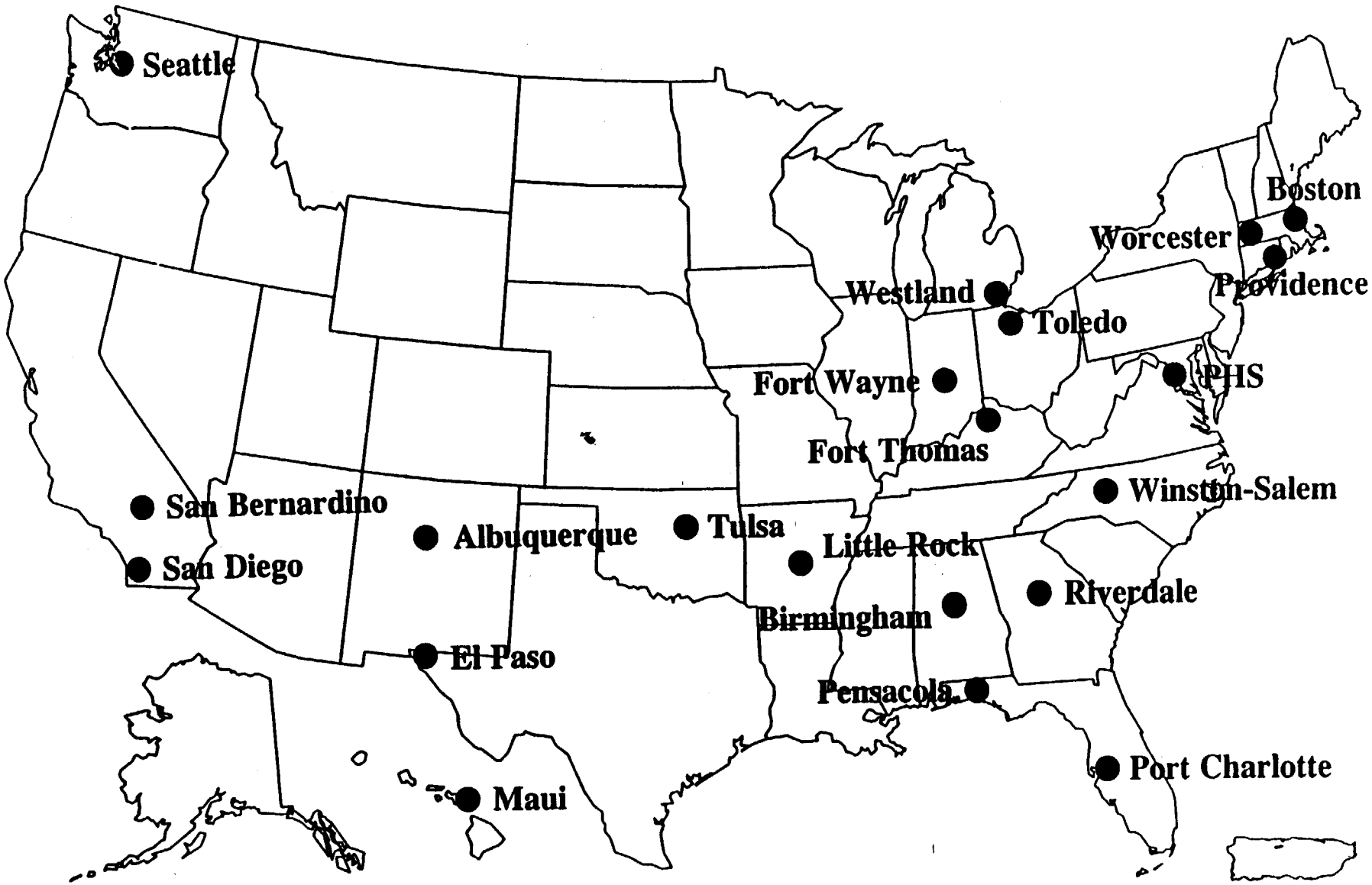
METRO STRIKE TEAM PURPOSE/MISSION STATEMENT

- *MST responds at request of local and/or regional jurisdictions.*
- *Responds to and assists with medical management and public health consequences of chemical and biological incidents.*
- *MSTs positioned at major metropolitan areas.*
- *Used at local and regional levels.*
- *Available for national deployment.*

METRO STRIKE TEAM SCOPE OF OPERATIONS

- Medical management of chemical and biological (C/B) incidents arising from consequences of technological accidents and/or terrorism.
- Technical consultation of C/B incidents.
- Medical intelligence about the C/B incident.
- Interaction with applicable law enforcement and other C/B terrorism response agencies.

READINESS LEVEL-I DMATs



CRITICAL C/B CONSEQUENCE MANAGEMENT FUNCTIONS

- Threat Assessment
- C/B Consultation with Affected Jurisdictions
- Public Affairs
- C/B Rapid Deployment Team (CBRDT)
- Agent Identification
- Epidemiological Investigation
- Expedient Hazard Detection
- Expedient Hazard Reduction
- Environmental Decontamination
- Mental Health Support

CRITICAL C/B CONSEQUENCE MANAGEMENT FUNCTIONS (Continued)

- Clinical Medical Support
  - Health Professionals
  - Laboratory Support
  - Patient Evacuation
  - In-hospital Care
- Pharmaceutical Support
- Human Toxic Effects Registry
- Supplies and Equipment
- Victim Identification and Mortuary Services