

NATIONAL BIOTERRORISM HOSPITAL PREPAREDNESS PROGRAM

Cooperative Agreement Guidance

U.S. Department of Health and Human Services
Health Resources and Services Administration
Maternal and Child Health Bureau

May 2, 2003

Table of Contents

Mission Statement	2
HRSA Cooperative Agreement	2
Introduction	2
Purpose	3
Who Can Apply.....	4
Funding.....	4
Deadline.....	4
Application Requirements.....	5
Review Criteria	5
National Bioterrorism Hospital Preparedness Program Contacts	5
Cooperative Agreement Application	6
PHS Form 5161-1.....	6
Year 1 Progress Report.....	6
FY2003 Work Plan	6
Part A. Cross-Cutting Activities	6
A. Cross-Cutting Benchmark #1: Incident Management	7
B. Cross-Cutting Benchmark #2: Joint Advisory Committee for CDC and HRSA Cooperative Agreements.....	9
C. Cross-Cutting Benchmark #3: Laboratory Connectivity	10
D. Cross-Cutting Benchmark #4: Laboratory Data Standard.....	12
E. Cross-Cutting Benchmark #5: Jointly Funded Health Department / Hospital Activities ...	12
Part B. HRSA Priority Areas	14
Priority Area #1: Administration.....	15
Priority Area #2: Regional Surge Capacity for the Care of Adult and Pediatric Victims of Terrorism	16
Priority Area #3: Emergency Medical Services	21
Priority Area #4: Linkages to Public Health Departments	22
Priority Area #5: Education and Preparedness Training	23
Priority Area #6: Terrorism Preparedness Exercises	24
Part C. Budget	25
Part D. Timeline.....	26
References	26

Appendices

- Appendix A: Public Health Service Form 5161-1 (PHS Form 5161-1)
- Appendix B: Year 1 Progress Report
- Appendix C: Line-Item Budget Template
- Appendix D: Funding Table

Mission Statement

The mission of the National Bioterrorism Hospital Preparedness Program is to ready hospitals and supporting health care systems to deliver coordinated and effective care to victims of terrorism and other public health emergencies.

HRSA Cooperative Agreement

Introduction

In the wake of the terrorist attacks of September 11, 2001, and the subsequent anthrax incident, attention was focused on the ability of the health care system, including hospitals, emergency medical services (EMS) systems and outpatient facilities to respond to terrorist events and other public health emergencies. All components of the health care system face the challenge of becoming trained and prepared to respond to biological, chemical and radiological incidents, and casualties resulting from conventional explosions, whether they present in large numbers acutely or in small cohorts over a long period of time. While generally well prepared to respond to routine emergencies and minor epidemics, the system lacks the plans and infrastructure to respond to the new challenges posed by terrorist acts. An acute influx of large numbers of sick or contaminated patients from such an attack could completely overwhelm the medical system.

The outbreak of anthrax stemming from mailings of weaponized spores through the United States (US) postal system in the fall of 2001 was the latest instance of bioterrorism in the United States. Although the Federal government has staged more than 200 counterterrorism training exercises since 1996, when the *Defense Against Weapons of Mass Destruction Act* was passed by Congress, concern has been expressed from many quarters about the continued lack of preparedness of hospitals, community clinicians, EMS systems and poison control centers to respond to terrorist attacks. Although the Centers for Disease Control and Prevention (CDC) and a number of medical groups have produced many

web-based and other resources on these subjects as the situation has evolved, few provide specific guidance on the development of local, regional, and State response systems. A maximally effective response can occur only if emergency response systems at the local, regional, and State levels have fully integrated hospitals and acute care medicine, emergency medical services (EMS), public health, and other health assets into appropriate jurisdictional emergency operation plans.

Lest we become complacent in the aftermath of the anthrax incident, it is important to realize that terrorist groups may have access to other biological, chemical, radiological and explosive weapons. For example, in the 1990s, United Nations inspectors in Iraq found evidence that thousands of pounds of anthrax culture, hundreds of liters of *Clostridium botulinum* culture, and several kilograms of botulinum toxin were possessed by that government.¹ At the time of this writing, our government has been at war with Iraq to neutralize this capacity.

To follow up on the emergency bioterrorism legislation in fiscal year (FY) 2002 through the Public Health and Social Services Emergency Fund, Congress authorized a continuing response to bioterrorism and other public health emergencies in June 2002. The *Public Health Security and Bioterrorism Preparedness and Response Act of 2002* (Public Law 107-188) enacts Section 319C-1 of the Public Health Service Act (42 U.S.C. 247d-3a), which supports activities related to countering potential terrorist threats to civilian populations. Funding was provided under the *Consolidated Appropriations Resolution, 2003* (Public Law 108-7).

As part of this initiative, the Health Resources and Services Administration (HRSA) announces that \$498 million is available in FY 2003 for cooperative agreements with 62 public health departments of States, territories, municipalities and Pacific nations (hereafter referred to as "Awardees"). These awards are for the development and implementation of regional plans to improve the capacity of the health care system, including hospitals,

emergency departments, outpatient facilities, emergency medical services (EMS) systems and poison control centers, to respond to incidents requiring mass immunization, isolation, decontamination, diagnosis and treatment, in the aftermath of terrorism or other public health emergencies.

Purpose

The purpose of this cooperative agreement program is to build upon the planning, infrastructure development and initial implementation that began in FY 2002, to continue to upgrade the preparedness of the Nation's health care system to respond to bioterrorism, other outbreaks of infectious disease, and other public health threats and emergencies. This will also allow the health care system to become more prepared to deal with non-terrorist epidemics of rare diseases, exposures to chemical toxins and radiological materials, and mass casualties due to explosions. The prime focus will be to develop, implement and intensify regional terrorism preparedness plans and protocols for hospitals, outpatient facilities, EMS systems (both freestanding and fire-based) and poison control centers in collaborative statewide or regional models. Collaboration with other States, American Indian and Alaska Native tribes, bordering countries and expert national organizations is encouraged. Integration of the health care system plans with the public health department response is critical.

Applications of two types are being accepted for FY 2003: (a) *Competing Continuations*: requests for financial assistance to extend for an additional budget period beyond FY 2002 (all current awardees) and (b) *New*: request for financial assistance for projects not currently receiving support (Pacific freely associated nations).

The FY 2003 cooperative agreements will perpetuate successful FY 2002 bioterrorism preparedness activities based on needs assessments begun then. It will also include planning and implementation of new or expanded activities designed to prepare the regional health care systems for incidents of terrorism or other public health emergencies. FY 2002 awardees will

continue, and Pacific freely associated nations will begin, to involve their local partners in this effort. These partners must include, but are not limited to, pediatric and adult hospital associations, emergency medical systems, emergency management agencies, rural health offices, primary care associations, health care professional organizations and federal health care facilities (including those of the Indian Health Service, Veteran's Administration and Department of Defense).

Each application is expected to integrate the work done under the FY 2002 HRSA cooperative agreement and the proposed work under the FY 2003 cooperative agreement with funds available through: (1) the CDC cooperative agreements for upgrading State and local public health preparedness for terrorism; and (2) funds directed to selected municipalities by the Department of Homeland Security (DHS) for Metropolitan Medical Response Systems (MMRS).

Awardees will be given the flexibility to prioritize funding for specific activities based upon their needs assessment, within the overall context of national terrorism preparedness objectives. This should result in awardees being able to upgrade the ability of health care entities to respond to terrorist incidents; develop a multitiered system in which these entities are prepared to triage, isolate, diagnose, treat and refer multiple victims to identified centers of excellence; and develop regional consortia to pool limited funding to accomplish these goals.

Awardee health departments will be required to allocate most of these funds to hospitals, emergency medical systems, poison control centers, community health centers, rural health clinics, federally qualified health centers, tribally-owned health care facilities serving American Indians and Alaska Natives, and other outpatient facilities that serve as vital points of entry into the health care system.

Indian Health Service facilities could be eligible for State funding under this program. To the extent that such facilities apply for State funding and provide the requisite

documentation, the State could award funding based on appropriate State law and procedures.

While associations of hospitals and other health care entities may serve as subawardees to implement this program, the intent of the program is primarily to fund health care entities directly for their preparedness activities, or to implement activities that have a direct benefit to these entities.

Who Can Apply

The distribution of funds will be to the health departments of all 50 States, the District of Columbia, the nation's three largest municipalities (New York City, Chicago and Los Angeles County), the Commonwealths of Puerto Rico and the Northern Mariana Islands, the territories of American Samoa, Guam and the U.S. Virgin Islands, the Federated States of Micronesia, and the Republics of Palau and the Marshall Islands. Hospitals, EMS systems, outpatient facilities and poison control centers should work with the appropriate health department for funding through this program.

Eligible applicants from the Pacific Basin Territories and Nations may cooperate in a consortium arrangement to submit a single application, pooling funds to develop a larger regional plan where economies of scale might make this more practical. Under such an arrangement, one of the applicants must be the awardee of record, with responsibility to oversee the funds directed toward the other participants.

Funding

The administrative and funding instrument to be used for this program will be the cooperative agreement, in which substantial HRSA programmatic collaboration with awardees is anticipated during the performance of the project. Under the cooperative agreement, HRSA will support activities of awardees through a memorandum of agreement.

\$498 million will be awarded in cooperative agreements. Minimum allotments will be available of \$2,000,000 to the District of Columbia, \$1,000,000 to the States, Puerto

Rico and the three municipalities, and \$500,000 to the other four territories and the three Pacific nations. Remaining funds will be distributed to these jurisdictions using a formula based on population. The amount to be awarded includes both direct and indirect costs.

Given the responsibilities of Federal, State, and local governments to protect the public in the event of terrorism, funds from this cooperative agreement must be used to supplement and not supplant the non-Federal funds that would otherwise be made available for this activity.

No matching costs or cost sharing are required.

Awards are intended to support needs assessments, the development and implementation of DHHS-approved work plans, and contracts to health care entities to upgrade their ability to respond to terrorist incidents.

Funds for these cooperative agreements will be awarded for a four-year project period beginning August 31, 2003. Funding for subsequent budget periods beyond FY 2003 will be based upon the accomplishment of objectives and fulfillment of cooperative agreement requirements for previous years, and upon the availability of appropriated funds.

Deadline

Awardees must file an application with HRSA as soon as feasible after receipt of this announcement, but no later than **July 1, 2003**. In order to facilitate rapid review by HRSA, copies of the application may be electronically mailed to HRSA.

Applications will be reviewed by committees within both HRSA and the Office of the Secretary, DHHS. If the applications fulfill the review criteria, awards will be made by August 31, 2003. If recommendations from these reviews result in funding restrictions, the restrictions will need to be addressed shortly after the applicant receives the Notice of Grant Award.

Application Requirements

Applications must be submitted to both HRSA and the Office of the Assistant Secretary for Public Health Emergency Preparedness (OASPHEP) via separate mailings or electronic transmissions. Applications must be postmarked or submitted electronically by close of business on July 1, 2003. After a simultaneous dual review process at the agency and departmental headquarters levels, funds will be awarded by August 31, 2003. Based on demonstrated ability to obligate FY 2002 funds by the FY 2003 application date, post-award funding restrictions may apply until the grantee is ready to spend the new funds.

Applications must be addressed separately to both of the following individuals, either by mail or electronic transmission, to ensure efficient review at both levels and timely award of funding. It is critical that this dual mailing be accomplished by the applicant. HRSA will be unable to duplicate and forward cooperative agreement applications to the Office of the Assistant Secretary for Public Health Emergency Preparedness (OASPHEP).

Addresses for Submission:

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When submitting applications/workplans to OASPHEP, please provide electronic copies, if possible.

Review Criteria

Applications will be reviewed based on the following criteria:

- Extent to which the plan relates to identified needs
- Extent to which terrorism preparedness issues are prioritized and addressed based on available funds
- Extent to which the bioterrorism coordinator and medical director are qualified for their positions
- Extent to which requests for staffing, equipment and capital improvements relate to sustainable program goals
- Extent to which objectives are measurable, achievable, and sustainable
- Extent to which the work plan meets benchmark requirements in a high-quality manner
- Extent to which proposed objectives can be accomplished within one year
- Extent to which the needs of pediatric and adult age groups are addressed in the plan
- Extent to which terrorism disaster exercises feed back to revisions of the plan
- Clarity of budget and narrative justification

National Bioterrorism Hospital Preparedness Program Contacts

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Cooperative Agreement Application

To apply for funds, applicants will need to submit the following:

1. Public Health Service Grant Application Form (PHS 5161-1)
2. Year 1 Progress Report Document (Competing Continuation applications only)
3. FY 2003 Work Plan

PHS Form 5161-1

Public Health Service Form 5161-1 (PHS Form 5161-1) can be found in Appendix A. The form can also be viewed and downloaded from

<ftp://ftp.hrsa.gov/mchb/grants2003/phs5161-1.doc>

Item 10 on this form should reference Catalog of Federal Domestic Assistance (CFDA) Number 93.003.

Year 1 Progress Report

The Year 1 Progress Report is required for competing continuation applications only. The document (see Appendix B) contains objective items designed to reflect the current status of each awardee within a given priority area. Completion of the report will result in consistent cross-awardee data that may be used for national planning purposes. For applicants, this data can serve as the basis for a continuous quality improvement plan, in which the initial needs assessment is continually updated and forms the basis for changes in the implementation plan.

FY2003 Work Plan

Part A. Cross-Cutting Activities

Public health emergency preparedness requires that state and local health departments, hospitals, and other health care entities be able to mount a collective response featuring seamless interaction of their event-specific capabilities. For example, while public health departments would play the predominant role in a public health emergency requiring mass distribution of vaccine or antibiotic prophylaxis, hospitals and other health care entities would carry the primary burden in the wake of a mass casualty incident.

Many aspects of public health emergency preparedness demand a unifying jurisdiction-wide strategy. For this reason, the Department of Health and Human Services (HHS) directs both the CDC and the HRSA cooperative agreements primarily to state health departments and looks to the senior state public health official to effect the necessary integration of pertinent activities. The scope of this integration must be both vertical (i.e., between state and local activities) and horizontal (i.e., between public health and health care activities).

In addition, public health emergency preparedness activities should be coordinated closely with those of public safety and emergency management agencies, especially with respect to activities funded by the Department of Homeland Security and/or other federal agencies. States should actively support efforts by counties and municipalities to enhance their readiness for public health emergencies, including their capacity to rapidly accommodate state and federal assets (such as the Strategic National Stockpile) and emergency response teams (such as those provided by the National Disaster Medical System).

To ensure that all preparedness activities are coordinated and integrated at the state and local levels, applicants should address cross-cutting issues that are identified below (Sections A through F). The Recipient Activities in Sections A through E consist of two subsections beginning with the following phrases:

- 1 - Provide the following information.
- 2 - Carry out the following activity.

The responses to all subsections 1 as well as to Section F should be assembled as one, stand-alone document. Responses to subsections 2 should be integrated and interwoven with descriptions of activities in the corresponding Priority Area.

This Cross-Cutting Activities section is identical in both the CDC and the HRSA guidance. In the HRSA guidance, this section appears in the body of the guidance as Part A; in the CDC guidance, it appears as Attachment X. Responses to this section should be identical whether submitting for CDC or HRSA funding. Thus the responses need be prepared only once and copies inserted in the separate submissions to CDC and to HRSA.

**A. Cross-Cutting Benchmark #1:
INCIDENT MANAGEMENT**

On February 28, 2003, President Bush issued Homeland Security Presidential Directive HSPD-5 establishing the National Incident Management System (NIMS).

NIMS covers all incidents (natural and unnatural) for which the federal government deploys emergency response assets. The Secretary of Homeland Security is responsible for developing and maintaining NIMS.

Bioterrorism and other public health incidents fall within the scope of NIMS. To this end, the Department of Health and Human Services (DHHS) will have the initial lead responsibility for the federal government and will deploy assets as needed within the areas of his or her statutory responsibility (e.g., the Public Health Service Act and the Federal Food Drug and Cosmetic Act) while keeping the Secretary of Homeland Security apprised regarding the course of the incident and the nature of the response operations.

HSPD-5 provides for the Department of Homeland Security (DHS) to assume responsibility for coordinating federal response operations under certain circumstances. In particular, "The Secretary shall coordinate the federal government's resources utilized in response to or recovery from terrorist attacks, major disasters, or other emergencies if and when any one of the following four conditions applies: (1) a federal department or agency acting under its own authority has requested the assistance of the Secretary; (2) the resources of state and local authorities are overwhelmed and federal assistance has been formally requested by the state and local authorities; (3) more than one federal department or agency has become substantially involved in responding to the incident; or (4) the Secretary has been directed to assume responsibility for managing the domestic incident by the President."

States will need incident management systems that are interoperable with NIMS if States and local governments are to gain full benefit from the emergency response assets of the federal government. To that end, HSPD-5 requires that, effective with Fiscal Year 2005 awards, adherence to and compatibility with NIMS be a condition of all grants and other awards from federal government agencies for any aspect of state or local emergency preparedness and

response. DHHS has elected to begin the requisite planning activities immediately with a view to avoiding unnecessary and potentially costly revisions in Fiscal Year 2005 to DHHS-sponsored activities already underway or undertaken in Fiscal Years 2003 or 2004.

This benchmark is intended to help states and local governments prepare for their eventual participation in the National Incident Management System (NIMS), which is prescribed in Homeland Security Presidential Directive #5 (HSPD-5). NIMS is to cover all incidents (natural and unnatural) for which the federal government deploys emergency response assets. The Secretary of Homeland Security is responsible for leading the development and implementation of NIMS.

During the upcoming budget period, the Department of Health and Human Services will undertake the following activities with respect to NIMS:

- Collaborate with the Department of Homeland Security and other agencies of the Federal Government in developing NIMS, as prescribed by HSPD-5.
- At appropriate times, share NIMS-related documents with cooperative agreement recipients and invite their comments with a view to keeping them apprised of progress toward and enlisting their assistance in NIMS development.

Recipient Activities:

1. Provide the following information (not to exceed 5 pages).

Describe the roles and responsibilities of public health departments and the hospital community (including their supporting health care systems) related to incident management at the state and regional levels – including inter-state as well as intra-state regions, as appropriate.

- a. Does your state (city) currently have an incident management system? If yes, please indicate a web-site address or

other reference to a descriptive document and answer the following questions about the system.

- i. What government agencies participate in the system?
 - ii. What other entities, public and private, participate in the system?
 - iii. Which agency has responsibility for overall planning, directing, and coordinating jurisdiction-wide response operations?
 - iv. For what classes of incidents does the public health department have lead responsibility for planning, directing, and coordinating jurisdiction-wide response operations?
- b. Has your state government defined intra-state regions to facilitate planning and conduct of incident management? If yes, please provide a map showing the regional structure.
 - c. Does each intra-state region have an incident management plan? If yes, please indicate a web-site address or other reference to a typical plan.
 - d. Summarize the results of activities during the FY 2002 budget period to achieve CDC Critical Benchmarks #3, 5, 6, and 12 and HRSA Critical Benchmark #3; and describe how these results relate to the statewide and regional incident management systems.

2. Carry out the following activity during the upcoming budget period:

- a. Review and comment on DHHS-furnished documents regarding NIMS as it undergoes development.
- b. Develop and keep up to date a description of the roles and responsibilities of public health departments, hospitals, and supporting health care systems in the statewide incident management system and, where applicable, in regional incident management systems.

The estimated costs for this activity are eligible for inclusion, with an appropriate distribution, in both the CDC and HRSA cooperative agreements. For the estimated costs assigned to the HRSA cooperative agreement, specify them in the budget for Priority Area 2 and discuss them in the associated budget justification.

**B. Cross-Cutting Benchmark #2:
JOINT ADVISORY COMMITTEE
FOR CDC AND HRSA
COOPERATIVE AGREEMENTS**

Establish and operate an Advisory Committee to assist the jurisdiction's senior public health official in overseeing both the CDC and HRSA Cooperative Agreements

DHHS strives to ensure that the CDC and HRSA cooperative agreements are complementary with respect to strategy and scope and feature mutually reinforcing provisions. Moreover, DHHS strives to foster appropriate integration of CDC- and HRSA-funded activities by directing both cooperative agreements to the jurisdiction's health department and by synchronizing the application, review, and award processes for the two cooperative agreements.

The CDC and HRSA cooperative agreements awarded in fiscal year 2002 each called for formation of an advisory committee to help guide their respective funded activities. As part of the FY 2003 cooperative agreements, with a view to enhancing integration of public health department and hospital community initiatives, DHHS is calling for formation of a single advisory committee to assist the senior public health official in overseeing both the CDC and the HRSA cooperative agreements. The transition from two committees to one may occur any time during the upcoming budget period. The unified committee may include CDC- and HRSA-specific subcommittees, among others, if the recipient so chooses.

Recipient Activities:

1. Provide the following information (not to exceed 2 pages):

Describe the activities of the advisory committees for the CDC and HRSA cooperative agreements during the FY 2002 budget period (CDC Critical Benchmark #2 and HRSA Critical Benchmark #2). Summarize the major accomplishments. Identify the areas, if any, where the committees' results fell short of expectations and discuss the obstacles encountered and potential ways to overcome them in the future.

2. Carry out the following activity during the upcoming budget period:

Establish an Advisory Committee to assist the jurisdiction's senior public health official in overseeing both the CDC and HRSA cooperative agreements. The charter for the Committee should span the scope of the CDC and HRSA cooperative agreements. Opportunities for joint or coordinated activities between public health departments and the hospital community should receive special attention. The Committee should meet at least quarterly and maintain a record of its major decisions and other actions.

The membership of the Advisory Committee should be broadly representative of public and private entities that have a significant role in preparedness for and response to bioterrorism and other public health emergencies. Representatives from the following entities must be included on the unified advisory committee and/or its subcommittees:

- State, territorial or municipal health department
- Local health departments
- State or territorial hospital association
- State or territorial mental health agency
- Academic Health Centers
- Other tertiary care centers

- Community hospitals
 - Community health centers
 - Primary care associations
 - Clinical professional societies
 - American Indian or Alaska Native health care facilities
 - Veterans Administration health care facilities
 - Military treatment facilities (if applicable)
 - State or territorial office of rural health
 - State, territorial or municipal emergency medical services director or designee
 - State, territorial or municipal emergency management agency
 - Local emergency medical systems
 - Poison control centers
 - Metropolitan Medical Response Systems
 - State Maternal-Child Health Advocate
 - State Trauma Coordinator
 - Police departments
 - Fire departments
 - Red Cross and other voluntary organizations
 - Consumer representatives
- infectious disease, toxicology, radiation medicine and trauma surgery)
 - Nursing (especially emergency, critical care, occupational and school health)
 - Pharmacy
 - Hospital administration
 - Hospital engineering
 - Laboratory science
 - Mental health (care delivery and psychological consequences of terrorism)
 - Emergency medical technicians or paramedics
 - Information systems and technology
 - Public affairs (especially risk communication)

The estimated costs for this activity are eligible for inclusion, with an appropriate distribution, in both the CDC and HRSA cooperative agreements. For the estimated costs assigned to the HRSA cooperative agreement, specify them in the budget for Priority Area 1 and discuss them in the associated budget justification.

**C. Cross-Cutting Benchmark #3:
LABORATORY CONNECTIVITY**

Establish operational relationships among the various types of analytical laboratories within the jurisdiction (and other jurisdictions as appropriate) that are relevant to preparedness for and response to bioterrorism and other public health emergencies.

Given the myriad forms that terrorism might take, emergency preparedness requires not only a variety of different types of analytical laboratories but also well defined operational relationships among them – especially with respect to routing of samples and sharing of test results. The jurisdiction's senior public health official should be able to obtain analyses and associated data from any and all relevant types of analytical laboratories as needed to counter a bioterrorism incident or other public health emergency.

The Advisory Committee's members – and, if applicable, its consultants – collectively should have expertise and experience in the following professional disciplines:

- Public health (especially infectious disease epidemiology and clinical laboratory science)
- Medicine (especially emergency medicine, family medicine, internal medicine, pediatrics, critical care,

The classes of analytical laboratories that seem particularly relevant to bioterrorism and other public health emergencies include public health department laboratories, hospital laboratories, food testing laboratories, veterinary laboratories, and environmental testing laboratories. Collectively, such an array of laboratories should be able to test for terrorism-related pathogens and chemicals in human clinical specimens (typically, blood or urine samples), food specimens, animal specimens (including those from wildlife) and environmental samples.

Moreover, such an array of laboratories should be able to provide analyses during both the peri-event phase and the post-event phase as needed. "Peri-Event" refers to the minutes, hours, or days during which an emergency incident is unfolding. "Post-event" refers to the days, weeks, or months following an emergency incident. The duration of these phases necessarily will differ from case to case – and the phases may overlap – depending upon the agent and medium involved and the extent and duration of human and/or animal exposure.

This Cross-Cutting Critical Benchmark relates directly to laboratory-related activities included in CDC Focus Areas C and D and in HRSA Priority Area #4. Note that collaborations with food testing laboratories and/or development of food testing capabilities within public health department laboratories are eligible for support under the CDC cooperative agreement because food is being recognized increasingly as a medium for biological or chemical terrorism. The Food and Drug Administration (FDA) will collaborate with CDC in integrating food safety considerations into state and local public health emergency preparedness and response. In addition, collaboration with environmental (biological) laboratories is emphasized because CDC and the Laboratory Response Network are important contributors, along with the U.S. Environmental Protection Agency and the Department of Homeland Security, to the recently announced Presidential initiative called BioWatch – a national program to monitor air at selected sites across the nation for the presence of pathogens that

might be used in terrorist acts against the U.S. Homeland.

Recipient Activities:

1. *Provide the following information (not to exceed 2 pages).*

Describe the progress made during the FY 2002 budget periods of the CDC and HRSA cooperative agreements in establishing linkages between public health department laboratories (especially those of local public health departments) and hospital-based clinical laboratories (CDC Critical Benchmark #10).

2. *Carry out the following activity during the upcoming budget period:*

- a. Compile a jurisdiction-wide or region-wide inventory of all the analytical laboratories that could play an important role in helping public health officials respond to bioterrorism or other public health emergencies. Include laboratories of academic health centers that have a formal affiliation with public health departments or hospitals.
- b. Determine what cooperative arrangements currently exist between and among these laboratories and assess needs for improvements.
- c. Consider the results of this needs assessment when planning and implementing (a) enhancements to public health department laboratories, hospital-based laboratories, and food laboratories affiliated with state or local government – including collaborating academic health centers and (b) new or improved cooperative arrangements between and among laboratories listed in the jurisdiction-wide inventory.

The estimated costs for this activity are eligible for inclusion, with an appropriate distribution, in both the CDC and HRSA cooperative agreements. For the estimated costs assigned to the HRSA cooperative agreement, specify them in the budget for Priority Area #4 as applicable and discuss them in the associated budget justification.

**D. Cross-Cutting Benchmark #4:
LABORATORY DATA STANDARD**

Adopt the Logical Observation Identifiers Names and Codes (LOINC), where applicable, as the standard codes for electronic exchange of laboratory results and associated clinical observations between and among clinical laboratories of public health departments, hospitals, and other entities, including academic health centers, that have a role in responding to bioterrorism and other public health emergencies.

Adoption of and adherence to data standards can do much toward ensuring effective and efficient response to bioterrorism and other public health emergencies. On March 31, the Secretaries of Health and Human Services, Defense, and Veterans Affairs announced their joint adoption of the first set of uniform standards for electronic interchange of clinical health information (www.hhs.gov/news). Extension to the Laboratory Response Network and related laboratories is an important next step.

Additional information about LOINC and its relationship to other data standards can be found at www.loinc.org. During the course of the upcoming budget period, CDC will provide technical assistance regarding implementation of LOINC and, along with the Office of the Secretary, HHS, will participate in collaborative efforts to refine and extend the codes as necessary to meet the needs of public health emergency preparedness.

Recipient Activities:

1. *Provide the following information (not to exceed 2 pages).*

Describe the experiences of the recipient's public health department laboratory – and those of local public health department laboratories, as applicable – during the current budget period in promoting effective and efficient electronic exchange of clinical laboratory results and associated clinical observations.

2. *Carry out the following activity during the upcoming budget period:*

- a. Adopt and implement LOINC as the standard for electronic exchange of clinical laboratory results and associated clinical observations between and among public health department laboratories, hospital-based laboratories, and other entities, including collaborating academic health centers, that have a major role in responding to bioterrorism and other public health emergencies.
- b. In connection with CDC-provided technical assistance, identify areas where refinement or extension of LOINC would enhance public health emergency preparedness.

The estimated costs for this activity are eligible for inclusion, with an appropriate distribution, in both the CDC and HRSA cooperative agreements. For the estimated costs assigned to the HRSA cooperative agreement, specify them in the budget for Priority Area #4 and discuss them in the associated budget justification.

**E. Cross-Cutting Benchmark #5:
JOINTLY FUNDED HEALTH
DEPARTMENT / HOSPITAL
ACTIVITIES**

Develop and maintain a database displaying activities funded jointly by the CDC and HRSA cooperative agreements and, as applicable, other sources.

Full preparedness for the myriad forms of terrorism requires integration of activities funded by different sponsors with different but related objectives. The President and the Congress have provided – and continue to provide – extraordinary funding through DHHS and other agencies of the federal government for enhancing state and local preparedness for acts of terror against the U.S. homeland. Demonstrating that these funds are used effectively and efficiently and in highly coordinated ways is an essential element of accountability.

This section of the guidance focuses on preparedness initiatives that involve various

combinations of joint funding from the CDC and HRSA cooperative agreements and, as applicable, other sources as well. In this context, "other sources" includes a) other DHHS-sponsored programs — such as Public Health Preparedness Centers (CDC), the Bioterrorism Training and Curriculum Development Program (HRSA), and the Medical Reserve Corps (Office of the Surgeon General); b) other agencies of the Federal Government — such as the Federal Emergency Management Agency and other components of the Department of Homeland Security; c) State or local governments; and d) foundations and other private-sector organizations.

The database need not be limited to intra-State activities. HHS encourages applicants to enter into inter-State and trans-national preparedness initiatives as they see necessary — i.e., collaboration with other applicants for the CDC and HRSA cooperative agreements and, where pertinent, with bordering Canadian Provinces and Mexican States. In particular, HHS encourages applicants to forge multi-jurisdictional partnerships where major metropolitan areas or extensive rural regions span portions of two or more States or sit astride an international border.

Recipient Activities:

1. *Provide the following information (not to exceed 2 pages).*

List the preparedness initiatives during the current budget period that are receiving joint funding from the CDC and HRSA cooperative agreements. Where funding from one or more other sources is involved as well, identify the source(s).

2. *Carry out the following activity during the upcoming budget period.*

Maintain and extend as appropriate the database developed for the application in a form that can be included readily in progress reports or provided in response to special requests from the project officer.

The estimated costs for this activity are eligible for inclusion, with an appropriate distribution, in both the CDC and HRSA

cooperative agreements. For the estimated costs assigned to the HRSA cooperative agreement, specify them in the budget for Priority Area 1 and discuss them in the associated budget justification.

F. OTHER CROSS-CUTTING ACTIVITIES

Responses to each issue below need not be more than a page in length (single-spaced) but they should provide sufficient details about the nature and extent of the coordination and integration activities to permit an assessment of the adequacy of such activities. If efforts have been undertaken in any of the areas identified below, provide a brief summary of progress to date. If responses to any of the issues below duplicate information that will be provided in the CDC or HRSA specific sections of your application, you may use the same (or some of the same) text in both places.

Surveillance

Describe how the state health department will integrate disease surveillance systems at the state and local levels, including hospital-based surveillance systems, so that relevant data on disease reporting is rapidly captured and analyzed. Surveillance systems should be developed with a view towards capturing and reporting information in "real-time." Systems should eventually allow for electronic communication between hospitals and public health departments at all levels.

Coordination with Indian Tribes

Provide complete documentation of Indian tribal government participation in state and local preparedness planning. Describe how their participation in planning and implementation efforts will be assured by your plan.

Populations with Special Needs

Describe activities that will be implemented to meet the specific needs of special populations that include but not limited to people with disabilities, people with serious mental illnesses, minority groups, the non-English speaking, children, and the elderly. Consider all operational and infrastructure

issues as well as public information/risk communication strategies. Such activities must be integrated between the public health and the hospital communities.

Planning for Psychosocial Consequences of Bioterrorism and Other Public Health Emergencies

Describe how the state health department is working with hospitals, mental health providers, and public and private emergency response and social services entities in planning to meet the peri- and post-event psychosocial needs of victims, those at risk, their families, psychological casualties both with and without medical illness, and emergency responders (including health care personnel, public health professionals, EMTs, etc.).

Education and Training

Describe what the state health department is doing to train or ensure training of its staff and those in hospitals, major community health care institutions, emergency response agencies, public safety agencies, etc.) to respond in a coordinated manner in the event of a bioterrorist attack or other public health emergency. Describe plans (including joint exercises and drills) that will ensure that each category of personnel in these organizations/agencies knows what their duties are, what is expected of them, and with whom they will be interacting in such an event.

Involvement of Academic Health Centers

Recognizing that academic health centers constitute institutions with expertise and resources in health care delivery (often with emergency response/trauma care capabilities), education/training and research, state and local health departments should capitalize on these assets, if available in their regions, in their preparedness efforts. Describe any activities underway or planned that will involve nearby academic health centers.

Interoperability of Information Technology Systems

Since interoperability of information technology (IT) systems is the most critical

component of electronic communications that will be relied upon heavily during a public health emergency to transmit vital information, data, alerts and advisories, it is paramount that states make every effort to ensure this desired outcome. Describe what measures the state has taken to ensure the connectivity and interoperability, both vertically and horizontally, of its various IT systems with those of local health departments, hospitals, emergency management agencies, public safety agencies, neighboring states, federal public health officials and others.

Border States

Describe how State and local Health departments sharing an international border with Mexico or Canada foster collaboration and coordinate with border counties and existing border agencies and institutions. The traditional definition of the border is 100 kilometers on either side of the international boundary, but state and local public health agencies in consultation with local public health agencies serving the border areas may choose to define the border in a more functional way. States may use funds to conduct necessary actions in support of binational planning, coordination, program development, and contracting in Mexico or Canada if such actions directly contribute to health security in the United States. In all regional planning efforts, describe any collaborative efforts undertaken by local health departments with hospitals in their communities to develop an integrated regional approach to a mass casualty event.

Part B. HRSA Priority Areas

Recognizing the comprehensive nature of an effective response plan for bioterrorism and other public health emergencies, HRSA has identified six priority areas for the work plan.

The Priority Areas include Critical Benchmarks which must be implemented as soon as possible. For each Critical Benchmark the awardee must provide a brief proposal for effecting the intended enhancements during this budget period. An implementation time line with measurable milestones, and a proposed budget for each

planning area must also be provided using the template in Appendix C. The work plan, exclusive of appendices, is not to exceed 70 pages.

There are other activities in this guidance that may be proposed for funding, which may be identified by their "Optional Benchmarks." These activities should be undertaken only after Critical Benchmarks have been addressed. Recipients are encouraged to choose among these optional activities, based on local needs and priorities. If these activities are selected, then the Optional Benchmarks are the standards for those activities.

The HRSA work plan will be expected to show how proposed uses of FY 2003 funds are integrated with other funding sources and organizations, such as CDC and the Department of Homeland Security (DHS).

Populations with Special Needs

The HRSA National Bioterrorism Hospital Preparedness Program shares a concern for populations with special needs with its counterpart program at the CDC. These include but are not limited to people with disabilities, people with serious mental illnesses, minority groups, the non-English speaking, the elderly and children.

Children are more susceptible to the untoward consequences of disasters and acts of terrorism, because of a host of special anatomical, physiological and psychological considerations. Planning must consider, but not be limited to, special treatment areas for mass pediatric casualties in hospitals, triage areas and health centers, development of pediatric response protocols paying special attention to appropriate medications and dosages, pediatric-specific training and exercise procedures, and provision of psychological support to children and families, including methods to ensure reunification of children with family members as needed.

Priority Area #1: Administration

In no more than 5 pages, please address the following elements in order to ensure an

adequate infrastructure to support the planning and implementation process.

Program Direction

While this Program is administered through the State health officers, it is intended to focus on maximizing healthcare facility surge capacity and the integration of healthcare facilities into the public health and general emergency response systems.

There must be leadership at the health department level to ensure coordination of HRSA, CDC and MMRS activities and funding streams, as well as other State, regional and local emergency preparedness initiatives in the awardee's jurisdiction. Specific direction for the HRSA-funded hospital preparedness plan will also be needed.

The application must discuss the staffing plan, including the required positions of Bioterrorism Hospital Preparedness Coordinator and Medical Director, and appropriate professional and administrative staff to support them. A brief description of the education, training and experience that qualify these individuals for the positions must be included.

The Bioterrorism Hospital Preparedness Coordinator is responsible for providing operational leadership to this program in the awardee's jurisdiction, as well as for implementing the needs assessment and operational plans for terrorism health care system preparedness in the State. He or she should have training and experience in disaster response planning, including knowledge of clinical issues, administrative procedures, linkages to appropriate agencies and organizations, and training issues appropriate to terrorism preparedness.

The Medical Director will provide medical expertise in development and implementation of the work plan. If a Medical Director cannot be hired as a state employee, the Awardee may obtain medical direction from the State EMS medical director, or may contract with other qualified physicians for these services. Physicians with board certification in emergency

medicine, and training and experience in disaster medicine, infectious disease, toxicology, radiation and trauma would be desirable for this position.

The staffing plan may include positions for persons with needed professional expertise, or with qualifications in grant proposal writing, financial management, administrative support and other essential functions for the operation of a successful terrorism preparedness program.

Financial Accountability

Critical Benchmark #1: Develop and maintain a financial accounting system capable of tracking expenditures by priority area, by critical benchmark, and by funds allocated to hospitals and other health care entities.

Considering the significant amount of funds that will have been awarded to state health departments through the HRSA cooperative agreements in FY 2002 as well as this year, it is essential to ensure accountability for these funds. This issue has been and will continue to be one of high priority to the Department, the Administration and the Congress. Consequently, public health departments are being asked to track expenditures funded under this cooperative agreement by Priority Area and by Critical Benchmark, and to identify funds that are allocated to hospitals and other health care entities. A benchmark similar to this one is included in the CDC guidance, thus facilitating the development of a system that will satisfy both agencies' requirements.

Although there may be additional guidance developed in this area, for the purpose of this guidance, please see Appendix C (Line Item Budget Template) for the appropriate form on which to demonstrate compliance with this benchmark.

Priority Area #2: Regional Surge Capacity for the Care of Adult and Pediatric Victims of Terrorism

In no more than 40 pages, provide a description of the mechanisms to build upon or put in place a system for optimizing surge capacity. This proposal should take into

consideration the issues identified in the Year 1 Progress Report, and the results of needs assessments that may have been done previously, or from a new assessment developed in response to this guidance.

It is critical that the work plan takes into account the possibility of unprecedented numbers of adults and children who will require health care system resources during a biological terrorism incident. To the extent that funding is available, chemical, radiological or explosive terrorist incidents may also be considered. This plan should take into account:

- hospital bed capacity for both adults and children (routine and critical care)
- capacity for isolation and referral of patients with communicable infections
- appropriate staffing to manage the short- or long-term surge of patients
- antibiotic and vaccine treatment of adult and pediatric biological exposures
- antidote and prophylactic treatment for chemical and radiological exposures
- personal protective equipment
- capacity for trauma and burn care
- capacity for mental health care
- communications and information technology
- capacity for mass mortuary activities

Since awardees will also be applying for CDC funds to support health department preparedness for terrorism, the HRSA application must show how this Priority Area will be coordinated with the appropriate CDC Focus Areas to prevent overlap or gaps between the two cooperative agreements.

Hospital Bed Capacity

Critical Benchmark #2-1: Establish a system that allows the triage, treatment and disposition of 500 adult and pediatric patients per 1,000,000 population (or no fewer than 500 patients per awardee

jurisdiction), with acute illness or trauma requiring hospitalization from a biological, chemical, radiological or explosive terrorist incident.

This system must address all components of the health care system (critical care, inpatient, outpatient and prehospital). Under the authorizing legislation, priority must be given to biological events before using these funds for chemical, radiological or explosive incident planning.

The applicant should address not only enhancing the surge capacity of individual health care entities, but also fostering mutual aid agreements among them. Where appropriate, the applicant should develop and implement intra-state or multi-state regional work plans to maximize economies of scale in planning for an overwhelming terrorist incident or other public health emergency.

Recognizing that many patients may come from rural areas served by referral centers in metropolitan areas, urban planning must include the surrounding areas likely to impact municipal resources. Conversely, in the event of an urban terrorist attack, experience indicates that many people will evacuate to a more rural area. Consequently, the sudden influx of potential patients into rural facilities should be addressed in the work plan.

Awardees should identify the major rural and urban priorities to be discussed in the planning process, so that both rural communities and metropolitan areas can be engaged meaningfully. The State Office of Rural Health should take the lead in engaging other rural health care leaders on priorities affecting them.

Territories and jurisdictions with frontier areas should identify any unusual circumstance that will require special procedures (such as evacuation or equipment availability) due to the geographic location and isolation.

Applicants should consider off-site options for increasing bed capacity such as mobile facilities, temporary facilities appropriate to

an austere environment, large convention halls, armories, and State fair grounds.

The plan must account for the operational and physical needs of special populations such as people with disabilities, pregnant women, children, the elderly, and those with special health care needs.

The plan should account for the translation needs of major non-English speaking groups in the awardee jurisdiction, including locally appropriate means for communicating with the hearing impaired.

The plan may include provisions for the decontamination and final disposition of human remains, and associated forensic procedures.

Isolation Capacity

Critical Benchmark #2-2: Upgrade or maintain airborne infectious disease isolation capacity to have at least one negative pressure, HEPA-filtered isolation facility per awardee, to be placed in accord with the findings of the awardee's needs assessments. Such facilities must be able to support the initial evaluation and treatment of 10 adult and pediatric patients at a time having a clinical contagious syndrome suggestive of smallpox, plague or hemorrhagic fever, prior to movement to a definitive isolation facility.

Applicants should provide an inventory of all available hospital-based isolation facilities, both fixed and mobile, in the jurisdiction, together with the operational characteristics of the facilities.

Applicants may propose equipment purchases or capital improvements (such as retrofitting of existing facilities) to increase isolation capacity in their jurisdiction. The work plan must describe which hospitals and other health care entities in the jurisdiction will be targeted for capital improvements to assure safe and effective isolation and decontamination of large numbers of patients with communicable diseases. Any such capital improvements must be directly incident to the installation of equipment to enhance preparedness for and response to such public health emergencies.

Health Care Personnel

Critical Benchmark #2-3: Establish a response system that allows the immediate deployment of 250 or more additional patient care personnel per 1,000,000 population in urban areas, and 125 or more additional patient care personnel per 1,000,000 of population in rural areas, that would meaningfully increase hospital patient care surge capacity.

The response plan should describe how these personnel are recruited, received, processed and managed through the incident.

The health care personnel must include expertise in both adult and pediatric health care.

Critical Benchmark #2-4: Develop a system that allows the credentialing and supervision of clinicians not normally working in facilities responding to a terrorist incident.

The system should provide for emergency increases in staffing with physicians, nurses, pharmacists, mental health professionals, emergency medical technicians and other appropriate health care professionals, and for linkages with other hospitals and EMS systems.

Processes for accepting the credentials maintained by other accredited health care facilities during an emergency may be developed. This should be a component of any mutual aid arrangements.

The system should also coordinate with health care reimbursement plans that may impact the ability of hospitals, outpatient centers and clinicians to respond efficiently in the event of a major terrorist disaster.

Pharmaceutical Caches

Critical Benchmark #2-5: Establish local or regional systems whereby pharmacies based in hospitals or otherwise participating in the local or regional health care response plan have surge capacity to provide pertinent pharmaceuticals in response to bioterrorism or other public health emergencies.

The surge cache should be within the stock rotational capacity of the participating pharmacies, to prevent shelf-life expiration of the medications, vaccines, and supplies. These systems must complement the Strategic National Stockpile (SNS).

Contingency plans for pharmaceuticals needed in chemical and radiological terrorism preparedness may be considered after biological terrorism preparedness is fully addressed as required under the authorizing legislation.

The plan may provide for distributing prophylactic medications and antidotes to emergency response personnel in hospitals, clinics and emergency medical services systems, and their families, within 12 hours. However, the State health department has the primary role in this effort.

As part of a radiological response, consideration may be given to pre-placement of potassium iodide in appropriate settings where it can be delivered to adult and pediatric victims of an attack within 6 hours.

Since deployment of the Strategic National Stockpile (SNS) is primarily done through the CDC cooperative agreement, the HRSA proposal may support deployment of the SNS to health care facilities outside of health departments.

Recognizing that a Federal response is secondary to a local jurisdiction's ability to respond to a disaster, pharmacies participating in the regional health care response plan should optimize their capacity to provide pertinent pharmaceuticals for an immediate response before the SNS may be realistically available.

Consistent with concerns that have been expressed about potential overuse of medical treatments for biological or chemical exposures, adult and pediatric treatment protocols must be consistent with generally accepted clinical recommendations, such as those promulgated by CDC and appropriate professional organizations.

When planning for a response to likely terrorist threats, priority should be given to

the following agents thought to be credible threats:²

- Viruses: smallpox, hemorrhagic fevers and equine encephalitides
- Bacteria: anthrax, plague, brucellosis, Q fever and tularemia
- Toxins: ricin, botulinum, staphylococcal enterotoxin-B and T-2 mycotoxin
- Nerve agents: organophosphates, sarin, tabun, soman, VX
- Respiratory agents: cyanide
- Toxic Industrial Chemicals: hydrofluoric acid, isocyanates, methyl bromide
- Radiation illness: acute manifestations, delayed complications

Outright purchase of medications and vaccines by the awardee using HRSA funds should be limited to instances where stock rotation by participating pharmacies in their normal course of business is possible to avoid product expiration. However, the awardee may develop written agreements with local pharmacies to reimburse them for medications supplied in an emergency.

The awardee may increase the par level of necessary medications in hospitals and other health care entities, to mitigate the problem of outdated medications by rotating them through the system to insure product freshness.

The awardee may enter into partnerships with local independent and chain pharmacies that are able to stock more than the usual par level of required medications for daily needs.

There may be agreements with pharmaceutical wholesalers that can deal effectively with filling orders from their client pharmacies in a terrorist emergency, by arranging to have sufficient stocks on hand to meet emergency needs.

There may be agreements with drug wholesalers that offer a Vendor Managed

Inventory (VMI) arrangement to ensure that medications are in date.

Consultation with CDC regarding participation in the ChemPack program is encouraged. This allows awardees to establish stocks of medications to be used in strategic locations in the event of a chemical attack.

Personal Protection and Decontamination

Contingency plans for chemical and radiological terrorism preparedness may be proposed after biological terrorism preparedness is fully addressed as required under the authorizing legislation.

Critical Benchmark #2-6: Ensure adequate personal protective equipment (PPE) to protect 250 or more health care personnel per 1,000,000 population in urban areas, and 125 or more health care personnel per 1,000,000 population in rural areas, during a biological, chemical or radiological incident.

Critical Benchmark #2-7: Ensure that adequate portable or fixed decontamination systems exist for managing 500 adult and pediatric patients and health care workers per 1,000,000 population, who have been exposed to biological, chemical or radiological agents.

The application should assess the availability of personal protective and decontamination equipment in the awardee jurisdiction; and determine what unmet needs exist in order to adequately protect emergency medical responders in a terrorist incident. Awardees should determine how PPE and decontamination facilities will be allocated between rural and metropolitan hospitals, to address possible contamination in both types of venue.

Describe which hospitals and other health care entities in the State will be targeted for capital improvements for facilities capable of safe and effective decontamination of large numbers of adult and pediatric patients with particulate biological, chemical or radiological exposures. Any such capital improvements must be directly incident to the installation of equipment to enhance

preparedness for and response to such public health emergencies.

Mobile decontamination facilities and supply caches may be funded to maximize benefit and cost-effectiveness.

It is important that equipment purchased under this priority is interoperable with equipment purchased with funds from DHS's State Homeland Security Grant Program (SHSGP) for first responders.

Mental Health

Important additions to this new cooperative agreement are recommendations and requirements to address needs and direct activities to issues of psychological health and their behavioral manifestations. This represents a strongly recognized need that the Nation prepare to protect both the physical and psychological health of those potentially victimized by terrorism.

Most survivors of terrorism experience a variety of stress reactions. However, as many as one in three survivors develop critical symptoms, which if not addressed can lead to chronic post-traumatic stress syndrome, anxiety and depression.

Critical Benchmark #2-8: Establish a system that provides for a graded range of acute psychosocial interventions and longer-term mental health services to 5,000 adult and pediatric clients and health care workers per 1,000,000 population exposed to a biological, chemical, radiological or explosive terrorist incident.

The primary goal of the acute psychosocial interventions is rapid return to functioning and return to the community, rather than diagnosis and treatment referral. Interventions may range from incident-specific technical education linked with psycho-education to group or one-on-one acute psychological interventions. These activities may occur within the physical space of the health care facility itself, or at a proximally located facility designed for this purpose. Longer-term care refers to those interventions that extend beyond the acute interventions described previously, and therefore require full diagnostic evaluation,

treatment plan and consistency of treatment provider.

Patients will include those directly impacted and at risk, their families, the concerned but well, and responding health care workers.

Define which hospitals or outpatient centers will provide mental health services appropriate to the aftermath of a terrorist incident.

Develop a listing of available behavioral health staff who are trained in incident stress management.

Develop and disseminate mental health messages to the population affected by a terrorist attack.

Trauma and Burn Care Capacity

Injury due to explosive devices has been, to date, the most common outcome of terrorist attacks both globally and domestically, and is likely to continue to be so in the future. Our nation must be prepared optimally for this eventuality. One of the best ways to prepare for this is to support organized systems of trauma care.⁵ A trauma system can typically handle up to 10 major trauma cases per day per million of population. But this capacity would be severely strained in a mass casualty incident due to terrorism.

The authorizing legislation provides for the development and implementation of the trauma and burn care components to the State plans for provision of emergency medical services in the event of a terrorist incident. There should be contingency plans for terrorism preparedness involving mass trauma or burn casualties, after biological terrorism preparedness is fully addressed as required under the same law.

Optional Benchmark #2-9: For awardees choosing to fund this section, enhance statewide trauma care capacity to be able to respond to a mass casualty incident due to terrorism. This plan should ensure the capability of providing trauma care to at least 50 severely injured adult and pediatric patients per million of population per day.

Briefly summarize the findings of the 2003 HRSA Trauma-EMS program's trauma system assessment (if done in the awardee jurisdiction), as they apply to mass explosive emergencies due to terrorism.

The work plan should take into account the need for general surgeons, pediatric surgeons, trauma surgeons, neurosurgeons, orthopedic surgeons, other surgical specialists, anesthesiologists, critical care specialists, nurses and ancillary health care personnel in implementing an effective surgical and burn unit terrorism response plan.

Resources may include, but are not limited to, metropolitan medical response systems, disaster medical assistance teams, and mobile surgical response teams.

Regional plans may be proposed for upgrading equipment or facilities to accommodate mass surgical and burn casualties due to a terrorist incident.

Communications and Information Technology

Critical Benchmark #2-10: Establish a secure and redundant communications system that ensures connectivity during a terrorist incident between health care facilities and state and local health departments.

Describe what measures the awardee has taken to ensure the vertical and horizontal connectivity and interoperability of its various information technology systems with those of health departments, hospitals, emergency medical services, emergency management agencies, public safety agencies, neighboring jurisdictions and federal public health officials.

The system should include: a) Internet connectivity; b) electronic mail for notification of alerts and other critical communications; and c) radio backup for land-line and cellular phone systems that may be compromised during a terrorist incident.

There should be a discussion of local and State communications capabilities available

to hospitals, clinics, EMS systems and poison control centers, and the ability of the statewide communication system to respond to overloading of standard telephone, cellular phone and radio communications during a terrorist incident.

It is important that equipment purchased under this priority area is interoperable with equipment purchased with funds from DHS's State Homeland Security Grant Program (SHSGP) for first responders.

Funding proposals for information technology must be consistent with the approach and technical specifications contained in the Appendix to the FY 2003 CDC guidance on the Public Health Preparedness Program.

Proposals under the HRSA cooperative agreement to enhance health care system communication abilities must be clearly distinguished from similar proposals that respond to the CDC guidance addressing health department preparedness.

Priority Area #3: Emergency Medical Services

In no more than 5 pages, describe how the needs of emergency medical services systems will be addressed in optimizing their ability to respond to terrorist incidents. This proposal should take into consideration any issues identified in the Year 1 Progress Report, and the results of needs assessments done previously or in response to this guidance.

Emergency medical services (EMS) systems are an important component in a comprehensive terrorism preparedness plan, especially in a chemical agent release or mass trauma scenario. An EMS system can typically handle up to 200 emergencies per day per million of population. But this capacity would be severely strained in a mass casualty incident due to terrorism.³

In the FY 2002 Bioterrorism Hospital Preparedness Program, EMS systems were eligible recipients of funding, but were overshadowed by hospital needs due to the limited funding and comprehensive requirements of a bioterrorism response

plan. During the FY 2003 appropriations process, Congress specifically encouraged HRSA to consider a statewide assessment of emergency medical preparedness needs in the event of a public health emergency, as well as a plan to address those needs as part of the State application for hospital preparedness funds.

Critical Benchmark #3: Develop a mutual aid plan for upgrading and deploying EMS units in jurisdictions they do not normally cover, in response to a mass casualty incident due to terrorism. This plan must ensure the capability of providing EMS coverage for at least 500 adult and pediatric patients per 1,000,000 population per day.

This plan should take into consideration the emergency medical services activities the jurisdiction will be supporting through funds from the Department of Homeland Security to avoid overlap and duplication of efforts. There should be particular attention paid to EMS systems not traditionally included in other funding streams, such as non-fire-based and college campus emergency medical systems.

Awardees should discuss how planning at both the level of their own jurisdiction and the larger region will engage the rural volunteer EMS community on the response plan for terrorism.

For children, this plan should build upon projects funded through the HRSA/MCHB EMS for Children Program but must not supplant funding available under that program.

Resources may include Metropolitan Medical Response Systems (MMRS) or Disaster Medical Assistance Teams (DMAT).

Areas of consideration in planning may include personnel, training, communications, equipment, and treatment protocols.

To the extent justified by dedicated time spent working on terrorism response, partial salary and benefits of the awardee's EMS Medical Director may be supported under this cooperative agreement.

Priority Area #4: Linkages to Public Health Departments

Hospital Laboratories

In no more than 5 pages, present a proposal to enhance the participation of hospital laboratories in efforts led by the public health departments. This proposal should take into consideration any issues identified in the Year 1 Progress Report, and the results of needs assessments done previously or in response to this guidance.

There is a need to enhance laboratory capacity throughout the U.S. to diagnose and report on biological and chemical agents used by terrorists. The intent of this section is look at hospital laboratories as they coordinate with those of public health departments, in order to ensure optimal capacity to respond to terrorism, infectious disease outbreaks, and other public health emergencies.

Critical Benchmark #4-1: Implement a hospital laboratory program that is coordinated with currently funded CDC laboratory capacity efforts, and which provides rapid and effective hospital laboratory services responding to terrorism and other public health emergencies.

The plan should focus on Level A participation of hospital laboratories in the Laboratory Response Network (LRN), with respect to weaponizable biological, chemical or radiological materials. The plan must be coordinated with activities under CDC Focus Areas C and D.

Hospital laboratories should have protocols for referral of clinical samples and associated information to LRN nodes that have relevant analytical capabilities. Some hospitals may choose to develop capacities to rule out bioterrorist pathogens of concern.

The applicant may use funds to recruit and train hospital laboratory personnel for this purpose.

Awardees must establish procedures for coordinating with public health laboratories to ensure a seamless screening, testing and reporting hierarchy.

There should be a system for electronic reporting of laboratory results to hospitals and clinicians that ensures rapid access to critical diagnostic information. Please see the relevant Cross-Cutting Benchmark elsewhere in this guidance.

Where deemed appropriate by awardees who share common borders, there may be joint efforts to fund and implement a multi-awardee plan for supporting regional hospital laboratories capable of assisting in a biological, chemical or radiological terrorism response.

Surveillance and Patient Tracking

In no more than 5 pages, present a proposal to enhance the participation of health care entities in surveillance efforts led by the public health departments. This proposal should take into consideration any issues identified in the Year 1 Progress Report, and the results of needs assessments done previously or in response to this guidance.

The purpose of this priority area is to expand both rural and urban surveillance efforts at the hospital, outpatient and prehospital levels, in coordination with what is being accomplished through the CDC terrorism cooperative agreement at the public health department level. Thus, all efforts in this area must be done in coordination with efforts under CDC Focus Area B. However, proposals under the HRSA cooperative agreement to enhance health system surveillance abilities must be clearly distinguished from proposals responding to the CDC guidance.

Critical Benchmark #4-2: Enhance the capability of rural and urban hospitals, clinics, emergency medical services systems and poison control centers to report syndromic and diagnostic data that is suggestive of terrorism to their associated local and state health departments on a 24-hour-a-day, 7-day-a-week basis.

It is important for hospitals, laboratories, clinics, EMS systems and poison control centers to be able to participate with health departments in prompt and uniform reporting of all patients meeting the appropriate case

definition for disease syndromes or toxidromes suggesting a terrorist incident.

To ensure accessibility and usefulness to all partners, systems should allow for electronic communication between rural and urban hospitals, clinics, emergency medical services, poison control centers and public health agencies at all levels.

Priority Area #5: Education and Preparedness Training

In no more than 5 pages, describe how education and training needs of health care professionals involved in terrorism response will be met. This proposal should take into consideration the issues identified in the Year 1 Progress Report, and the results of needs assessments done previously or in response to this guidance.

The strategy for education and preparedness training should clearly support the objectives of the awardee's overall terrorism preparedness program.

Training and education needs can be met through partnerships with a variety of sources including the awardees of the HRSA Bureau of Health Professions Bioterrorism Training and Curriculum Development Program, the CDC Public Health Preparedness Program, the USPHS Noble Training Center, and other appropriate agencies and professional organizations.

If educational needs for terrorism preparedness cannot be met through these programs, then it is appropriate to utilize Bioterrorism Hospital Preparedness Program funds for this purpose.

Optional Benchmark #5: For awardees choosing to fund this section, develop education and training programs for adult and pediatric hospital, outpatient and prehospital health care professionals responding to a terrorist incident.

These activities should be complementary to those funded under the CDC cooperative agreement.

A combination of approaches is encouraged, including traditional programs, web-based programs and other avenues.

Appropriate subject matter may include:

- recognition and treatment of rare diseases with bioterrorism potential
- toxidromes of chemical warfare agents
- immediate and delayed manifestations of radiation illness
- use of personal protective equipment
- decontamination and isolation procedures
- assessment and management of mass trauma and burn casualties
- distinguishing between the medical and psychiatric manifestations of bioterrorism
- recognition, assessment and response to the psychological and behavioral manifestations of terrorism-generated fear
- recognition and treatment of the acute and long-term psychosocial responses
- unique pediatric issues affecting all of these subjects

Applicants may choose to fund systems to support immediate information needs of clinicians caring for adult and pediatric patients, serving as EMS medical control officers, or staffing poison control centers during a terrorist incident, through such mechanisms as web-based diagnostic and treatment protocols or telephone consultation.

Funds may be used to enhance the ability of poison control centers to respond immediately to requests for information from health care professionals and the general public following a terrorist incident. Requests must not supplant funds available through the HRSA Poison Control Center Program for general operations.

The inclusion of rural hospital personnel in training efforts should be addressed specifically.

To enhance participation, continuing professional education credentialing should be sought for terrorism preparedness programs developed locally.

Priority Area #6: Terrorism Preparedness Exercises

In no more than 5 pages, describe how the work plan submitted in this grant application will be tested in real life to ensure its practicability. This proposal should take into consideration the issues identified in the Year 1 Progress Report, and the results of needs assessments done previously or in response to this guidance.

In lieu of actual incidents requiring activation of this program, it is important to define an evaluation strategy that identifies operational strengths and opportunities for improvement through simulated exercises.

Many awardees have staged a variety of community emergency exercises focusing on biological and other terrorist threats over the last year. It is critical that practical exercises continue that both reinforce knowledge and uncover opportunities for improvement in the written terrorism disaster plan.

Critical Benchmark #6: *As part of a written evaluation strategy of the awardee's program, conduct at least one bioterrorism disaster exercise in the jurisdiction during FY 2003 that covers a large-scale epidemic scenario affecting both adults and children.*

The biological disaster exercise must be of sufficient intensity to challenge the community's management and response operations during the exercise, in a way similar to what would be expected during an actual biological terrorist incident.

The exercise process must be documented in an after-action report to be sent to the project officer, and must include an evaluation component that captures strengths and weaknesses in a way that promotes system improvement.

Other terrorism disaster exercises are encouraged, that cover large-scale chemical, radiological and explosive scenarios. These exercises may be of similar intensity to that described above, or may be tabletop exercises designed as preliminary tests of the utility of the work plan.

Part C. Budget

The work plan must also provide a budget using the template in Appendix C. Include a narrative justification for each line item.

Indirect Costs

These are costs that are incurred for common or joint objectives within an organization's budget, and therefore cannot be identified readily and specifically with a particular program. For example, the costs of operating and maintaining facilities, depreciation, and administrative salaries are generally treated as indirect costs.

For this cooperative agreement, indirect costs are budgeted at the state's pre-negotiated rate, but at no more than 10% of the total award.

Awardee Operating Costs

Operating costs that can be specifically allocated to this program must be justified and reasonable. Since this program exists primarily to support health care entities directly in preparing for terrorism, contract line items that provide support to the awardee through hospital associations and the like are treated as extensions of health department operating costs, not as direct health care entity support. Cost items may include:

- Bioterrorism Preparedness Coordinator: up to 1 full-time equivalent (FTE)
- Medical Director: up to 1 (FTE)
- Professional and administrative staff
- Travel expenses
- Meeting expenses
- Administrative equipment and supplies

- Phone and electronic mail

For this cooperative agreement, awardee direct operating costs may be budgeted at no more than 10% of direct costs.

Planning Costs

Costs attributable to planning and coordination for the State health department and its contractors must be justified and reasonable. Examples of these costs include performance of awardee-wide needs assessments and plan development. Like operating costs, awardee-wide planning costs contracted to hospital associations or other contractors will be treated as health department costs, not as direct support to health care entities.

Up to 10% of direct costs may be allocated to awardee-wide planning efforts done by the health department and its contractors.

Implementation Costs

These are expenses provided directly to hospitals, outpatient facilities, emergency medical services and poison control centers for developing and implementing the priority area plans. Planning and implementation expenses borne by health departments and their contractors for direct support of regional systems of care may also be treated as implementation costs.

Examples of implementation expenses include purchase of medications, personal protective equipment, mobile decontamination facilities or communications equipment either directly by a health care entity or on behalf of it by the awardee or its contractors. Expenses of putting on a disaster drill may also be treated as implementation costs.

Provide an itemized budget and justification for the proposed distribution of funds to hospitals, outpatient facilities, EMS systems and poison control centers, or to planning and implementation costs borne by health departments and their contractors in direct support of priority areas as described above.

At least 80% of the funds awarded for direct costs must be clearly allocated to hospitals, outpatient facilities, EMS systems and

poison control centers, through written contractual agreements or purchase orders.

Obligation of FY 2002 Funds

Because of the rapidity of the distribution of funds to awardees during FY 2002, many jurisdictions are still in the process of obligating funds for concrete implementation efforts. In order to justify distribution of FY 2003 funds, a line-item narrative describing how FY 2002 funds have been obligated to various priority areas must be presented. If FY 2002 funds are still unobligated, FY 2003 funds for similar priority areas will likely be awarded with a funding restriction attached. This restriction will be lifted when FY 2002 implementation efforts on specific priority areas are complete.

Part D. Timeline

The application must include a timeline that describes the approach to development and implementation of the mechanisms in each priority area. This time line is to guide implementation, and must have measurable milestones to facilitate accountability. A narrative to how each of these priority areas will be coordinated with the appropriate CDC focus areas to prevent overlap must also be included.

References

- ¹ L Garrett. *Biowar: threatening biological terrorism and public health*. Betrayal of trust: the collapse of global public health, Hyperion, 2000, chapter 5, page 499.
- ² United States Army Medical Research Institute of Infectious Diseases (USAMRIID). *Medical Management of Biowarfare Casualties*. February 2000.
- ³ Department of Health and Human Services. *Health and Medical Response System: Response Team Description Manual*, May 1999.

Appendices

Appendix A: U.S. Public Health Service grant application form 5161-1

Word/.doc download at

- <ftp://ftp.hrsa.gov/hrsa/bioterror/PHS-5161-1.doc>

Acrobat/.pdf download at

- <ftp://ftp.hrsa.gov/hrsa/bioterror/PHS-5161-1.pdf>

Appendix B: Excel/.xls Year 1 Progress Report template download at

- <ftp://ftp.hrsa.gov/hrsa/bioterror/year1report.xls>

Appendix C: Excel/.xls Line Item Budget template download at

- <ftp://ftp.hrsa.gov/hrsa/bioterror/budget.xls>

Appendix D: Excel/.xls Funding Table download at

- <ftp://ftp.hrsa.gov/hrsa/bioterror/fundingfy2003.xls>