

**CDC**

**BIOTERRORISM**

**PREPAREDNESS AND**

**RESPONSE**

**COOPERATIVE**

**AGREEMENT**

**WEST VIRGINIA**

**APRIL 2002**

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**BACKGROUND**

**AND**

**OVERVIEW**

## **BACKGROUND AND PROJECT OVERVIEW**

### **Background:**

This cooperative agreement is a clear opportunity to strengthen preparedness and response capacity of West Virginia's public health system and to develop a Public Health Threat Response Plan with our many partners. Threat Preparedness and Response is not a new topic to public health in WV. The Bureau for Public Health (BPH), in conjunction with the Department of Military Affairs and Public Safety, Office of Emergency Services, regularly responds to natural disasters (primarily floods) affecting much of our population. However, many factors need to be considered in addressing these issues. West Virginia is the only state entirely within Appalachia and communities are widely disparate both geographically and culturally across the state. West Virginia encompasses 24,282.45 square miles and has a population of approximately 1.8 million people living within its 55 counties. Both county size and rurality of locales vary widely.

West Virginia's governmental public health system consists of the West Virginia Bureau for Public Health and 49 local public health agencies covering 55 county jurisdictions. The West Virginia Bureau for Public Health lies within the West Virginia Department of Health and Human Resources, is directed by the State Health Officer/Commissioner, and includes the following offices: Office of Community and Rural Health Services, Office of Environmental Health Services, Office of Epidemiology and Health Promotion, Office of Health Facility Licensure and Certification, Office of Laboratory Services, Office of the Chief Medical Examiner and the Office of Nutrition Services. Although state and local health departments work closely with each other, local health agencies are independent of the Bureau and work under local boards of health. Different structures of local health agencies have evolved. Most are single county. Some are combined city-county agencies, and two are multi-county (two county and six county coverage).

Both before and in response to the events of September 11, 2001, DHHR/BPH has undertaken significant background work related to bioterrorism and other serious public health threats. These include: developing materials for providers and the public related to bioterrorism and threat response; partnering with the WV Medical Institute to develop blast fax and e-mail capability for sharing information with providers statewide; developing preliminary plans and procedures necessary for WV to activate the National Pharmaceutical Stockpile; training of hundreds of first responders, local health staff, and others to respond to bioterrorism and other weapons of mass destruction; training of various responders in Crisis Incident Stress Management; and finally formation of an internal Threat Preparedness Workgroup (TPWG). This workgroup initially coordinated the Bureau for Public Health's response to last fall's anthrax incidents. Over the past few months, it has now reorganized to support development and implementation of a statewide Public Health Threat Response Plan, including appendices specific to bioterrorism and to other specific threats. This plan will support the health component of the WV Emergency

## Operations Plan.

Local Health Agencies have also been working to strengthen preparedness and response capacity. Many, though not all, are active in Local Emergency Planning Councils. Through work in response to severe floods and to last fall's anthrax incidents, enhanced partnerships with state and local police, fire, EMS and other health care providers, and emergency management agencies are developing. Community awareness of public health's role in health threat preparedness and response has been significantly heightened through these experiences. Similarly, state and local health staff are recognizing the now urgent need to strengthen capacity in this arena.

This effort clearly depends upon other components of WVDHHR as well. For example, the Bureau for Behavioral Health and Health Facilities has begun provision of training in crisis response and critical incident stress management. As last fall's anthrax incidents revealed, one cannot dismiss the fact that bioterrorism is psychological warfare. Often the psychological casualties, among both the general public and the workforce, outnumber the physical ones. Psychological preparedness, support and crisis intervention skills can dramatically mitigate the impact of an incident. This critical piece of workforce preparedness will also need to be considered in broader public health threat response planning.

Public health threat preparedness and response planning cannot be done in isolation, rather it must involve and coordinate the efforts of multiple organizations and entities both across the state and within communities. State and local health departments, as the governmental agencies responsible for protecting the health of the public, are critical to this effort and should serve as both leaders and facilitators of health preparedness and response planning efforts. Of special note is the fact that health response plans must fully align with state and local emergency response plans, thus speaking to the importance of collaboration and partnership between health and emergency management agencies at both the state and local levels.

One of the principles of disaster response planning is to build response upon the systems in place every day. Public health systems developed to address routine health threats parallel capacities needed for disaster response (assessment and planning, surveillance and epi response, risk communication, laboratory support, communication and information technology (IT) systems, training systems, etc.). However, dramatic strengthening of these systems is needed for them to support adequate preparedness and response to more severe threats including possible bioterrorist incidents, flu pandemics, or massive natural disasters.

### **General Project Description:**

This proposal supports health agencies in two primary activities:

1. Facilitating development of State and Regional/Local Public Health Threat Response Plans in partnership with multiple other agencies and organizations and

in close coordination with state and local emergency management agencies.

2. Strengthening state and local health agency preparedness and response capacity in identified focus areas (Readiness Assessment and Preparedness Planning, Epidemiologic Surveillance and Response, Laboratory Capacity for Biologic Agents, Health Alert Network / Information Technology, Risk Communication and Public Information Dissemination, and Education and Training).

Both components of this work will be undertaken through an iterative process of assessing, planning, implementing, and evaluating to continually identify additional areas to strengthen and maintain. Integration of state and local health agency plans as well as integration of public health efforts with those of the many others involved in threat preparedness and response will be critical.

Although a strong first step, it is clear that current funding will not be adequate to fully shore up public health threat preparedness and response capacity. Similarly, it will not support the many needs identified by our partners involved in development of public health threat response plans. However, effort spent on collaboratively developing strong plans, strengthening partnerships, and jointly prioritizing needs will allow future funding [FEMA funds, EPA funds, National Electronic Disease Surveillance System (NEDSS) Funds, other needed funds, etc.] to be spent wisely in support of an integrated, coordinated health response to disasters in alignment with WV's State Emergency Operations Plan.

Overview of the WVDHHR Threat Preparedness Initiative:

The WVDHHR Threat Preparedness Initiative has three overarching goals:

- Goal 1: To facilitate development of State and Regional / Local Public Health Threat Response Plans,
- Goal 2: To continuously assess and strengthen state and local public health agency preparedness and response capacity (primary initial funding source: CDC Cooperative Agreement), and
- Goal 3: To continuously assess and strengthen broader health care system preparedness and response capacity (primary initial funding source: HRSA Cooperative Agreement).

An overview of early plans to attain these goals are as follows. Processes are likely to evolve as further assessment and planning occurs.

**Facilitate Development of State and Regional /Local Public Health Threat Response Plans:**

An overview of the proposed process for developing State and Regional Public Health Threat Response Plans is provided in Attachment 1. In brief, multi-agency topic specific workgroups (see Attachment 2), each facilitated by a DHHR Threat



Preparedness Work Group (TPWG) member, will develop statewide response plans specific to their area. These will be brought together and integrated by the TPWG into the Concept of Operations section of the State Public Health Threat Response Plan. The Governor's Commission on Public Health Threat Preparedness will oversee the process, review plan drafts, and recommended changes based on exercises and drills. Through the process of developing a state Public Health Threat Response Plan, areas needing regional and local level planning will be identified and planning standards developed. These will be used to guide subsequent development of Regional/Local Response Plans. Finally, to assure integration of response plan development and public health capacity building activities, many of the same multi-agency workgroups discussed here will also serve as key workgroups providing input to public health preparedness capacity assessment and planning efforts described below.

### **Assess and Strengthen State and Local Public Health Agency Preparedness and Response Capacity:**

Assessment of state level capacity will be undertaken in collaboration with local health departments and other key partners. An initial and very rough assessment of capacity occurred as part of last fall's anthrax response. In addition, significant discussions of capacity are being held by state and local staff in preparation of this application. Existing assessments (e.g., DOJ Survey, etc.) will be reviewed and additional assessments undertaken where needed. Finally, and very importantly, assessment will occur as part of the process developing the State Public Health Threat Response Plan above. State public health assessments in targeted focus areas will be overseen by the applicable topic specific multi-agency work group and are an iterative process. As a State Response Plan is developed and public health roles and expectations are better defined, resource needs and skill gaps will become clearer.

Local Health Departments vary widely across the state. Assessments at this level are more complex and identified needs and mechanisms to address them will differ across jurisdictions. The State-Local Preparedness Oversight Committee will help shape the assessments and planning process at this level. Tools guiding locally driven assessments will be developed by this group. In addition, this group will develop systems for supporting local agencies in assessment and planning activities and for tracking progress. Local public health staff participation in development of State Public Health Threat Response Plans will also help clarify overall public health roles in threat preparedness and response. In future months, development and drilling of Regional/Local Public Health Threat Response Plans will also provide opportunity for continued assessment and plan refinement.

State and local capacity improvement plans developed through this process will be integrated through the subcommittee work and the work of the State-Local Public Health Preparedness Oversight Committee. Over time, regularly testing systems

and drilling plans will identify additional needs/gaps to be filled. Ongoing cycles of assessments and planning and plan integration must occur.

Beyond assessments, this application contains various proposed activities to strengthen state and local capacity in the targeted focus areas of the grant. These have been developed through focus area workgroups including both state and local staff and through the work of the State-Local Public Health Preparedness Oversight Committee. While the majority of proposed activities are anticipated to occur as described, it must be recognized that proposed actions may change significantly over time as more thorough assessments and planning at both state and local levels progress. This is especially true with the local activities proposed. Approximately 64% of the funds of this application are targeted for distribution to local health agencies for developing plans to address the critical capacities of this application and for subsequent plan implementation. This distribution of funding was developed in collaboration with the WV Association of Local Health Departments through the State-Local Public Health Preparedness Oversight Committee. The first and relatively immediate local health distribution is targeted for assessment and planning activities described in Focus Area A. In addition, dollars in each applicable focus area are identified for local health implementation of developed plans. Although provided under a single agreement to each applicable agency, local health departments will track use of implementation funds by focus area. Distribution of funds will be on a per capita basis.

### **Assess and Strengthen Broader Health Care System Preparedness and Response Capacity:**

Much of the work assessing and strengthening broader health care system capacity will be undertaken through activities of the HRSA Preparedness Cooperative Agreement (see separate application). These activities will be integrated with and supported by the CDC Cooperative Agreement in several ways. First, development of State and Regional Public Health Threat Response Plans are being undertaken as a single integrated process with the Hospital Committee (a subcommittee of the Governor's Commission) overseeing development of the Mass Patient Care component of the State Public Health Threat Response Plan discussed above. Public Health agency staff will be serving on multiagency workgroups supporting the work of the Hospital Committee. Similarly, representatives of the broader health care community will serve on multiagency workgroups supporting other areas of the plan (including those that overlap with CDC Cooperative Agreement Focus Areas). Finally, activities strengthening state and local public health capacity in CDC Cooperative Agreement focus areas should support not only public health agencies but also the efforts of the many others involved in threat preparedness. For example, public health training efforts and systems should support EMS providers, hospital providers, primary care systems, etc. Public health communication systems should be linked into existing or developed jointly with those of emergency departments, primary care systems, emergency management agencies, etc.

These cooperative agreements by no means address all public health preparedness and response needs. Many additional public health agency needs are already arising (e.g., environmental sampling, behavioral health, mass mortuary care, EMS, primary care, etc.) Others will continue to emerge through the assessment and planning process. The Threat Preparedness Initiative will continue to seek funding from a variety of sources to more fully address targeted focus areas and other needs over time.

While new staff are certainly proposed to strengthen capacity, including staff to provide central coordination and support, no new free-standing state or local public health programs are envisioned. This is in an effort to ensure that West Virginia builds upon existing capacities and strengthens the ability of public health agencies to address not only disasters but every day health threats as well (emerging infectious diseases, vaccine preventable diseases, food borne illness, etc.).

**Project Impact:**

This project will strengthen and protect individuals and communities through the development of State and Regional/Local Public Health Threat Response Plans addressing bioterrorism, infectious disease outbreaks, and other public health threats and emergencies. It will support better integration of federal, multistate, state, regional, and local disaster preparedness and response efforts. It will significantly advance the ability of state and local health departments to collaboratively prepare for and respond to possible bioterrorism incidents, infectious disease outbreaks, and other public health threats and emergencies. And finally, by building upon existing systems, it will strengthen public health capacity to protect citizens from everyday health threats. All of these efforts are aimed at preventing disability, stopping spread of disease, and saving lives.

**West Virginia Department of Health and Human Resources  
Public Health Threat Preparedness  
February 2002**

**Attachment 1**

**Overview of WVDHHR Threat Preparedness Activities to Date**

- , Identified and consolidated fiscal information on preliminary state and local needs for threat preparedness
- , Developed materials for providers and the public related to bioterrorism and threat response – fact sheets, educational materials, clinical guidance, epidemiologic investigation forms, lab protocols, etc. (see DHHR website [www.wvdhhr.org/bph/oehp/sdc/bioterrorism.htm](http://www.wvdhhr.org/bph/oehp/sdc/bioterrorism.htm))
- , Actively supported citizens, providers, and agencies in responding to the national anthrax experience.
- , Developing a system with West Virginia Medical Institute (WVMI) to share information rapidly with medical providers statewide as requested by DHHS.
- , Developing plans/procedures necessary for West Virginia to activate the National Pharmaceutical Stockpile in conjunction with National Guard, Board of Pharmacy, Office of Emergency Services, etc.
- , Trained hundreds of first responders, local health staff, and others to respond to bioterrorism and other weapons of mass destruction
- , Formed a Threat Preparedness Work Group (TPWG)
  - formed in October 2001 to coordinate DHHR crisis response with MAPS, Office of Emergency Services
  - developed agendas and hosted weekly conference calls of the WV Public Health System (Bureau for Public Health and Local Health Departments)
  - now reorganizing to support development of a statewide health response plan
  - composition prior to 1/30/02: BPH staff plus representatives from the Bureau for Children and Families, the Bureau for Behavioral Health and Health Facilities, and the WV Poison Center
  - as of 1/30/02: added the President of the WV Association of Local Health Departments, the DHHR Office of Communications and Legislative Affairs, and the DHHR Director of Special Projects.
  - TPWG could serve as the task force facilitating statewide, multi-agency threat preparedness and response planning
  - reviewed state health threat preparedness and disaster planning documents.
  - developed draft outline of a WV Public Health Threat Response Plan.

**In-House Skills and Resources**

- T Threat Preparedness Work Group
- T Facilitation / Planning Skills
- T Disaster Response Experience
- T Bioterrorism Coordinator (a new position within our Epidemiology unit)
- T Subject matter expertise and systems (e.g., surveillance, health threat/outbreak investigation, lab analysis, forensic capacity, EMS, behavioral health, linking victims to services--medical insurance, food stamps, WIC, etc.)
- T Linkages with health care providers, health care facilities, rural health networks, local health departments, coroners, mortuary services, etc.
- T Other grants able to support Threat Preparedness efforts (Health Alert Network, National Electronic Disease Surveillance System, Bioterrorism Grant, etc.)

# **PUBLIC HEALTH THREAT PREPAREDNESS**

## **Goal:**

### **Prevent Injury, Stop Disease, Save Lives**

#### **Preparedness for What?**

- , Bioterrorism and other Infectious Disease outbreaks: foodborne disease, West Nile Virus, Flu pandemic, etc.
- , Chemical Disasters – intentional or unintentional
- , Natural Disasters, e.g., floods, storms
- , Other—radiologic, conventional weapons, etc.

#### **General Principles**

- T DHHR facilitates statewide planning, preparedness, and resource allocation.
- T Ground process in outcome goals – Save lives, Prevent injury, Stop disease
- T Environment where participants think for the whole, think beyond their organizations
- T Process will help public health to begin thinking more like responders and responders to begin thinking more like public health.
- T Some components of plan must have local/regional flexibility. Other components require consistency across jurisdictions and must be statewide.
- T Planning must occur at community, regional, and state levels. Some activities require local plans, some regional, some statewide and some multi-level, aligned planning. Early on, must identify activities and the level(s) of planning needed for each.
- T Community level planning can be done by defining standards to be met and letting local communities define how. Funding will be needed for these activities.
- T Must identify most critical areas where resources are needed. Then focus resources on mission critical areas where other resources are not available.
- T HHS Cooperative Agreement will not fulfill all preparedness needs. Development of a good plan and strong preparedness process will allow maximal and most effective use of resources from multiple sources.
- T Threat Preparedness process will strengthen public health infrastructure and partnerships applicable to other daily health threats.

# **PUBLIC HEALTH THREAT PREPAREDNESS PROCESS**

**Goal: Prevent Injury, Stop Disease, Save Lives**

## **Design Phase**

Design process by which DHHR will facilitate statewide health response planning

- Define principles upon which health preparedness efforts are based
- Develop draft process and structure
- Obtain Secretarial (DHHR and MAPS) and Gubernatorial support
- Meet with several key partners in process to obtain input and set stage

## **Planning Phase**

Develop Public Health Response Plan

- DHHR facilitates statewide planning
- Includes community and regional planning activities
- Identifies and prioritizes resource needs
- Oversight by Governor's Commission on Public Health Threat Preparedness

## **Implementation Phase**

Begin filling resource needs:

- Equipment
- Personnel
- Facility Modification / Development
- Data and Communication Systems

Training – provider, first responder, public, etc.

Practice skills needed to respond

## **Evaluation Phase**

Drills of plan and plan components

- Drill
- Analyze
- Review and revise plan. Examine resource allocation.
- Repeat drill if necessary.

Independent review of drill (peer / other states / federal?)

*Note: Some overlap in phases is anticipated  
Maintaining preparedness requires ongoing cycling of these phases.*

# Public Health Threat Preparedness

## Proposed Process

### Planning

Plan Development

Identify / Prioritize Needs

### Implementation

Fill Needs Training

Skill Practice

### Evaluation

Drill

Analyze

Revise

Integrate / Align with State Threat Preparedness

Goal: Save Lives, Prevent Injury, and Stop Disease

# **PUBLIC HEALTH THREAT PREPAREDNESS**

## **Proposed Structure**

Planning Director: State Coordination / Process Facilitation / Fiscal Management

Governor's Commission on Public Health Threat Preparedness

- Oversees process, reviews drafts of, and recommends changes to the Public Health Threat Response Plan. This plan would be part of the State Emergency Response Plan developed by the Office of Emergency Services and the Disaster Recovery Board
- Advisory to and support of the systems monitoring health status. Will receive immediate notification if /when an unusual cluster of events is detected.
- Reviews identified resources needed to accomplish the plan
- Helps prioritize resource allocations
- Evaluates implementation of the State Public Health Threat Response Plan
- Recommends plan changes and resource prioritization based on evaluation

Hospital Preparedness Committee

- Develops regional hospital plans
- Reviews identified resources needed to accomplish the plan
- Prioritizes resource allocations
- Evaluates implementation of the Patient Care component of the Public Health Threat Response Plan
- Makes changes to the plan and resource allocation based on evaluation.

Preparedness Task Force (Threat Preparedness Work Group)

- , Develops draft outline of plan
- , Provides facilitators for Task/Topic Specific Workgroups
- , Established a forum for communicating / coordinating across task workgroups through the planning process
- , Consolidates plan components into a draft Public Health Threat Response Plan

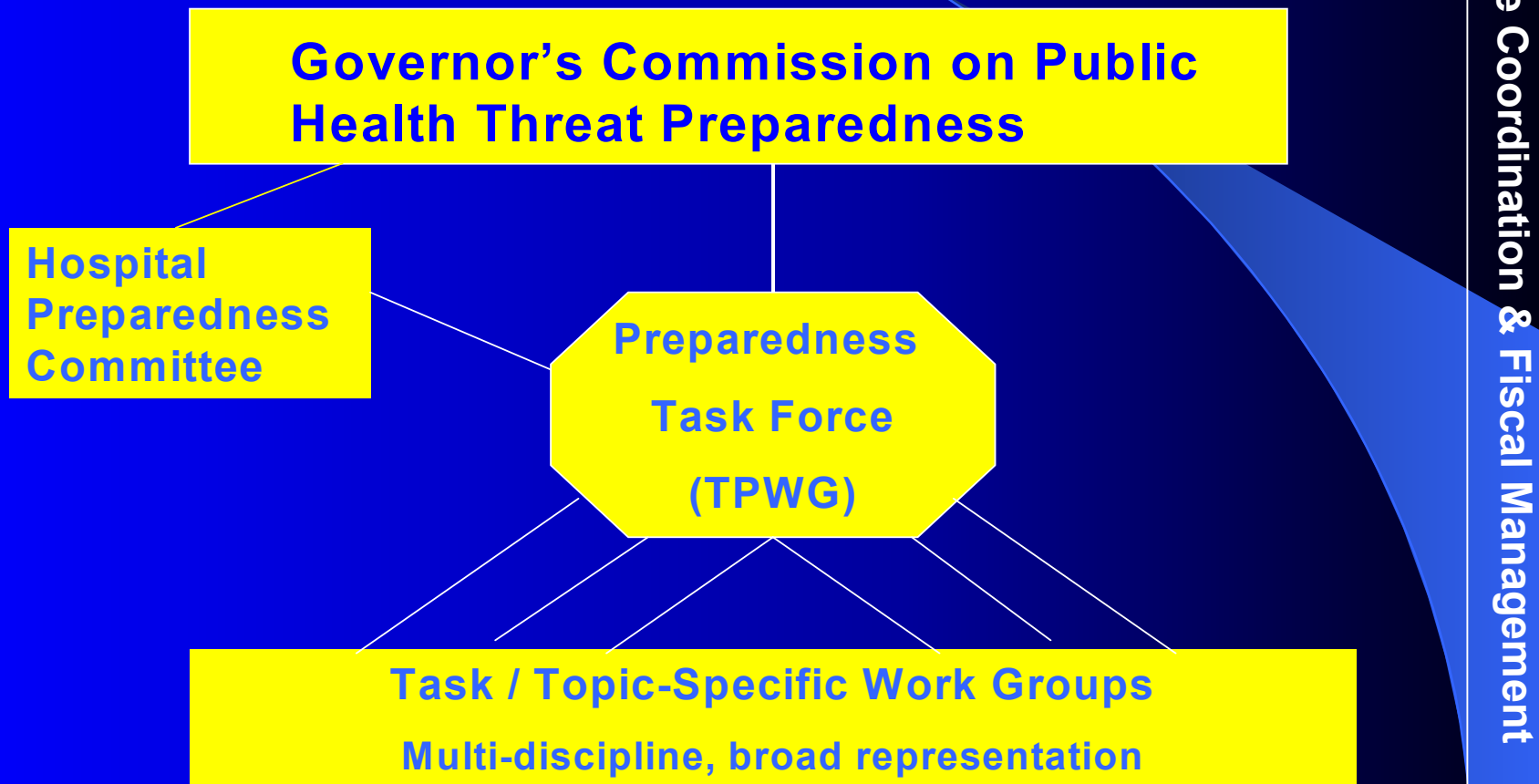
Task Workgroups:

- , Develops individual components of the plan in detail (e.g., mass patient care, environmental site evaluation and management, mass prophylaxis/vaccination, workforce safety, etc.)
- , Provides broad representation, multi-agency/organization involvement



# Public Health Threat Preparedness

## Proposed Structure



# **PUBLIC HEALTH THREAT PREPAREDNESS**

## **Anticipated Local and State Planning Participants**

Hospitals / WV Hospital Association	National Institute of Chemical Studies /
Emergency Medical Services	specific chemical companies
WV Association of Local Health Departments	WV Poison Center
WV Board of Pharmacy	WV Bureau for Public Health
WV State Medical Association	WV Bureau for Children and Families
WV Society of Osteopathic Medicine	WV Bureau for Behavioral Health and Health
WV Primary Care Association / Network	Facilities
Home Health Agencies / Associations	WV Bureau for Medical Services
American Red Cross	Office of the State Fire Marshall
Department of Military Affairs and Public Safety	WVU School of Medicine
Office of Emergency Services	Marshall University School of Medicine
WV National Guard	WV School of Osteopathic Medicine
WV Medical Institute	WV Council of Churches
Association of Practitioners of Infection Control	WV Department of Education
WV Clinical Laboratories and Associations	WV Department of Agriculture
WV State Police	WV Department of Administration
Federal Bureau of Investigations	WV Department of Environmental Protection
Coroners / Mortuary Services	US Postal Service
WV Volunteer Organizations Assisting	Local Emergency Planning Councils
Disasters (VOAD)	Veterans Administration Hospitals

**FOCUS AREA A:**

**READINESS ASSESSMENT**

**AND**

**PREPAREDNESS PLANNING**

# **FOCUS AREA A: PREPAREDNESS PLANNING AND READINESS ASSESSMENT**

## **I. STRATEGIC DIRECTION, COORDINATION, AND ASSESSMENT**

**I.A. CRITICAL CAPACITY:** To establish a process for strategic leadership, direction, coordination, and assessment of activities to ensure state and local readiness, interagency collaboration, and preparedness for bioterrorism, other outbreaks of infectious disease, and other public health threats and emergencies.

**Description and Adequacy of Current Capacity:** WV has not been a recipient of CDC Bioterrorism Preparedness and Response Cooperative Agreement funding in this focus area in the past. While work in previously funded focus areas (Epi Surveillance and Response, Laboratory Capacity, and Health Alert Network/Training) has resulted in significant progress in these arenas, overall coordination of effort or infrastructure to support broad readiness assessment and planning activities has not been in place and is, at present, inadequate. However, the lessons learned and partnerships developed during last summer's devastating floods and the fall 2001 anthrax response, along with the funding available through this cooperative agreement, present a strong opportunity to develop strategic leadership, direction, and coordination of activities. Significant progress has been made more broadly linking WV DHHR with WV Department of Military Affairs and Public Safety (WV MAPS), the state agency responsible for emergency planning. By consensus of both Department Secretaries and the Governor, WVDHHR has been given responsibility and authority to facilitate development of State and Regional Public Health Threat Response Plans in full alignment with the state Emergency Operations Plan.

At local and regional levels, some public health agencies have worked with Local Emergency Planning Councils (LEPCs) to coordinate overall response efforts; however, few have staff with significant expertise or responsibility in disaster planning or response and none have developed full health threat response plans.

Finally, and of critical importance, significant strengthening of state and local public health infrastructure is necessary for public health to fulfill their roles in protecting and responding to such public health disasters.

**Critical Benchmark #1:** Designate a Senior Public Health Official within the state health department to serve as executive director of the bioterrorism preparedness and response initiative.

Catherine Slemple, M.D., M.P.H. is serving in this role. *(See Critical Benchmark #1 attached.)*

**Critical Benchmark #2:** Establish an Advisory Committee including representation from (but not limited to) the following groups: a.) State and local health departments and governments; b) emergency management agencies; c) emergency medical services; d) the Office of Rural Health; 3) law enforcement and fire departments, emergency rescue workers, and occupational health workers; f) other healthcare providers including university, academic, medical, and public

health; g) community health centers; h) Red Cross and other voluntary organizations; and i) the hospital community (including Veterans Affairs and military hospitals where applicable.

The Governor's Commission on Public Health Threat Preparedness is now being formed. (See Critical Benchmark #2 attached.)

### **Other Objectives for This Critical Capacity:**

**Objective 1:** Ensure that high level policy makers and elected officials at the state and local level are provided regular updates regarding preparedness activities.

**State Plan:** Although housed within the Bureau for Public Health, the WV Threat Preparedness Initiative is supervised directly by the Secretary of the Department of Health and Human Resources (DHHR), a direct report of the Governor. The Secretary will be updated both through direct reports as well as through information reviewed and submitted by his DHHR Bioterrorism Task Force. This group is anticipated to meet at least once every two months. Direct reports to the Governor will be provided by the Secretary.

Also critical is meaningful collaboration and coordination across the public health system. Key leaders and policy makers within the public health system will be updated on state and local public health capacity building efforts through regular meetings of the State-Local Public Health Preparedness Oversight Committee (State-Local Oversight Committee).

Other key policy makers will be updated through their participation in the Governor's Commission on Public Health Threat Preparedness. This group will initially meet monthly to develop partnerships, more fully define the process of plan development, assure appropriate participation of applicable agencies, and oversee the work itself. Meeting frequency is anticipated to be at least quarterly.

A diagram showing each of these groups and the primary Threat Preparedness Initiative objective under which each falls can be found in Attachment A1.

**Local Plan:** Assess, plan, and implement plans to accomplish the following:

- Assure Local Boards of Health, County Commissions, and elected leadership are regularly updated on local and state threat preparedness and response activities and their input obtained.

**Evaluation:** Minutes of meetings will reflect discussion and review of preparedness and response activities.

**Objective 2:** Within 90 days of application's approval, refine a coordinated and integrated process for monitoring progress, allocating resources, and developing work plans.

**Plan:** This will be accomplished through adequate staffing of the Threat Preparedness Initiative and through the development of various groups linking the many partners involved in this work.

#### **A. Threat Preparedness Initiative Staffing:**

Adequate state level leadership and staffing to oversee this initiative will be critical for coordinating and integrating activities and tracking overall progress. Having individuals focusing on each of the initiative's primary goals within the same working environment will facilitate integration and coordination of activities. It is anticipated that staff will be hired over time once the full magnitude of the work involved can be better assessed. Pending further assessment and planning efforts, the following state level staffing is proposed (see organizational charts in Attachment A2):

1. **Executive Director, Threat Preparedness Initiative:** Provides broad oversight of the overall initiative and serves as primary facilitator of the process developing and maintaining State and Regional / Local Public Health Threat Response Plans. (See full position description in Critical Benchmark #1.) While initially devoting full time to overseeing plan and initiative development, roles of this key senior public health official will broaden in subsequent years to also support other BPH efforts. Grant based funding for this position is expected to decrease over time.
2. **Administrator:** To allow the Executive Director to adequately address development of Public Health Threat Response Plans with the many partners involved, and to provide stable managerial support of the initiative over time (e.g., as the Executive Director assumes other duties) this position will be added several months into the process. While the Executive Director will continue to provide oversight and be intimately involved, the administrator will manage personnel, administrative issues, and coordination of the overall initiative.
3. **Public Health System Preparedness and Response Coordinator (CDC Grant Coordinator):** This position will focus on coordinating efforts aimed at assessing and strengthening public health system preparedness and response capacity in CDC Cooperative Agreement Focus Areas. This position will guide efforts to coordinate and integrate state public health capacity building efforts in identified focus areas and will assure integration and linkage with local public health assessment and planning efforts.
4. **Hospital Preparedness Coordinator:** (*funded through the HRSA Hospital Preparedness Agreement*): The initial and primary focus of this position will be staffing the Hospital Preparedness Committee and working with the WV Hospital Association to guide preparedness activities among hospitals and systems supporting them. As funding for this area expands, work will increasingly involve other components of the health care system.
5. **National Pharmaceutical Stockpile Coordinator:** This position will initially work to complete National Pharmaceutical Stockpile planning. In addition, this position provides oversight for stockpile management were activation to occur. Responsibilities will evolve into identification of and resolution to logistics issues involved in DHHR disaster response. (See Focus Area A: III. Capacity A. 1.)
6. **Administrative Assistant/Secretarial Support:** This critical position provides secretarial and administrative support to the initiative. This position will help organize

the membership and activities of various workgroups and committees, support the Governor's Commission, compile draft documents, provide staff clerical support, assistance with acquisition of personnel, etc.

7. **Fiscal Officer:** This position will provide fiscal management of funds in Focus Area A of this agreement, coordination of fiscal personnel overseeing funds in other focus areas, and, in time, management of HRSA Cooperative Agreement funds. Activities will include purchasing, preparation of federal and state fiscal documents, contract and subrecipient agreement preparation and tracking (including funds to local health departments), etc.

In addition to supporting activities of this cooperative agreement, these positions will, over time, provide additional Public Health staffing for disaster response. Training in disaster response and incident command will be critical for these individuals.

**B. Integration of state and local health agency activities:**

The State-Local Oversight Committee will assure state-local health agency collaboration and integration of activities. This group reviews proposals, makes recommendations as to resource allocation, addresses issues related to state-local integration of effort, and tracks progress of activities. Targeted focus area specific workgroups (the same as those developing the State Threat Response Plan) serve as subcommittees of this group.

**C. Integration of activities developing the State Public Health Threat Response Plan:**

Coordination and integration of detailed response plans developed by topic-specific workgroups will occur through the DHHR Threat Preparedness Work Group (TPWG). This group is composed of all workgroup facilitators and meets every two weeks. High level coordination and integration of activities is provided by the Governor's Commission on Public Health Threat Preparedness.

**D. Integration of activities across WVDHHR:**

Coordination with other WVDHHR activities and efforts is undertaken through the Secretary's BT Task Force, a group including the lead individuals for the HRSA Hospital Preparedness Grant, Bureau for Behavioral Health and Health Facilities, Departmental Fiscal Office, Office of the Secretary, and others. Resource allocation is under the jurisdiction of the DHHR Secretary with recommendations provided by the State-Local Oversight Committee and Governor's Commission.

The State-Local Oversight Committee, TPWG, Governor's Commission, and DHHR BT Task Force are all supported by Threat Preparedness Initiative staff identified above.

**Local Responsibilities:** Assess, plan, and implement plans to accomplish the following:

- Assure active and continued participation of local health department staff on focus area workgroups.

- Provide broad and active local health representation to the State-Local Oversight Committee.
- Provide methods for obtaining input, as applicable, from across the local health community on critical issues discussed in workgroups or in the State-Local Oversight Committee.
- Communicate progress made by these groups back to local health staff.

**Evaluation:** Success will be defined as follows: a) positions will be filled within 90 days of proposal approval or as needed based on further understanding the scope of work; b) evidence of regular meetings of the State-Local Oversight Committee and associated focus area specific workgroups; c) evidence of regular meetings of the Threat Preparedness Work Group to coordinate and facilitate State Public Health Threat Response Plan development; d) by May 31, 2002, establish and hold the first meeting of the Governor's Commission on Public Health Threat Preparedness; e) evidence of regular meetings of the WVDHHR Secretary's Bioterrorism Task Force.

**Objective 3:** By October 31, 2002, sponsor jurisdiction wide conferences and workshops bringing together partners and stakeholders.

**State Plan:**

- A. Related to Development of the State Public Health Threat Response Plan:** In October 2002, a mid point review of developing plans will be undertaken and a joint conference working through table top scenarios will occur. This will be attended by all agencies involved in development of the State Public Health Threat Response Plan and will provide an opportunity to test out concepts developed thus far and to identify additional issues needing to be addressed by topic-specific workgroups.
- B. Related to Public Health System Capacity Building Efforts:** The WV Public Health Association (WVPHA) Conference held annually in late September will include sessions related to threat preparedness and provide opportunities for state and local agencies to share ideas on and results of assessment and planning activities.

**Local Responsibilities:** Assess, plan and implement plans to:

- Assure active involvement of local health staff in developing and attending the mid-point review and table top scenarios meeting in October 2002.
- Assure active participation of local health staff knowledgeable in threat preparedness activities in presentations at the WVPHA Conference.

**Evaluation:** Participant evaluations of both events will be undertaken.

**Objective 4:** Ensure that parts of the public health system not directly involved in bioterrorism preparedness are aware of and, when appropriate, participate in planning and implementation of cooperative agreement activities.



**State Plan:** This is accomplished through broad participation of partner agencies /organizations in the planning process. Within the Bureau for Public Health, regular updates of progress will be provided to the BPH Leadership Team. Offices not integrally involved in preparedness planning will be included on an as needed basis. Their participation will be especially critical in shaping BPH / DHHR agency response plans.

**Local Plan:** Assess, plan, and implement plans to accomplish the following:

- Ensure that parts of the local public health system not directly involved in bioterrorism preparedness are aware of and when appropriate, participate in preparedness activities.

**Evaluation:** Minutes of meetings; evidence of regular contact with marginally-involved public health system partners.

**Objective 5:** Ensure competency of project leadership through technical, managerial, and leadership training and career development activities.

**State Plan:**

**A. Southeast Public Health Leadership Institute (SEPHLI):** The SEPHLI is planning to devote efforts this year fully to bioterrorism assessment and planning. Opportunities will be available not only to new scholars, but, given this specific focus, those who have completed leadership training in the past. Funds from this grant will support involvement of up to 5 state and local leaders of this effort to attend this special SEPHLI program. This will allow exchange of ideas with leaders working on similar initiatives in surrounding states as well as support coordination / alignment of efforts across state lines.

**B. Other Training:** Other training opportunities as assessments reveal identified needs will be made available to state and local staff leading these efforts. This will include travel to national workshops and in-state trainings. Incident command training is anticipated as is training in psychological preparedness and response.

**Local Plan:** Assess, plan, and implement plans to accomplish the following:

- Promote leadership training opportunities available through this cooperative agreement.
- Support staff participation in technical, management, and leadership training/career development activities (time off to attend, cover costs not covered by training dollars in this cooperative agreement as possible, etc.).

**Evaluation:** Staff attending training programs will report on lessons learned and benefit of training opportunity to colleagues as applicable (TPI staff, State-Local Oversight Committee, WV Association of Local Health Departments , etc.).

**I.B. CRITICAL CAPACITY: To conduct integrated assessments of public health system capacities related to bioterrorism, other infectious disease outbreaks, and other public**

**health threats and emergencies to aid and improve planning, coordination, and implementation.**

**Description and Adequacy of Current Capacity:** Over the past few years, local and state health agencies have played increasing roles in disaster response. Both the July 2001 floods and the fall 2001 anthrax response, offered perhaps the best recent opportunity to assess state and local preparedness capacity. In many arenas, very good responses at both state and local levels were mobilized; however, systems were severely taxed, incident command and coordination systems were unclear, policies and procedures had to be developed during rather than prior to crisis response, etc. Both the importance of and current inadequacies of several public health systems came to light (laboratory capacity, surge capacity, 24/7 coverage by local jurisdictions, environmental sampling, etc.). It became clear that more systematic preparedness assessments and planning were critical to providing a better and a more coordinated response in the future. The increasing probability of scenarios involving far greater casualties and impact than those experienced last fall make this need all the greater. Systematic assessments and planning need to occur at both state and local public health levels. These efforts need to be integrated to assure a systems approach to both public health preparedness activities and crisis response and recovery.

**Critical Benchmark #3:** Prepare a timeline for the assessment of emergency preparedness and response capabilities related to bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies with a view to facilitating planning and setting implementation priorities. *(See Critical Benchmark # 3 attached)*

Systematic BPH and local public health agency capacity assessments will be undertaken and will be used to develop an integrated state public health preparedness and response capacity improvement plan.

**State Assessments and Planning:** (See attached timeline for proposed activities.) State level assessments will be undertaken primarily through the work of the multi-agency topic specific workgroups.

**Local Assessments and Planning:** Base funding will be provided to each local health agency for systematically assessing current capacity and for planning to meet expected capacity in the cooperative agreement's targeted focus areas. The local planning entity will independently perform an assessment and develop a plan to address all focus areas in an integrated manner. The State-Local Oversight Committee will likely assist in developing guidelines to support the process (help define "what" needs to be accomplished / planned for and how progress will be tracked). This committee will also work to aggregate, review, modify, and integrate (ARMI) plans with each other and with state improvement plans. Following this 4 - 6 months of assessments and integrated plan development, additional funds will be distributed to counties for implementation of the plans to address the identified critical capacities. The integrated plans being developed by local health department entities may include many of the various activities proposed within this application's focus area "local" plans. However, plans are intended to be developed in a flexible manner and are more than simply an aggregation of the noted proposed local activities.

**Integration of State and Local Public Health Assessments and Plans:** Integration of state and local public health assessments and plans will occur through the work of the State-Local Oversight Committee and the work of its focus area specific subcommittees. Subcommittees will make recommendations to the State-Local Oversight Committee regarding how best to integrate and coordinate capacity building activities both across local jurisdictions and with state activities into a single, integrated public health system preparedness plan. Oversight Committee recommendations will then be provided back to the WVALHDs for broader local health agency discussion and to WVBPH leadership and staff responsible for strengthening state capacity in targeted focus areas. Areas of concern will be brought back to the State-Local Oversight Committee for joint resolution. Although issues may arise upon which BPH and Local Health Agencies agree to disagree, this process should maximize common understanding of all issues involved and strengthen the probability of identifying jointly acceptable approaches for the good of the whole.

Of note, there may be areas where it is important to at least temporarily strengthen capacity immediately while more systematic assessment and planning is occurring. Examples might include the following: 1.) Areas that are mission critical to an effective public health response if an event were to occur tomorrow, or 2.) Activities that state and local agencies jointly anticipate being necessary no matter what ongoing assessments and planning activities reveal. Where potentially impacting both state and local entities, such “emergency” or other “immediate” activities will be discussed within the State-Local Oversight Committee and its applicable subcommittees. Need for and cost of such activities should be clearly delineated. As much as possible, “emergency” activities will be held to a minimum so as to afford the maximum flexibility in the development of individual and integrated plans. If local health involvement in these activities requires significant fiscal resources, then applicable implementation dollars given on a per capita basis will be distributed in advance.

**Integration of Public Health Agency Assessments and Plans with Broader State and Regional / Local Health Response Planning:** This will be accomplished by having the same focus area workgroups that are developing specific components of the State Public Health Threat Response Plan (each with strong state and local health staff representation) also serve as the focus area subcommittees to the State-Local Oversight Committee. This will help assure that capacities being developed are consistent with roles and responsibilities assigned to state and local public health agencies in a response. Active local health agency participation in development of Regional / Local Public Health Threat Response Plans will assure the same at a local level. Drills of developed plans will provide an opportunity to assess the effectiveness of state and local public health capacity building efforts.

**Critical Benchmark # 4:** Prepare a timeline for the assessment of statutes, regulations, and ordinances within the state and local public health jurisdictions that provide for credentialing, licensure, and delegation of authority for executing emergency public health measures, as well as special provisions for the liability of healthcare personnel in coordination with adjacent states.

This work is being undertaken by the developing legal workgroup.  
(See *Critical Benchmark # 4 attached*)

**Other Objectives for This Critical Capacity:**

**Objective 1:** Utilize results of existing assessments of public health system capacity as part of the above assessments.

**State Plan:** See timelines for assessments and planning. The primary existing assessment is the DOJ assessment. In addition, hospital assessments currently being undertaken will be reviewed as part of state and local assessment efforts. An evaluation of the public health response to last fall's anthrax response efforts is also underway and will be reviewed for lessons learned / needs identified. In addition any existing focus area specific assessments will be identified by those addressing the specific focus area and will be shared with both Threat Preparedness Initiative staff and the State-Local Oversight Committee.

**Local Plan:**

- Identify and share any previously undertaken general or focus area specific assessments with members of the State-Local Oversight Committee and with applicable state staff addressing targeted focus areas.
- Review existing assessments shared with local health staff and incorporate findings as applicable into current assessment and planning efforts.

**Evaluation:** Successful sharing of existing assessments with applicable parties. This will be tracked by the State-Local Oversight Committee

## **II. PREPAREDNESS AND RESPONSE PLANNING**

**II.A. CRITICAL CAPACITY: To respond to emergencies caused by bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies through the development and exercise of a comprehensive public health emergency preparedness and response plan.**

**Description and Adequacy of Current Capacity:** Emergency Response Planning in West Virginia falls under the jurisdiction of the Department of Military Affairs and Public Safety (Chapter 15 of WV State Code). State Emergency Operations Plans are in place. These include a basic plan as well as annexes addressing Health, Human Services, and Terrorism. Among other responsibilities, the WV Department of Health and Human Resources is given responsibility to coordinate necessary health response in these plans. This is done through activation of the WVDHHR Disaster Response Coordinator (Mr. Mark King, Office of Emergency Medical Services, WVBPH) and the active participation of multiple BPH and broader DHHR staff. While good work has been done, little formal planning for a coordinated departmental or broader health care system response has been undertaken. Although not a new need, the events of fall 2001 resurfaced the urgent need for public health disaster preparedness and response planning. Even prior to receipt of the current funding and Cooperative Agreement Guidance, significant interest in developing an integrated Public Health Threat Response Plan in full alignment with the State Emergency Operations Plan was emerging and development of the necessary background work and support systems to take on this task had begun. Receipt of the Cooperative Agreement funds and guidance has and will significantly advance this critical effort.

**Critical Benchmark # 5:** Prepare a timeline for the development of a statewide plan for responding to incidents of bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies. This should include the development of emergency mutual aid agreements and/or compacts, and provision for regular exercises that test regional response proficiency.

*(See Critical Benchmark # 5 attached).*

**Critical Benchmark # 6:** Prepare a timeline for the development of regional plans to respond to bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies.

*(See Critical Benchmark # 6 attached).*

### **Other Objectives for This Critical Capacity:**

**Objective 1:** Within 90 days of proposal approval, designate a senior public health professional to serve as the lead coordinator responsible for developing and implementing planning activities associated with this cooperative agreement.

**State Plan:** The Senior Public Health Professional designated in Critical Benchmark # 1 as Executive Director will be responsible for overseeing activities leading to development of the State Public Health Threat Response Plan. This will involve work with the TPWG and facilitation of the Governor's Commission on Public Health Threat Preparedness. For regional planning, regions will be formed around patient care nodes identified through the work of the Hospital Preparedness Committee. Through work developing the State Threat Response Plan, guidance for development of regional / local plans will be developed.

Support and coordination of public health system capacity development activities will be provided by the Public Health System Preparedness Coordinator (CDC Cooperative Agreement Coordinator). This position will report to and work closely with the Executive Director above. The ability to develop, guide, and support state-local collaborative efforts will be a critical competency of this position.

**Local Plans:**

- Upon receipt of funding, identify an individual in each jurisdiction responsible for assuring meaningful public health capacity assessment and planning activities are undertaken in accordance with the guidance developed by the State-Local Oversight Committee.
- Upon receipt of funding, identify an individual within each jurisdiction who will assure active local health leadership of or participation in development of Regional/Local Public Health Threat Response Plans.

**Evaluation:**

1. **State:** Hire state positions identified and appointed within 90 days of plan approval.
2. **Local:** Local health identification of individuals responsible to assure meaningful assessment and planning activities are carried out and to assure active local health participation in development of Regional/Local Public Health Threat Response Plans.

**Objective 2:** In collaboration with other agencies, assess readiness of hospitals and emergency medical services to respond to bioterrorism, other outbreaks of infectious diseases, and other public health threats and emergencies, and include them in state/local plan development and exercises.

**State Plan:** Through the HRSA Grant and the activities of the WV Hospital Association, an assessment of hospital readiness is being conducted in March 2002. Additional assessments, including EMS assessments will be undertaken as supplemental follow up to this work. Results of these assessments will be shared with other state and local public health staff involved in development of State and Regional / Local Public Health Threat Response Plans as well as with those assessing and strengthening public health system preparedness capacity.

Hospital and other health care system response plans are fully integrated into the State Public Health Threat Response Plan. Much of the work of the Hospital Committee and other health care provider workgroups including EMS will provide the "mass patient care" component of the

## State and Regional / Local Public Health Threat Response Plans.

Representatives of EMS, hospitals, and other health care providers are integral parts of the entire planning process. They serve on several of the topic specific workgroups developing components of the Public Health Threat Response Plan. Representatives of EMS, the WV Hospital Association, and the WV Primary Care Association also serve on the Governor's Commission for Public Health Threat Preparedness. Supporting Hospital Preparedness work, the Executive Director of the Threat Preparedness Initiative and the BPH Deputy Commissioner will attend, whenever possible, meetings of the Hospital Preparedness Committee.

**Local Plan:** Assess, plan, and begin implementation of plans to accomplish the following:

- Assure those leading planning efforts at Regional / Local levels review the Hospital Preparedness Assessment and any follow up supplementals undertaken.
- Build partnerships with local and regional hospital and other health care system representatives and ensure their participation in development of Regional / Local Public Health Threat Response Plans.

**Evaluation:** By July 1, 2002, the process and findings of the Hospital Assessment and any follow up assessments will be presented to the TPWG and to the State-Local Oversight Committee.

**Objective 3:** Establish a system for 24/7 notification or activation of the public health emergency response system (see Critical Benchmark # 12 and IT Functions 7 - 9 addressed in Focus Area E of this application for specific plans.):

**State Plan:** Currently, 24/7 coverage for the Bureau for Public Health is provided primarily by pager / cell phone for several key staff including the BPH Commissioner, Deputy Commissioner, Executive Director Threat Preparedness, DHHR Disaster Response Coordinator, and senior epidemiologists. Numbers to call/page for after-hours contact with local health jurisdictions are reported annually to the Division of Public Health Nursing and Administration, WVBPH. Call down exercises have been undertaken with varying results. In addition, blast e-mail and fax capability is now available with all local health agencies. Work is also well underway to develop at least blast fax capacity to other key health care providers in the state. Ultimately, 24/7 notification systems must be fully electronic, allow for two way or interactive flow of information, have a back up plan for when electronic communication systems fail, and allow selective grouping of message distribution based on content of the information being shared. This will occur through development and use of a Public Health and Clinical Personnel Resource Directory. Basing this on national format standards will allow key components of this directory to be shared with other states as envisioned nationally, thus allowing for rapid and timely information flow not only within the state but also across the nation in the event of a disaster. More detailed plans for accomplishing this objective can be found in Focus Area E, Critical Benchmark # 12.

**Local Plans:** Assess, plan, and implement plans to accomplish the following:

- Participate in development and maintenance of the Public Health and Clinical Personnel Resource Directory.

- Assure all applicable personnel can access and utilize this directory to receive and send notifications.
- Regularly check notification systems to assure timely receipt of messages.

**Evaluation:** Once developed, 24/7 notification systems will be tested at least quarterly and results of tests disseminated.

**Objective 4:** At least annually, exercise plans developed to demonstrate proficiency in responding to bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies.

**State Plan:** By October 2002, table top scenarios with the many partners and stakeholders involved in the State Public Health Threat Response Plan development will be undertaken. Beginning in July 2003, once a first draft of the full response plan is accomplished, exercises will be undertaken. These will continue to be run on at least an annual basis and will be undertaken in coordination with and under the guidance of the WV Office of Emergency Services. Lessons learned from these exercises will be incorporated into ongoing response plan development and public health capacity building activities.

**Local Plan:** Assess, plan, and implement plans to accomplish the following:

- Participate in tabletop scenarios (October 2002) and in annual exercises of the State Public Health Threat Response Plan (July 2003).
- Work with local emergency management agencies to exercise Regional/Local Public Health Threat Response Plans on at least an annual basis. Where possible, exercises of Regional/Local plans should be done in conjunction with exercises of the State Response Plan.
- Lead and/or participate in after action reviews of events and exercises involving Regional/Local and/or state response plans.
- Incorporate lessons learned into ongoing local preparedness and response assessments and planning.

**Evaluation:** Success will be demonstrated by a) holding at least an annual exercise of plans; b) compiling and disseminating results of annual plan exercises to the Governor's Commission, the State-Local Oversight Committee, WVBPH staff responsible for state focus area development, and applicable local individuals and organizations; c) evidence of plan review / revision exercises held and lessons learned.

**II.B. CRITICAL CAPACITY: to ensure that state, local, and regional preparedness for and response to bioterrorism, other infectious outbreaks, and other public health threats and emergencies are effectively coordinated with federal response assets.**

**Description and Adequacy of Current Capacity:** An Interim NPS Plan, based on CDC Draft # 8, dated April 2001, is found in Attachment A-3. The plan needs to be 'firmed up,' as described in the next section (Section III A) of this proposal. Staff from Office of Emergency Services, Office of Emergency Medical Services, the Division of Public Health Nursing and Administration, the Immunization Program and the Infectious Disease Epidemiology Program



have collaborated on this initial draft. Other collaborators include the West Virginia Hospital Association and the Poison Control Center (for pharmaceutical support). The draft must be reviewed more fully by the Department of Military Affairs and Public Safety, the West Virginia National Guard, and other relevant state agencies and partners.

The Office of Emergency Medical Services is the state emergency response agency. During a state of emergency, that office links with Federal disaster response personnel, including disaster medical assistance teams and mortuary assistance teams. The West Virginia Hospital Association, Office of Emergency Medical Services and Infectious Disease Epidemiology Program are represented on both the hospital response committee and the NPS working group. It is anticipated that this arrangement will assure coordination between hospital preparedness planning and NPS planning.

West Virginia has not participated in regional exercises conducted by federal agencies to date.

**Critical Benchmark # 7:** Develop an interim plan to receive and manage items from the National Pharmaceutical Stockpile, including mass distribution of antibiotics, vaccines, and medical materiel. Within this interim plan, identify personnel to be trained for these functions.

**Status:** Achieved. (See *Critical Benchmark # 7 attached.*) West Virginia completed an interim draft of the NPS plan on March 19, 2002. Appendix I of the draft NPS plan contains a list of personnel who need to be trained on the plan.

#### **Other Objectives for This Critical Capacity:**

**Objective 1:** West Virginia will ensure that all preparedness and response planning is coordinated within the existing emergency management infrastructure that is facilitated and supported by the Federal Response Plan, Metropolitan Medical Response system, disaster medical teams, mortuary assistance teams, and hospital preparedness planning during the funding period from the present through August 30, 2003.

**State Plan:** West Virginia's NPS working group includes appropriate representation to assure that planning is coordinated appropriately, as discussed above.

**Evaluation:** Success will be defined as continued appropriate linkage with the Office of Emergency Services and continued participation of WVDHHR OEMS, WV Hospital Association and WVDHHR Infectious Disease Epidemiology Program in both the NPS workgroup and the hospital planning group.

**Objective 2:** West Virginia will participate in regional exercises conducted by federal agencies prior to August 30, 2003, if invited to do so.

**State Plan:** West Virginia needs to continue to 'firm up' the NPS plan and to train collaborating agencies (See next section, III A, of this grant for details). When invited to do so, West Virginia will participate in a regional exercise to test the plan.

**Local plan:** As a condition of funding to local health departments, they will be asked to:

- Designate a local NPS coordinator for each jurisdiction or groups of jurisdictions;
- Send the local NPS coordinator for training; and
- Participate in any regional test of the NPS.

**Evaluation:** Success will be defined as full participation by West Virginia in any regional exercise conducted by federal agencies prior to August 30, 2003.

### **SECTION III: NATIONAL PHARMACEUTICAL STOCKPILE PREPAREDNESS**

**CRITICAL CAPACITY:** to effectively manage the CDC National Pharmaceutical stockpile (NPS), should it be deployed – translating NPS plans into firm preparations, periodic testing of NPS preparedness, and periodic training for entities and individuals that are part of NPS preparedness.

**Description and Adequacy of Current Capacity:** Existing capacity to develop the NPS plan has been pieced together by staff pulled from several areas of state government. There is no dedicated staff support of NPS planning, training or drilling in state or local health departments in West Virginia; and local planning to date has been minimal. In some local jurisdictions partnerships between local health departments and emergency responders are extremely strong; in other cases, these relationships need to be nurtured.

Parts of the NPS plan must also be ‘firmed up;’ including formal MOAs with other state agencies. In addition, multiple contingency contracts and other agreements must still be developed. Finally, site visits to potential storage sites must be completed.

**Objective 1:** Develop an infrastructure component within the state- and local-level terrorism preparedness initiative that is dedicated to effective management and use of the NPS statewide by no later than 2 months after the final funding award.

**State Plan:** Effective with funding, West Virginia’s Threat Preparedness Initiative will recruit and hire a State NPS Coordinator. This individual will take charge of firming up the NPS plan and drawing up detailed background planning documents needed for full deployment. These documents include: detailed MOAs with the West Virginia Department of Military Affairs and Public Safety and the West Virginia Air National Guard, contingency contracts for transportation, food services, and other items, agreements with schools and agencies that will supply volunteer staffing, and other documents. In addition, the State NPS coordinator will work with the Hospital Planning Committee, the HAN workgroup and the Public Notification / Risk Communication workgroup to make certain that the link between NPS and these other groups is fully established and that planning is coordinated.

West Virginia develops ‘official’ emergency planning documents involving multiple state agencies under the auspices of the West Virginia Office of Emergency Services (WVOES). Emergency planning documents for WVOES are written in a completely different style and format than the NPS plan that has been written for CDC. The State NPS Coordinator will assist with developing the official documents for the WVOES so that the plan has full buy-in from state agencies in West Virginia. After the plan is ‘firmed up,’ the State NPS Coordinator will serve

as the training and drill coordinator. He/she will coordinate any needed changes in the plan after it is tested.

Part of the West Virginia interim NPS plan calls for development of a 'clinic template.' This will be completed by a working group led by Public Health Nursing and Administration with members of the Infectious Disease Epidemiology Program, Immunization Program, and local health department staff. The clinic template will include guidelines for selection of appropriate dispensing sites, staffing the clinic, management plan, inventory and supply list, standing order forms, patient intake forms and other planning documents needed for a mass prophylaxis clinic at the local level. Local health departments will then be able to use the 'clinic template' for developing their own local plans for dispensing NPS pharmaceuticals.

**Local Plan:** As a condition of funding, the local health departments will be asked to

- Identify appropriate NPS drug dispensing sites in their jurisdictions;
- Assure that personnel at the local health departments are trained and drilled in NPS deployment and data collection;
- Work with local partners to identify effective news media spokespersons, emergency transportation for NPS assets, transportation for asymptomatic exposed persons where needed, law enforcement for NPS dispensing sites, etc.

**Evaluation:** Success will be defined as a) successful hiring of the NPS Coordinator within 3 months after proposal approval; and b) the existence of a completed draft plan with all supporting documents in place by no later than 3 months after project staff are hired and after the federal 'Draft # 9' is available.

**Objective 2:** West Virginia will provide fiscal support to help local health departments to develop a similar infrastructure component dedicated to effective management and use of the NPS within one month of completing the state NPS plan draft.

**State Plan:** The West Virginia Bureau for Public Health will disburse money to each local health jurisdiction in the state, as proposed in the budget and budget justification.

**Local Plan:** As a condition of funding, local health departments will be required to:

- Identify an NPS Coordinator for the jurisdiction or jurisdictions. That coordinator will be required to attend training on NPS deployment, identify clinic sites in the jurisdiction, identify staffing and other resources per the clinic template, identify emergency transportation for NPS assets from the regional distribution site to the dispensing sites, identify effective news media spokespersons, law enforcement, etc.
- Share the results of local/regional plan with the State NPS Coordinator, including contact name and emergency phone number for the local NPS Coordinator.
- Assure 24/7 access for the local NPS coordinator or a designee.

**Evaluation:** Success will be measured by receipt of funding by all local health jurisdictions by no later than one month after completing the state NPS plan draft.

**Objective 3:** West Virginia will prepare a state description, with integrated local and regional

area components, for the management and use of the NPS, by addressing the considerations cited in Draft # 9 of the Guide for Planning the Receipt and Distribution of the CDC National Pharmaceutical Stockpile, February 2002; no later than 2 months after receipt of the federal guidance.

**State Plan:** After receiving and reviewing the anticipated February 2002 document, the NPS coordinator will identify all agencies that need to be added to the current working group, and he/she will convene a working group to address any changes in focus or direction that are needed in the current NPS plan. Local health department representatives will be included on the planning group and the components that must be present in each regional/local plan will be defined no later than 2 months after receipt of the federal guidance.

**Local Plan:** As a condition of funding, the local NPS Coordinator will be required to:

- Submit local plans to the state NPS coordinator by no later than 3 months after the required elements for each local/regional plan are defined and distributed.

**Evaluation:** NPS Plan will be updated in accordance with Draft #9 within 2 months following receipt of guidelines.

**Objective 4:** In collaboration with local and regional NPS planning components, West Virginia will follow development of an NPS plan with preparations that result in documented commitments by all of the individuals, agencies, organizations, and corporations identified in the plan no later than 2 months after the second draft of the plan (based on Draft #9) is complete.

**State Plan:** Heads of all state agencies named in the NPS plan will be asked to sign a copy of the final plan. For specific agencies potentially required to commit large personnel, financial and other resources, a written MOA will be drafted by the NPS Coordinator, and negotiated and signed.

**Local Plan:** As a condition of funding:

- Local NPS coordinators will be required to certify that they have formal arrangements with local officials, including news media spokespersons, law enforcement and transportation resources. They will also have to document agreement to use dispensing sites.

**Evaluation:** Success will be defined as a) the presence of a completed, signed NPS plan endorsed by participating state agencies; and b) the presence of signed MOAs between WVDHHR and both the Department of Military Affairs and Public Safety and the WV Air National Guard.

**Objective 5:** In collaboration with local NPS Coordinator; West Virginia will follow NPS planning and preparations with development and implementation of a regimen of basic orientation, training and refresher training, to begin within 2 months after the NPS plan (based on Draft # 9) is complete and MOAs and agreements are signed.

**State Plan:** After a detailed NPS plan is complete, training will be developed and conducted

by the State NPS Coordinator. Training will consist of formal presentations and table-top exercises. In addition, a team of 15 individuals from state and local government and other partners will be selected to go to Anniston, Alabama for NPS training at the federal facility there.

**Local plan:** As a condition of funding, local jurisdictions will be required to:

- Send the local NPS coordinator (or designee) to training.

**Evaluation:** Success will be defined as completion of at least 4 tabletop exercises with state and local partners by August 30, 2003.

**Objective 6:** West Virginia will develop a plan for distribution of antibiotics, chemical/nerve agent antidotes, and symptomatic treatment packages to various regional areas of the state, and describe the proposed storage sites for antibiotics, chemical/nerve agent antidotes, and symptomatic treatments (not pre-distributed to individuals) meeting specifications for environmental acceptability (i.e., moisture-free with a temperature range controlled to remain within 58°F and 86°F)

**State Plan:** The State NPS coordinator will identify transportation needs and develop contingency contracts to fulfill those needs. The State NPS Coordinator will identify storage sites and perform site visits to each one to assure that they meet all requirements.

**Local Plan:** N/A

**Evaluation:** Success will be measured by the presence of a) contingency contracts with transporters and b) completed site visits to storage sites; both within 2 months after completion of the NPS plan based on the federal Draft # 9.

## **Critical Benchmark #1**

### **Executive Director Public Health Threat Preparedness West Virginia Bureau for Public Health**

#### **Position Description**

This position is housed in the Office of the Commissioner, Bureau for Public Health, and serves as the Senior Public Health Official overseeing public health preparedness for and response to bioterrorism, infectious disease outbreaks, and other public health threats and emergencies. The Deputy State Health Officer will serve in this role under the administrative direction of the BPH Commissioner and will work closely with the Secretary of the WV Department of Health and Human Resources. Duties include, but are not limited to the following:

- Provide administrative direction of the initiative (a staff of approximately 6 individuals)
- Coordinate efforts among other Bureau for Public Health professionals leading focus area specific preparedness and response efforts (epidemiology, risk communication, health alert network, laboratory response, hospital preparedness, etc.)
- Develop and maintain partnerships with other agencies involved in preparedness and response.
- Provide oversight for the process of developing the state Public Health Threat Response Plan
- Develop and facilitate the Governor's Commission on Public Health Threat Preparedness (the statewide advisory body overseeing Threat Response Plan development)
- Assure integration of efforts focused on developing public health agency capacity and health care system capacity to respond to serious public health threats and emergencies.
- Coordinate development of Cooperative Agreement Applications supporting public health threat preparedness.
- Serve as a spokesperson for this initiative at local, state, and federal levels
- Attend local, state, and national meetings related to bioterrorism and other public health disaster response.
- Serve as a member of the Bureau for Public Health Leadership Team.
- Provide backup to the State Health Officer (BPH Commissioner) to assure 24/7 coverage.
- Utilize Threat Preparedness work as an opportunity to reshape and strengthen how the WV public health system effectively and efficiently addresses expected and unanticipated health issues through meaningful collaboration.

## CURRICULUM VITAE

CATHERINE C. SLEMP, MD, MPH

### Contact Information

Office of the Commissioner  
WV Bureau for Public Health  
Room 701, 350 Capitol St.  
Charleston, WV 25301  
304-558-2971

### BOARD CERTIFICATIONS

Public Health and Preventive Medicine, board certified 1996  
Family Practice, board certified 1992, recertified 1998

### EDUCATION

**Public Health Leadership Scholar:** Public Health Leadership Institute of North Carolina, Virginia, and West Virginia, 1997-98.

**Preventive Medicine Residency:** Johns Hopkins School of Hygiene and Public Health, residency completed 1994.

**Masters of Public Health:** Johns Hopkins School of Hygiene and Public Health; MPH May 1993

**Family Practice Residency:** St. Margaret Memorial Hospital, Pittsburgh, PA, 1989-92

**Medical School:** Duke University School of Medicine, Durham, NC; M.D. 1989

**Undergraduate:** Princeton University, Princeton, NJ; A.B. cum laude, Biochemistry, 1984

### WORK EXPERIENCE

**Executive Director, Public Health Threat Preparedness** Feb 2002 - present  
West Virginia Bureau for Public Health (WVBPH)

This position provides oversight of public health preparedness and response efforts for bioterrorism, infectious disease outbreaks, and other public health threats and emergencies. Responsibilities include administrative oversight of staff, development of funding applications, facilitating state public health threat response plan development, exercising developed plans, working with advisory bodies and external partners, etc.

**Manager, Bureau Strategic Planning Efforts** Mar 2001 - Mar 2002  
West Virginia Bureau for Public Health

Responsibilities include strengthening strategic planning skills within the Bureau for Public Health, helping initiate and manage ongoing strategic planning efforts within BPH, work with bureau leadership (Commissioner and Leadership Team) to strengthen leadership and organizational management, facilitating related workgroups, representing BPH and WVDHHR at national meetings, providing back up for medical issues as needed in the

Commissioner's absence, etc.

**Communicable Disease Transitions Coordinator**

2000 - Feb 2002

Division of Surveillance and Disease Control (DSDC), WVBPH.

Duties included managing the communicable disease component of the WV Transitions Project, a state and local collaborative initiative to strengthen public health capacity; participation in Bureau and Division policy development; and provision of training and technical assistance to local health departments.

**Medical Epidemiologist:** DSDC, WVBPH

2000 - Feb 2002

Communicable disease consultation with medical and public health professionals, public officials, and the general public, training and continuing education presentations, outbreak investigation, grant writing, representation of state at national meetings, etc. (continued this work while doing above due to staffing shortages within DSDC).

**Clinical Director**, Division of Surveillance and Disease Control, WVBPH

1994 - 2000

Duties included developing and serving as director of the WV Infectious Disease Epidemiology Program. This position was responsible for communicable disease surveillance systems, outbreak investigation, public and provider consultation, development of a system of Regional Epidemiologists, grant writing and management, provision of training, etc. Other roles included serving as epidemiologist for the WV Cancer Registry, consultation and participation in STD, Immunization, and TB projects; and numerous Bureau wide activities (workgroups on public health and managed care, participation in the Bureau Leadership Team, MPH program development, etc.).

**Preventive Medicine Resident:**

1992 - 1994

Practicum Year Experiences (1993 - 1994)

Prince George's County Health Department: Evaluating local impact of Medicaid Managed Care initiative

Maryland Department of Health and Mental Hygiene:

*Outbreak Investigation Division:* Outbreak investigation and communicable disease consultation

*Immunization Division:* Development of a birth cohort immunization survey.

*Tuberculosis Division:* TB control and surveillance projects.

Johns Hopkins University, Office of State and Local Affairs: Staff assistant tracking health related legislation, Maryland General Assembly.

Center for American Indian and Alaskan Native Health, Hopkins School of Public Health.

Management of a clinical trial of new oral rehydration solutions for children with diarrhea, Instituto Nacional de Pediatria, Mexico City, Mexico.

Part time work during MPH Academic year (1992 - 1993)

Baltimore City Health Department, Sexually Transmitted Disease Clinics: Physician consultant to the STD Clinic Family Planning Program; Clinical Care Provider.

Health Program Alliance, Hopkins School of Public Health: Research Assistant: Infant Mortality Review for Baltimore City Healthy Start Program; Staffing work, Maryland Association of County Health Officers.



**Family Practice Resident**, St. Margaret Memorial Hospital, Pittsburgh, PA 1989 - 1992

**Tutor, medical assistant, and office staff**, Deep Griha Society (non-profit community development project), Pune, India. 1984 - 1985

### **LICENSURE**

Licensed physician, West Virginia  
Licensed physician, Maryland, inactive

### **AWARDS**

WV Sanitarian's Association Award of Appreciation, 1996  
Lyman-Stebbins MPH Award, 1993  
Delta Omega Public Health Honor Society, 1993  
Mead Johnson National Award for Graduate Education in Family Practice, 1991  
Resident Teaching Award, 1992  
Sandoz Award in Undergraduate Medical Research, 1989  
American Medical Women's Association Award, 1989  
Alpha Omega Alpha Honor Society (Medical School)

### **PROFESSIONAL MEMBERSHIPS**

American Academy of Family Physicians  
American Public Health Association  
American College of Preventive Medicine  
Council of State and Territorial Epidemiologists  
West Virginia Public Health Association  
West Virginia Academy of Family Physicians

### **FACULTY APPOINTMENT**

1994 - present. Adjunct Assistant Professor, Department of Community Medicine, West Virginia University. Morgantown, WV.

### **COMPUTER SKILLS**

Word Perfect, Word, Epi Info, Harvard Graphics, Powerpoint, Corel Presentations, Groupwise, Access, Internet

### **REFERENCES**

Available on request

## **PUBLICATIONS**

"Consequences of Delayed Diagnosis of Rocky Mountain Spotted Fever in Children—West Virginia, Michigan, Tennessee, and Oklahoma, May - July 2000," contributing author. *MMWR*, 2000, 49(39):885-888.

Francisco Gimenez-Sanchez, Jay C. Butler, Daniel B. Jernigan, Larry J. Strausbaugh, Catherine C. Slemp, Scott F. Dowell. "Treating Cardiovascular Disease with Antimicrobials: a Survey of Knowledge, Attitudes and Practices among U.S. Physicians." *Clinical Infectious Diseases*, 2001.

Jubelirer, Harpold, Miller, Keener, and Slemp. "Factors Associated with Breast Conserving Surgery Received for Treatment of Early-Stage Breast Cancer: A Statewide Analysis in West Virginia." *West Virginia Medical Journal*. Spring 2001.

German, Slemp, Keener, Jubelirer, Thompson, and Uhler. "Long Term Trends in Cancer Mortality Rates for West Virginia," *West Virginia Medical Journal*, 1997, 93(1):362-367.

Dowell, Groves, Kirkland, Cicirello, Ando, Jin, Gentsch, Monroe, Slemp, Dwyer, Meriwether, Glass. "A Multistate Outbreak of Oyster-Associated Gastroenteritis: Implications for Interstate Tracing of Contaminated Shellfish," *Journal of Infectious Disease*, 1995, 171:1497-1503.

"Human Rabies--West Virginia, 1994," contributing author, *MMWR*, 1995, 44(5):86-87,93.

"Multistate Outbreak of Viral Gastroenteritis Related to Consumption of Raw Oysters--Louisiana, Maryland, Mississippi, and North Carolina, 1993," contributing author, *MMWR*, 1993, 42(49):945-948.

Aukhil, Slemp, Lightner, Nishimura, Briscoe, and Erickson. "Purification of Hexabrachion from Cell Culture Conditioned Medium and Separation from a Cell Adhesion Factor," *Matrix*, 1990,10:98-111.

Lightner, Slemp, and Erickson. "Localization and quantitation of Hexabrachion in skin, embryonic brain, tumors, and plasma," *Collagen, N.Y. Academy of Sciences*, 1990, 580:260-75.

Ross, Grob, Bothwell, Elder, Ernst, Narano, Ghrist, Slemp, Gerlyn, Atkinson, and Koprowski. "Characterization of nerve growth factor receptor in neural crest tumors using monoclonal antibodies," *Proceedings National Academy of Sciences, USA*, 1984, 81:6681-85.

## **OTHER SELECTED PROJECTS**

Advisory Committee. Masters of Public Health Program, West Virginia University. Morgantown, WV. 2000 - present.

Practicum Preceptor, Masters of Public Health Program, West Virginia University. 2000 - 2001.

Expert Panel Member: US Department of Health and Human Services. "Assessing Core Capacity for Infectious Disease Surveillance." The Lewin Group. Washington DC. Fall 1999 - Spring 2000.

External Advisory Committee. Public Health Graduate Certificate Program, Johns Hopkins School of Hygiene and Public Health. Baltimore, MD. 1996-1998.

Moderator for numerous satellite teleconferences. Topics have included "HIV and AIDS in the Workplace" (three part series), "Public Health in West Virginia," "WVDHHR: An Introduction to Secretary Joan Ohl," "A Conversation with WVDHHR Secretary Paul Nusbaum", and others. Distribution of these has been multistate.

## **TEACHING**

### **COURSES / WORKSHOPS / CONTINUING EDUCATION SERIES:**

"Epidemiology: Surveillance, Case Investigation, and Outbreak Investigation." New Sanitarian Training. West Virginia Bureau for Public Health, Office of Environmental Health Services. Morgantown, WV. November 16-17, 2000.

"Case Studies in Communicable Disease Control." A distance learning quarterly continuing education opportunity for local health department staff. Topics: Hepatitis A in a Food Service Worker, Understanding Meningitis and Encephalitis, Rabies: Clinical and Community Strategies for Prevention. January 2000 to present.

"Outbreak Investigation: The First 24-48 Hours." A training for local health department staff. Led team in development of training and served as faculty. WV Public Health Association Pre-Conference. Canaan, WV. September 21-22, 1999.

"Communicable Disease Surveillance and Response." A workshop for local health department staff. Led team in development of training and served as faculty, Wheeling, Parkersburg, Elkins, and Beckley, WV. October-December 1998.

Association for Professionals in Infection Control, "Infection Control: A Clinical Focus": Intermediate level training for infection control professionals from across the nation; Faculty. "Outbreak Investigation" November 1998 (Orlando, FL), 1999 (Fort Lauderdale, FL).

Emerging Infectious Diseases Series January 1996 - March 1999: Slemp, C.C., Fisher, M., and Khakoo, R. Monthly series delivered over statewide compressed video system (MDTV). (EID Series, cont.): Presentations included: "Hepatitis C," "Vancomycin Resistant Enterococci," "Drug-Resistant Streptococcal pneumoniae," "Multi-Drug Resistant Tuberculosis," "E. coli O157:H7," "Invasive Group A Streptococcal Disease," "Clostridium difficile," "Influenza and other Respiratory Viruses," "Hantavirus Pulmonary Syndrome and Related Viruses," "Viral Encephalitis," "Ehrlichiosis," "Malaria," "Cat Scratch Disease and other Bartonella Infections,"

“Meningococcal Disease,” “Antibiotic Resistance and Respiratory Infections,” “Emerging Infectious Diseases in Travelers--Part 1 and Part 2,” “Legionnaire’s Disease,” “New Problems with Salmonella and Shigella,” “Rabies,” “Infection Control in Health Care Settings,” “Appropriate Use of Antimicrobials,” “Tuberculosis and Public Health Issues,” “Update on Vancomycin-Resistant Enterococci,” and “Infectious Diseases in the Community: Case Studies in Management,” “Listeriosis,” and “Varicella”.

Intro to Family Medicine. WV School of Osteopathic Medicine. Guest Lecturer (six hours) on “Public Health in West Virginia,” and “Intro to Epidemiology.” Lewisburg, WV. 1996 - 2001.

Public Health Epidemiology, CMED 491B, West Virginia University, co-taught course over MDTV, Spring 1996.

## **LECTURES AND PRESENTATIONS:**

### **Communicable Disease**

Slemp, C.C. “WV Statewide Immunization Information System”, health care provider continuing education meetings, Beckley and Charleston, WV, Spring 2001.

Slemp, C.C. “Improving Communicable Disease Surveillance Through the Use of Performance Standards and More: Does Building Capacity Make a Difference?” International Conference on Emerging Infectious Diseases. Atlanta, Georgia. July 19, 2000. Delivered in state, 2000 - 2001.

Slemp, C.C. “Managing the Healthcare Worker with an Infectious Disease.” Annual Conference of the WV Association of Practitioner’s of Infection Control. Flatwoods, WV. November 4, 1999.

Slemp, C.C. “Working with Public Health: Why and How to Report Diseases.” Regional Provider Immunization Meeting. Charleston. Sept. 30, 1999.

Slemp, C.C. “Public Health’s Role in Communicable Disease Control.” Local Health Officer Conference Call. July 8, 1999.

Slemp, C.C. “Public Health Surveillance and Disease Reporting.” Region 1 Communicable Disease Surveillance and Response Initiative Provider Meeting. November 16, 1998.

Slemp, C.C. “Epidemiology in West Virginia: Emerging Infectious Diseases.” Joint meeting of the WV Association of American Medical Technologists, WV Clinical Lab Managers Association, and WV Society for Clinical Laboratory Science. Flatwoods, WV. October 9, 1998.

Slemp, C.C. “Antimicrobial Resistance: Where Do You Fit In?” WV Public Health Association Conference. Morgantown, WV, September 24, 1998.

Slemp, C.C. “Vancomycin Resistant Enterococci.” Mid Atlantic Renal Coalition. Charleston,

WV, July 23, 1998.

Slemp, C.C. "WV Guidelines for Management and Prevention of Vancomycin Resistant Enterococci in Health Care Facilities." WV Association of Professionals in Infection Control. Braxton County, WV, March 20, 1998.

Brannon, E., Slemp, C., Minnich, L., Haddy, L. "LaCrosse Encephalitis: Enhancing Disease Surveillance." Poster presentation. First International Emerging Infectious Disease Conference. Atlanta, Georgia. March 9-11, 1998.

Slemp, C.C. "Rabies." Regional Sanitarian Inservice. Jackson Mills, WV, October 17, 1997.

Slemp, C.C. and others. Panel Discussion: "Tuberculosis -- Patient vs Community Rights." Ethics Grand Rounds. WVU School of Medicine. Morgantown, WV. October 8, 1997.

Slemp, C.C. "Emerging Infectious Diseases." WV State Vocational Conference for Health Profession Educators. Charleston, WV. August 7, 1997.

Slemp, C.C. "Prevention of Antimicrobial Resistance: Where Do We Go from Here?" West Virginia University Internal Medicine Clinical Conference. Charleston, WV, September 17, 1996; State Health Education Council Meeting. Charleston, WV, June 13, 1996.

Slemp, C.C. "Epidemiology and LaCrosse Encephalitis." Lecture for Medical Entomology, Marshall University, Department of Biology, Huntington, WV. September 10, 1996.

Slemp, C.C. Case Follow-up and Discussion of Immunization Administration Issues. Teleconference. "Hepatitis B." Multi-state. August 14, 1996.

Slemp, C.C. "Update on New Reportable Diseases and other Communicable Disease Issues." Spring Teaching Day, WV Public Health Nurses Association. Glade Springs, WV. March 27, 1996.

Slemp, C.C. "Outbreak Investigation." Lecture for Principles and Practices of Epidemiology, WVU School of Medicine, Morgantown, WV. November 30, 1995.

Slemp, C.C. "HIV Data Interpretation." Conference for HIV Community Planning Groups. Clarksburg, WV, October 28, 1995.

Slemp, C.C. "Emerging Infectious Diseases: Implications for West Virginia." 1995 WV Public Health Association Meeting. Canaan Valley, WV. Sept. 21, 1995.

Slemp, C.C. "Surveillance and Communicable Disease Control." Cabell-Huntington Health Department, Huntington, WV. June 15, 1995.

Slemp, C.C. "Hepatitis B." Regional Public Health Nurses, Franklin, WV, June 22, 1995.

Slemp, C.C. "Foodborne Illness and Outbreak Investigation." Workshop, WV Sanitarians' Association, Mid-Year Training. May 3, 1995.

Slemp, C.C. "Rabies in WV." Grand Rounds, West Virginia University School of Medicine, Morgantown, WV. March 15, 1995.

Slemp, C.C. "Tuberculosis and Lyme Disease--Updates from the Bureau for Public Health." Grand Rounds, St. Francis Memorial Hospital, Charleston, WV. Feb. 10, 1995.

## **Cancer**

Slemp, C.C. "Long Term Trends in Cancer Mortality Rates, West Virginia 1984-1994." Surveillance and Data Management in Cancer Control. CDC Cancer Conference. Atlanta, Georgia. September 3, 1997.

Slemp, C.C. "Lung Cancer in West Virginia." Teleconference, Lung Cancer Anatomy and Staging. June 4, 1996.

Slemp, C. C. "Cancer in the United States and West Virginia--1993." Charleston Area Medical Center Tumor Board, Charleston Area Medical Center, Charleston, WV. September 11, 1995.

Slemp, C.C. "Uses of Cancer Registry Data." Teleconference, Quality Assurance for Hospital and Central Cancer Registries. May 8, 1995.

## **Public Health--General**

Slemp, C.C. "Outbreak Investigation: The Local Perspective." Institute of Medicine, Workshop on Assessing Public Health Capacity to Address Emerging Infectious Diseases. Washington, D.C., November 2, 1998.

Slemp, C.C. Wyant, B. "Interpreting and Communicating Data." West Virginia Rural Health Conference, Charleston, WV. October 28, 1998.

Slemp, C.C. "Basic Epidemiology Terms," and "Presenting and Communicating Data." SHEC/WVBPH Data Workshop for community based public health professionals. Flatwoods, WV, March 24-25, 1998.

Slemp, C.C. "Outbreak Investigation." WV Association of Professionals in Infection Control, Annual Conference. Charleston, WV. October 10, 1997.

Slemp, C. C. "Do You Know How I'd Find the 'Goat Woman From Huntington?' Lessons From a Recent PMR Graduate in State Public Health." Lecture for CDC Preventive Medicine Residents, Atlanta, Ga. October 19, 1995.

Slemp, C.C. "What is Public Health?" Family Insights Radio Show. Feb. 11, 1995.

## **Critical Benchmark #2**

## **Governor's Commission on Public Health Threat Preparedness**

**Background:** Recent experiences with both natural (e.g., floods) and man-made disasters (e.g., anthrax incidents) point to the importance of well developed partnerships and coordinated operational plans for health response. This is especially critical given the recently increased possibility of a catastrophic health disaster (bioterrorist incident, flu pandemic, etc.). In an effort to maximally coordinate health preparedness and response efforts, the Governor's Commission on Public Health Threat Preparedness is formed to oversee development of the Statewide Public Health Threat Response Plan.

**Proposed Mission:** To support development and maintenance of a coordinated public health threat response plan and the partnerships necessary to effectively implement it in a disaster.

### **Duties:**

This high level advisory body serves the following functions:

- To oversee development of the West Virginia Public Health Threat Response Plan—oversee process, review drafts, make recommendations.
- To assure developed plan aligns with the State Emergency Response Plan developed by the Office of Emergency Services and the Disaster Recovery Board.
- To strengthen relationships between various entities involved in health disaster preparedness and response
- To bridge high level leadership of health related and Emergency Management Agencies.
- To provide advice and support regarding surveillance systems aimed at detecting a pending public health disaster.
- To collaboratively review resource and other identified needs critical to implementation of the plan.
- To help prioritize resource needs and work to link with identified resources.
- To review lessons learned and evaluate implementation of the State Public Health Threat Response Plan (following drills or after action reviews)
- To recommend plan changes and resource prioritization based on evaluation

**Longevity:** This group will continue at least through Public Health Threat Response Plan development and several cycles of testing and refinement (2-3 years). Based on need, it may well become a permanent advisory body.

**Membership:** Members are appointed to two year terms by the Governor with the support of the Secretary of the Department of Health and Human Resources. (See next page)

# Governor's Commission on Public Health Threat Preparedness

## Proposed Membership

Local Health Departments:	Local Health Officer
Emergency Management Agencies:	Representative of the WV Department of Military Affairs and Public Safety, Office of Emergency Services
Emergency Medical Services:	EMS Representative
Office of Rural Health:	Director, Office of Rural Health Policy
State Police:	Representative from State Police
Fire:	State Fire Marshall
Other Health Care Providers, including university, academic medical, and public health:	WVU Occupational Medicine Physician Marshall Univ. School of Nursing Representative
Community Health Centers:	Representative of the WV Primary Care Association
Red Cross / voluntary organizations:	Representative of the American Red Cross
Hospital Community:	Director, WV Hospital Association Representative of the VA Hospital System
Behavioral Health:	Behavioral Health Professional with background in Crisis Counseling / Critical Incident Stress Management
State Health Department / DHHR:	WVDHHR Secretary to determine need and appoint
Governor's Office:	Governor's Office representation

*Note: Although many individuals have been approached and have expressed interest in serving, names are withheld from this document pending submission to the DHHR Secretary and Governor for final approval and invitation.*



### Critical Benchmark # 3

### Timeline for Assessment of Emergency Preparedness and Response Capabilities

<b>Assess Public Health Threat Response Capacity (primary state level assessment)</b>		
<b>Activity</b>	<b>Lead</b>	<b>Timeframe</b>
A. Multi agency topic specific workgroups assess current capacity through review of DOJ survey, hospital survey, other identified resources available, dialogue among members, additional surveys if needed.	Workgroup facilitators, (Coordinated through TPWG)  (Surveys, if undertaken, coordinated through TPWG)	April 2002 to June 2002
B. Define needs as best understood	“	
C. Identify available resources in state and communities that can support preparedness and response.	“	
D. Compile descriptions of current capacity, anticipated lists of needs and of resources by topic specific area	TPWG: to State-Local Oversight Committee, Governor’s Commission, and Secretary’s BT Task Force	June 2002
E. Identify common themes / possible linkages between resources and gaps across workgroups	TPWG and Governor’s Commission	July 2002
F. Develop public health threat response plans	Workgroups via TPWG and Governor’s Commission	June 2002-April 2003
G. Exercise plans to continually assess gaps and needs	TPI Staff, to workgroups / Governor’s Commission, etc.	May 2003
H. Refine identified needs based on developed plans	Workgroup Facilitators (Coordinated through TPWG)	June-July 2003
I. Prioritize needs	Workgroups, TPWG and Governor’s Commission	August 2003

**Timeline for Assessment of Emergency Preparedness and Response Capacity, cont.**

<b>Assess Public Health System Capacity with a special emphasis on Local Health Departments</b>		
<b>Activity</b>	<b>Lead</b>	<b>Timeframe</b>
State-local health department dialogue re current capacity for development of cooperative agreement application	Focus area workgroups and State - Local Oversight Committee	March 2002
Identify state and local health department roles in preparedness for each focus area	State-Local Oversight Committee and focus area workgroups	April 2002
Review DOJ Assessment, hospital survey, etc.	State-Local Oversight Committee and workgroups	April - May 2002
Develop a coordinated approach to LHD assessment and planning activities: a. Define standards/"Whats" to plan for b. Design assessment methodology (incorporate peer review? self assessment? use or modification of existing tools? etc.) c. Determine how to provide support to LHDs going through process d. Determine how to track progress e. Determine how to handle situations where LHD not progressing f. Determine how to assure integration/linkages between state and local assessments throughout process	State-Local Oversight Committee and WVALHDs	April 15 - June 15
Local Health Department Assessment and planning activities a. Undertake assessments b. Develop plans for "how" to accomplish critical capacities in each community c. Integrate plans across jurisdictions	Local Health Departments	June 15, 2002 - October 15, 2002
Aggregate, review, modify, and integrate state and local plans into aligned public health system preparedness plan(s).	State-Local Oversight Committee	Nov 2002 - Dec. 2002

Implement, evaluate, assess, revise, etc.	State-Local Oversight Committee	Dec. 2002 and ongoing
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## Critical Benchmark #4

### Timeline for the assessment of statutes, regulations, and ordinances

**Process Development:** On March 21, 2002 a meeting with WVBPH Legal Counsel and WV's Senior Public Health Official for the Bioterrorism Preparedness and Response Program was held. During this meeting the individuals and agencies who will be invited to participate on the Bioterrorism Legal Issues Workgroup were identified. Representatives from the legal sections of the West Virginia Hospital Association, The Association of Practitioners of Infection Control (APIC), The Governor's Office, the U.S. Federal Prosecutor's Office, the Kanawha County Prosecutor's Office, Military Affairs and Public Safety, the WV Attorney General's Office, General Counsel for the Secretary of the Department of Health and Human Resources(DHHR), Director, DHHR Office of Communication and Legislative Affairs, WV Legislative Services from key committees, e.g. Health, Judiciary, and Rules, the WV Department of Environmental Protection, the WV Board of Medicine, the state medical schools, a private law firm with strong public health involvement, two local health department representatives, and appropriate DHHR offices will be contacted. Each representative will be asked to assess WV/Federal Code, Rule, and ordinances pertinent to each agency's legal authority within their state or local public health jurisdiction, as well as special provisions for the liability of healthcare personnel in coordination with adjacent states. Representative(s) of the BT Legal Workgroup will attend monthly WV Legislative Interim Meetings for Senate and House Health Committees with pertinent updates and/or proposed legislation. The committees will be given regular status reports of the work that is being conducted within the BT Legal Workgroup. This will facilitate knowledge of the issues and support for any future legislation.

- March 2002** A letter will be written by WVBPH's legal counsel to introduce/invite the workgroup members to participate on the BT Legal Issues Workgroup. Several legal documents, e.g., sections of WV Code, Legislative Rules, local ordinances, the model public health code, etc. will be distributed for review before attending the first general meeting.
- May 2002** The first meeting of the BT Legal Issues Workgroup will be held to discuss key legal issues surrounding the implementation of the Bioterrorism Preparedness and Response Program. The agenda for the first meeting will focus on discussions of issues involving patient confidentiality, constitutionality, quarantine, model public health code, credentialing and certification of health care workers, and environmental management and cleanup.
- June 2002** The second meeting of this workgroup will be held to review legal issues brought forth from each of the BT Focus Areas during the preparation of the State BT Threat Preparedness and Response Plan. Also, proposed changes to Legislative Rule that will need to be filed before July 2002 to enable submission into the cycle for consideration during the 2003 Legislative session.
- July 2002** The third meeting of this workgroup will be held to review any legislative rules that will need to be emergency filed and review, revise, and change any drafts of proposed legislation that will be presented at the next monthly Legislative Interim Committee Meetings.
- August 2002** During the fourth meeting of this workgroup representatives from medical, dental, nursing, etc., licensing boards will present their recommendation for special credentialing/licensing during emergency bioterrorism events, should there be a critical shortage of licensed healthcare workers and the urgent need for credentialing additional health care personnel.

The BT Legal Workgroup will determine the frequency of monthly meetings for the remainder of the budget period. The workgroup will continue to maintain a presence in the legislative interim meeting cycle and regular legislative session. The workgroup will follow-through with the process of drafting, revising, and finalizing WV Code and Legislative Rules and will serve as a resource for local municipalities as they develop ordinances.

**Critical Benchmark # 5**

**Timeline for the Development of a State-wide Public Health Threat Response Plan**

Activity	Lead	Timeframe																	
		2002												2003					
		F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J
Define and assure DHHR authority to facilitate development of a Public Health Threat Response Plan in alignment with the state Emergency Operations Plan.	DHHR Secretary MAPS Secretary																		
Develop first draft outline of Public Health Threat Response Plan	TPWG																		
Develop multi-agency, topic specific workgroups to develop "Concept of Operations" plan components: <ul style="list-style-type: none"> <li>• Determine workgroups needed</li> <li>• Identify proposed workgroup partners</li> <li>• Develop workgroup guidance</li> <li>• Invite participants</li> </ul>	TPWG																		
Convene Governor's Commission on Public Health Threat Preparedness	Executive Director																		
Activate Multi-agency, topic-specific workgroups	Workgroup Facilitators																		
Topic specific capacity assessments / resource identification.	Workgroups																		

Activity	Lead	Timeframe																	
		2002												2003					
		F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J
Identify legal, training, security, communications, workforce safety, human resources / fiscal issues, data, volunteer, and other needs anticipated (for referral to appropriate workgroup)	Workgroups																		
Develop first draft (X) and refine topic specific response plans	Workgroups						X												
Mid-point review / table top scenario (in close coordination with MAPS/OES)	TPI Staff; MAPS/OES																		
Develop guidance for regional / local planning on topic	Workgroups																		
Patient Care Hubs are identified and formation of regions begins	Hospital Committee																		
Begin (X) development of MOUs where appropriate	Workgroups with Legal and Agency Input									X									
Compile and integrate topic specific plans into first draft of Public Health Threat Response Plan	TPWG, TPI staff; Gov. Comm.																		
First draft of PH Threat Response Plan out for Review and Comment	TPI Staff, TPWG																		
Revise plan based on input (With assistance of workgroups)	TPWG, TPI Staff, Gov. Commis.																		

Activity	Lead	Timeframe											
		2002											
		F	M	A	M	J	J	A	S	O	N	D	J
First Drill / Exercise of Plan (In close coordination with MAPS/OES)	TPI Staff / MAPS/OES												

**Critical Benchmark # 6**

**Timeline for the Development of Regional Public Health Threat Response Plans**

Activity	Lead	Timeframe																							
		2002												2003											
		F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	
Development of Statewide Plan	TPWG; Workgroups, Gov. Comm.																								
Develop guidance for regional / local planning on topic	Workgroups																								
Regional Patient Care Hubs are identified	Hospital Committee																								
Identify regional lead agency for coordinating planning	Hospital Committee																								
Formations of regions around identified hubs occurs	LHDs* or Hospital Committee																								
Identify local lead agency for coordinating local involvement in regional planning	LHD*																								
Develop regional plans based on provided guidance	Regional lead agency																								
Develop local component of regional plans based on provided guidance and regional planning	Local lead agency																								
Develop local agency plans to fulfill role in integrated plans.	LHD / other agencies																								
Drill Regional / Local plans	Regional lead agency																								





# **Critical Benchmark # 7**

## **NATIONAL PHARMACEUTICAL STOCKPILE (NPS)**

### **INTERIM PLAN**

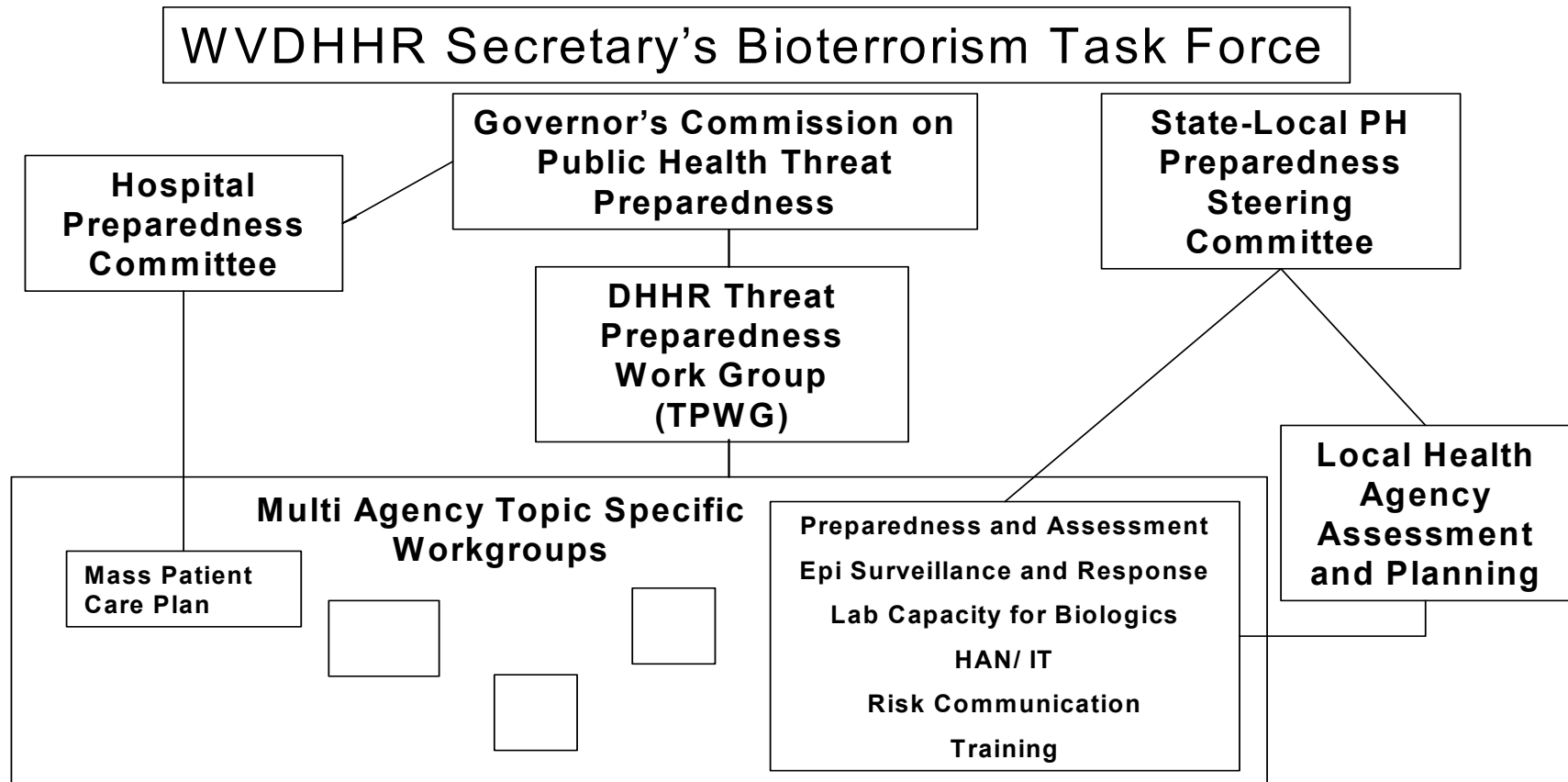
# WV Public Health Threat Preparedness Initiative

## Groups by Primary Objective

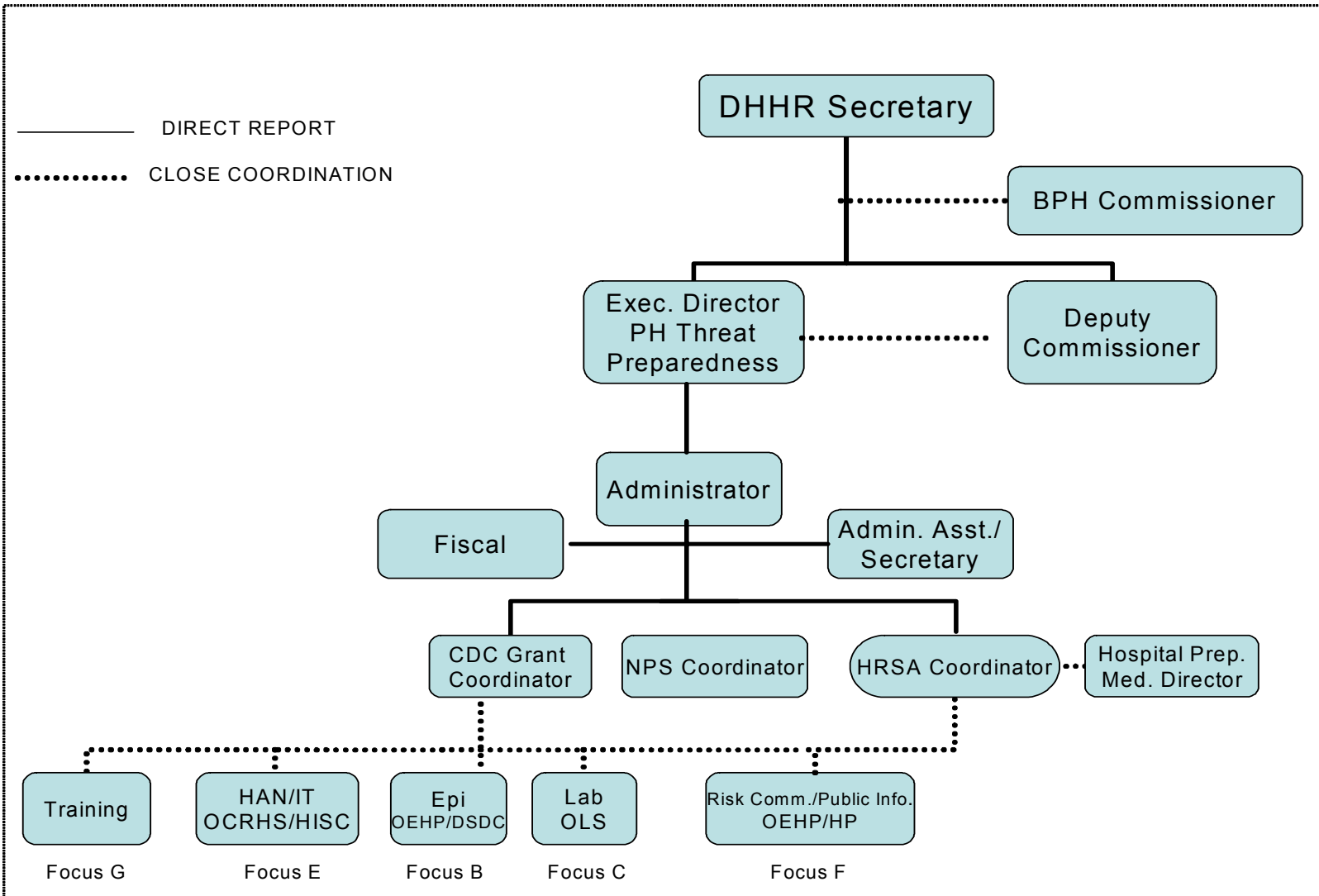
Strengthen Health Care System Preparedness and Response Capacity

Develop State & Regional / Local Public Health Threat Response Plans

Strengthen Public Health Department Preparedness and Response Capacity



## West Virginia Public Health Threat Preparedness Initiative



**BUDGET - Focus Area A (including NPS)  
WEST VIRGINIA - 2002-2003**

<b>A.</b>	<b>KEY PERSONNEL</b>		<b>\$367,733</b>
<b>B.</b>	<b>FRINGE BENEFITS:</b>		<b>\$114,730</b>
	010 Civil Service (\$215/FTE)	1,469	
	011 Social Security (7.65%)	28,132	
	012 Employee Insurance (\$400/mo)	32,800	
	014 Worker's Compensation (4.73%)	17,394	
	016 Pension and Retirement (9.5%)	34,935	
<b>C.</b>	<b>TRAVEL:</b>		<b>42,724</b>
	261 In-State	8,304	
	262 Out-of-State	34,420	
<b>D.</b>	<b>EQUIPMENT:</b>		<b>41,000</b>
	170 Computer Equipment	21,000	
	Workstations	20,000	
<b>E.</b>	<b>SUPPLIES:</b>		<b>7,814</b>
	054 Computer supplies	3,714	
	Office Supplies	4,100	
<b>F.</b>	<b>CONTRACTUAL:</b>		<b>\$2,621,325</b>
	Drill Development	11,325	
	LHD Subrecipient Agreements		
	Assessment and Planning	1,740,000	
	Implementation - Focus Area A	870,000	
<b>H.</b>	<b>OTHER:</b>		<b>\$63,294</b>
	Workforce Development	\$15,000	
	521 Training	\$8,700	
	Hospitality/Meetings	\$7,500	
	Miscellaneous	\$32,094	
<b>I.</b>	<b>TOTAL DIRECT COST:</b>		<b>\$3,258,620</b>
<b>J.</b>	<b>INDIRECT COST: (14.7% of direct personnel expenditures)</b>		<b>\$54,057</b>
<b>K.</b>	<b>TOTAL</b>		<b>\$3,312,677</b>

## BUDGET

### KEY PERSONNEL

<u>Name and Position Title</u>	<u>Annual Salary Rate</u>	<u>% Time</u>	<u>No. Months Budget</u>	<u>Total Requested</u>
NPS Coordinator - HHR Program Manager I (New)	\$45,318	100	15	\$56,647
Public Health Preparedness Coordinator (CDC Grant Coordinator)- HHR Program Manager II (New)	\$51,900	100	12	\$51,900
Administrator- Office Director I (New)	\$51,900	100	9	\$38,925
Admin. Asst / Sec- Administrative Services Assistant III (New)	\$35,000	100	15	\$43,750
Fiscal Officer- Accountant III (New)	\$34,542	100	15	43,178
Executive Director- Physician Specialist (New)		100	16	
<b>Subtotal</b>			<b>82</b>	<b>\$367,733</b>
<b>Fringe Benefits</b>				<b>\$114,730</b>
<b>TOTAL</b>				<b>\$482,463</b>

## **BUDGET JUSTIFICATION**

### **A. PERSONNEL**

**\$367,733**

#### NPS Coordinator (HHR Program Manager I)

\$56,647

The NPS Coordinator will work as a core member of the Threat Preparedness Initiative (TPI) Staff. He/she will have the overall leadership role in firming up the NPS plan, including drafting detailed background procedures for the Office of Emergency Medical Services, and working with the Office of Emergency Services (the state emergency response agency) to develop MOAs between the WV Department of Military Affairs and Public Safety, the WV Air National Guard, persons controlling storage and packing/distribution sites, persons controlling transportation resources and assets. Contingency contracts will be developed between food catering services and medical and pharmacy schools and other sources of volunteer workers. When the plan is firmer, this individual will train and drill the plan. Salary is based on a 15 month project period.

#### Public Health Preparedness Coordinator (HHR Program Manager I)

\$51,900

This position will focus on coordinating efforts aimed at assessing and strengthening public health system preparedness and response capacity in the CDC Cooperative Agreement Focus Areas. This position will guide efforts to coordinate and integrate state public health capacity building efforts and assure integration and linkage with local public health assessment and planning efforts. This position is budgeted for 12 months of the project period.

#### Threat Preparedness Administrator (Office Director I)

\$38,925

To allow the Executive Director to adequately address development of Public Health Threat Response Plans with the many partners involved, and to provide stable managerial support of the initiative over time (e.g., as the Executive Director assumes other duties) this position will be added several months into the process. While the Executive Director will continue to provide oversight and be intimately involved, the administrator will manage personnel, administrative issues, and coordination of the overall initiative. This position is budgeted for 9 months of the project period.

#### Administrative Assistant / Secretarial Support (Administrative Services Assistant III)

\$43,750

This critical position provides secretarial and administrative support to the initiative. This position will help organize the membership and activities of various workgroups and committees, support the Governor's Commission, compile draft documents, provide staff clerical support, assistance with acquisition of personnel, etc. This position is budgeted for 15 months of the project period.

#### Fiscal Officer (Accountant III)

\$43,178

This position will provide fiscal management of funds in Focus Area A of this agreement, coordination of fiscal personnel overseeing funds in other focus areas, and, in time, management of HRSA Cooperative Agreement funds. Activities will include purchasing, preparation of federal and state fiscal documents, contract / subrecipient agreement preparation and tracking (including funds to local health departments), etc. This position is budgeted for 15 months of the budget period.

Executive Director (Physician Specialist)

Provides broad oversight of the overall initiative and serves as primary facilitator of the process developing and maintaining State and Regional / Local Public Health Threat Response Plans. Initially provides administrative / managerial support (See full position description in Critical Benchmark #1.) While initially devoting full time to overseeing plan and initiative development, roles of this key senior public health official will broaden in subsequent years to also support other BPH efforts. Grant based funding for this position is expected to decrease over time. This position is budgeted for 16 months.

**B. FRINGE BENEFITS**

**\$114,730**

West Virginia fringe benefits requirements for each employee includes the following based on the given calculations: Social Security (7.65%), Employee Health Insurance (\$400/mo) Worker's Compensation (4.73%), Civil Service Fee (\$215 per FTE), and Pension and Retirement (9.5%).

**C. TRAVEL**

**\$42,724**

In-State Travel (\$8,304)

In-state travel funds will be used to reimburse state-level TPI staff for necessary travel and other allowable costs associated in the performance of training on and drilling of the NPS plan, working with local health agencies and other partners on assessments, developing plans, exercising plans, etc.

Official in-state travel will be reimbursed in accordance with state travel regulations for private car use and associated travel expenses:

Executive Director, PH Preparedness Coordinator, Administrator and NPS coordinator  
Reimbursement for local travel to meetings, training, and plan exercises.

Breakdown

Personal Auto Expense (200 miles per month @ \$.365 per mile)	\$876
Lodging (one night per month @ \$70)	840
Meals (12 days per year @ \$30)	<u>360</u>
<b>Subtotal:</b>	<b>\$2,076</b>
<b>Total (\$2,076 x 4)</b>	<b>\$ 8,304</b>

Out-of-State Travel (\$34,420)

Out-of-State travel funds will be utilized to support travel and other allowable costs for Threat Preparedness Initiative (TPI) staff to attend national meetings or to meet with regional federal officials.

Meeting with regional federal officials

Airfare	\$500
Lodging (\$110 X 3 days)	330



Meals (\$50 X 4 days)	200
Ground Transportation	50
Miscellaneous	<u>50</u>
<b>Subtotal</b>	<b>\$1,130</b>
<b>Total (1130 x 4)</b>	<b>\$4,520</b>

Bioterrorism meeting for TPI staff

Transportation	\$500
Lodging (\$110 x 3 days)	330
Meals (\$50 x 4 days)	200
Ground Transportation	50
Miscellaneous	<u>50</u>
<b>Subtotal</b>	<b>\$1,130</b>
<b>Total (\$1130 x 4)</b>	<b>\$4,520</b>

Anniston, Alabama trip for 15 state and local NPS staff

Transportation	\$1,000
Lodging (\$80 x 5 days)	400
Meals (\$32 x 6 days)	192
Ground Transportation	50
Miscellaneous	<u>50</u>
<b>Subtotal</b>	<b>\$1,692</b>
<b>Total (\$1692 x 15)</b>	<b>\$25,380</b>

**D. EQUIPMENT \$41,000**

Computers (\$21,000)

Computers	4 laptops X \$3,000	\$12,000
	2 desktops X \$2,500	\$5,000
	2 printers X 2,000	\$4,000

Office Equipment (\$20,000)

Current workspaces for this staff are limited to two. Work location will need to be modified and cubicles / workstations for additional staff will be needed. Estimate per workstation is \$5,000.  
5,000 x 4 = 20,000

**E. SUPPLIES \$ 7,814**

Computer supplies (\$3,714)

Funds in the amount of \$ 619 are needed for each of six staff computers, to include basic word processing, spreadsheet, powerpoint, and internet capability.

Desk Supplies (\$4,100)

Desk supplies are calculated at \$50 per month per FTE as staff are added X a 15 month project period for TPI personnel (82 months).

**F. CONTRACTUAL \$2,621,325**

Local Health Department Subrecipient Agreements (\$2,610,000)

*Assessment and Planning:*

Subrecipient agreements to 49 local health jurisdictions covering 55 counties to undertake assessment and planning activities related to the critical capacities identified throughout this Cooperative Agreement.

(\$31,636.36 x 55 counties = \$1,740,000)

*Implementation - Focus Area A*

Subrecipient agreements to 49 local health jurisdictions covering implementation of Focus Area A critical capacities (participation in development of regional/local response plans, NPS preparations, etc.). These funds will be joined with LHD implementation dollars in other focus areas to form a single implementation subrecipient agreement to each local health department to address the critical capacities of this cooperative agreement. Specific activities will be based on plans developed through the Local Health Assessment and Planning Phase funded above. Although provided under a single agreement to each agency, Local Health Departments will track use of funds by focus area. Distribution of funds will be on a per capita basis. (\$870,000)

Consultant Services: Table tops and drills (11,325)

Services by experts in design and implementation of drills and table top scenarios to exercise plans.

1 Tabletop, 1 full plan drill \$11,325

**H. OTHER \$63,294**

Workforce Development (\$15,000)

This provides for 5 local and state leaders in this arena to attend the Southeast Public Health Leadership Institute's special topic year on Bioterrorism. Cost is \$3,000 / scholar x 5 scholars = \$15,000.

Training (\$8,700)

The State NPS staff will conduct four regional tabletop exercises after the plan is firmed up in each of the four regions proposed in the plan. Training to be held at the Day's Inn in Flatwoods, West Virginia (a central location for statewide training). A total of four trainings will be held.

Meeting Rooms \$600/day X 4 days	\$2,400
Hospitality for 120 people \$400/day X 4 days	<u>\$1,600</u>
	\$4,000

At least one midpoint table top exercise of the Threat Response Plan and one full drill will be undertaken during the project period. Rooms for the tabletop and for debriefing / reviewing lessons learned from the drill, hospitality, and supplies for drills and after action reviews are \$4,700.

Meeting Room \$600/day X 2 days	\$1,200
---------------------------------	---------

Hospitality \$750/day X 2 days	\$1,500
Supplies	<u>\$2,000</u>
	\$4,700

Hospitality / Meetings (\$7,500)

Meetings of the Governor's Commission will be held off site to facilitate central access and adequate parking. This Commission is anticipated to meet monthly for the first 4 months and then bimonthly for the remainder of the budget period.

Meeting Room @ \$300/meeting X 10	\$3,000
Hospitality @ \$200/meeting X 10	<u>\$2,000</u>
	\$5,000

Meetings of the State-Local Preparedness Oversight Committee will occasionally be held off site in more central locations for all members. Costs are estimated at the same as the above.

Meeting Room @ \$300/meeting X 5	\$1,500
Hospitality @ \$200/meeting X 5	<u>\$1,000</u>
	\$2,500

Miscellaneous (\$32,094)

Object code (WV use only)	Item	Amount for 6 full-time employees
021	Printing and binding (\$125 X 6 FTE)	\$750
022	Rental expense (6 X \$2,284)	\$13,704
023	Utilities (6 X \$549)	\$3,294
024	Telecommunications (Phone @ \$20/mo X 82 months 6 Conference calls @ \$90/call Wireless @ \$60/month X 52 Pager \$25/month X 52)	\$6,600
251	General Janitorial and Security (\$391 X 6)	\$2,346
030	Rentals - copy machine, fax, etc. (\$450/month X 12)	\$5400
	<u>TOTAL</u>	<u>\$32,094</u>
<b>I. TOTAL DIRECT COST</b>		<b>\$3,258,620</b>
<b>J. INDIRECT COST (14.7% OF DIRECT PERSONNEL EXPENDITURES</b>		<b>\$54,057</b>
<b>K. TOTAL DIRECT AND INDIRECT COSTS</b>		<b>\$3,312,677</b>

**FOCUS AREA B:  
SURVEILLANCE  
AND  
EPIDEMIOLOGIC CAPACITY**

## **FOCUS AREA B: SURVEILLANCE AND EPIDEMIOLOGIC CAPACITY**

Building upon the capacity in the WV Bureau for Public Health (WVBPH) and in WV local health departments (LHDs) covering 55 counties, activities found in this section are proposed for Focus Area B during the budget period.

It is anticipated that the state and local planning process described in this application will occur during the first 6 months of the grant period and will be done collaboratively by the WVBPH and LHDs. The proposed state and local workplan, including milestones and budget, may change as the state and local planning processes are completed. Thus, the proposed workplan, particularly the local plan is subject to change during the planning process.

### **I. PUBLIC HEALTH SURVEILLANCE AND DETECTION CAPACITIES**

**I.A CRITICAL CAPACITY: To rapidly detect a bioterrorist (BT) event through a highly functioning, mandatory reportable disease surveillance system as evidenced by ongoing timely and complete reporting by providers and laboratorians in a jurisdiction, especially of illnesses and conditions possibly resulting from bioterrorism, other infectious disease outbreaks, and their public health threats and emergencies.**

**Description and Adequacy of Current Capacity:** In order to achieve adequacy in this capacity, WVBPH and LHDs need to 1) improve the 24/7 response to ensure rapid, timely, and immediate response, 2) update the state legislation to require mandatory reporting of all CDC Category B and C BT diseases; 3) update the WVBPH's reportable disease manual to include standardized protocols for all BT and other reportable diseases; 4) produce an annual report that includes an assessment of timely and complete reporting which will provide feedback to LHDs and reporting sources; 5) have the ability to train and retain sufficient staff that can support the reportable disease system; 6) commit more personnel time to reportable disease surveillance; 7) improve timely and complete reporting and decrease the rate of under reporting from reporting sources; and 8) assure reporting procedures.

**CRITICAL BENCHMARK #8 (OBJECTIVE 1):** By September, 2002 WVBPH and LHDs will ensure the capability to receive and evaluate urgent disease reports from all parts of WV on a 24 hour per day, 7 day per week basis.

**State Plan:** By September, 2002, the WVBPH will notify and reconfirm their 24/7 emergency response telephone numbers to LHDs. During July-August, 2003, the WVBPH will evaluate the effectiveness of the LHD 24/7 response capability.

**Local Plan:** By September, 2002, all LHDs will renotify and reconfirm their 24/7 emergency telephone numbers to all local reporting sources and first responders. During July-August, 2003, the LHDs will evaluate the effectiveness of the WVBPH 24/7 response capability.

**Evaluation:** WVBPH and all LHDs will provide a 24/7 response coverage by September, 2002.

**Objective 2:** By December, 2002, WVBPH will ensure legal authority to require and receive reports on and investigate any suspect cases, potential terrorist events, or unusual illness clusters.

**State Plan:** By September, 2002, WVBPH will update its legislation to require all CDC. Category B and C agents to be reportable diseases. By November, 2002, WVBPH will notify LHDs of updates.

**Local Plan:** By December, 2002, LHDs shall notify all reporting sources of updates to required reportable diseases.

**Evaluation:** By December, 2002, WV state legislation will be updated to require all CDC Category B and C agents to be reportable diseases and all LHDs and local reporting sources will be notified of updates.

**Objective 3:** By August, 2003, WVBPH and LHDs will routinely assess the timeliness and completeness of the reportable disease surveillance system, especially for naturally occurring illnesses and conditions mimicking those resulting from a terrorist action.

**State Plan:** WVBPH will routinely assess the timeliness and completeness of reportable disease reporting on an ongoing basis, particularly diseases that mimic those due to BT agents. The WVBPH's Division of Surveillance and Disease Control (DSDC) in collaboration with LHDs will complete an annual report by August, 2003 that will include an assessment of the surveillance system. DSDC will send the report to LHDs.

**Local Plan:** LHDs will routinely assess the timeliness and completeness of reportable disease cases and their flow through the jointly defined system on an ongoing basis. By August, 2003, LHDs will send the annual report to reporting sources.

**Evaluation:** WVBPH and LHDs will assess the timeliness and completeness of reportable disease cases by August, 2003 as measured by producing an annual report.

**Objective 4:** By August, 2003, WVBPH and LHDs will ensure the existence of systems to provide ongoing disease surveillance and epidemiologic training for public health, clinical, and other healthcare professionals and to develop subject matter expertise within the public health system.

**State Plan:** By December, 2002 DSDC in collaboration with LHDs will develop protocols for all CDC Category A diseases and update its reportable disease manual, develop training materials for periodic LHD training and will identify key subject matter experts on these protocols within the LHDs. By February, 2003, DSDC will hire the following positions to expand capacity in order to complete objectives in this area (and other critical capacities): 1 Epidemiologist I as an Assistant BT Coordinator in the Bioterrorism group, 1 Epidemiologist I in its zoonotic-vector borne disease group, and 1 Health Education Specialist III (Training Coordinator). These staff will increase WVBPH capacity to provide 1) improved surveillance of reportable diseases, 2) more frequent training of LHDs, and 3) more frequent consultations with local planners in the development of BT preparedness plans. By August, 2003 DSDC will provide training on its reportable disease manual to key LHD and reporting source staff through periodic training meetings (described further under Objective 5).

**Local Plan:** By December, 2002, LHDs will identify key LHD and reporting source staff who will be responsible for training LHD and reporting source staff. By August, 2003 these key staff will participate in periodic DSDC training on the reportable disease manual.

**Evaluation:** By August, 2003, subject matter materials and the revised reportable disease manual and protocols will be developed, and subject matter experts in LHDs will be identified and trained in the manual.

**Objective 5:** By August, 2003, with the input of local public health agencies, DSDC will evaluate and improve the timely and complete reporting of outbreaks of illness and/or key categories of cases of reportable diseases, such as influenza; invasive bacterial diseases, vaccine preventable diseases, vectorborne diseases, and food- and water-borne diseases.

**State Plan:** By August, 2003, DSDC will improve timely and complete reporting through regular training of LHDs and reporting source staff in the reportable disease manual including disease protocols and surveillance procedures, and new molecular epidemiologic and laboratory methods which will be developed in the future by WVBPH's Office of Laboratory Services (OLS) as it increases its laboratory capacity under this grant's workplan (See Focus Area C). DSDC in collaboration with the LHDs will increase the frequency of its training for LHDs and reporting source personnel from quarterly to at least every 2 months after additional staff are hired (See Objective 4).

By August, 2003 DSDC will procure, design, and develop software to enhance the NEDSS system in order to build software capacity to support surveillance and epidemiologic investigations described in Sections I and II of this workplan. By August, 2003, DSDC will develop GIS analysis capacity to improve its surveillance of reportable diseases by evaluating the feasibility of existing software, and purchasing and modifying or developing software to complete this task. New epidemiology staff proposed in Objective 4 and LHDs will contribute to the support of the systems design phase. By February, 2003, DSDC will hire a Systems Programmer Analyst III to design and develop NEDSS enhancements for both Focus Area B and C activities (See Focus Areas C and E) and GIS enhancements, and to design systems for inventory of pharmaceutical distributions, vaccinations, and adverse events connected with the National Pharmaceutical Stockpile (See Focus Area A).

**Local Plan:** Key LHD staff will participate in regular DSDC training on the reportable disease manual procedures and disease protocols (as described in Objective 4). Key LHD staff who will be trained by DSDC will in turn train their staff and reporting source staff in reportable disease surveillance methods and protocols. LHDs will collaborate with DSDC on NEDSS enhancements and GIS software design and development for use at the state and local level.

**Evaluation:** A measure of meeting this objective is completion of milestones by August, 2003.

**Objective 6:** By August, 2003, WVBPH and LHDs will assess capacities associated with monitoring dermatological/rash illness and develop plans to improve this component of the surveillance system.

**State Plan:** By March, 2003 DSDC, in collaboration with LHDs, will develop guidelines to assess the capacity for rash illness surveillance. By August, 2003, DSDC with LHDs will assess the capacity of rash illness surveillance. DSDC will conduct a meeting with LHDs to discuss the assessment and to develop plans for improvement of this capacity.

**Local Plan:** By July, 2003, LHDs will assess capacity for surveillance of rash illness at the local level. By August, 2003 LHDs will meet with DSDC and develop plans to improve this capacity.

**Evaluation:** By August, 2003 plans to improve rash illness surveillance will be completed.

**I.B ENHANCED CAPACITY: To rapidly detect and obtain additional information about bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies through core, cross-cutting health department surveillance systems such as vital record death reporting; medical examiner reports; emergency department, provider, or hospital discharge reporting; or ongoing population-based surveys.**

**Description and Adequacy of Current Capacity:** Although core cross-cutting data systems exist in the state, the capacity has not existed in the WVBPH to evaluate cross-cutting surveillance systems for BT and other infectious disease outbreaks. Only a few states have had the capacity to investigate these systems. Workgroup meetings of state health departments are planned in the future to share information between states (e.g., results of March 5, 2002 Region III State Health Officer meeting, Philadelphia, PA).

**Objective 1:** By August, 2003, in coordination with LHDs, DSDC will assess the effectiveness and feasibility of employing cross-cutting health department surveillance systems as described in this capacity to rapidly identify disease outbreaks particularly those due to BT events.

**State Plan:** DSDC's BT Coordinator will attend 2 meetings/conferences in which the effectiveness and feasibility of using cross-cutting data systems for surveillance of BT events are assessed. DSDC will determine which states have evaluated cross-cutting surveillance systems, obtain reports, and evaluate the evidence for their effectiveness. DSDC's BT Coordinator will visit 3 states to discuss their data.

**Local Plan:** None.

**Evaluation:** DSDC will evaluate the effectiveness and feasibility of cross-cutting surveillance systems by August, 2003 and if feasible, develop plans for the development of cross-cutting surveillance systems in WV.

**I.C. ENHANCED CAPACITY: To rapidly detect and obtain additional information about bioterrorism, other infectious disease outbreaks, and other public health threats or emergencies by accessing potentially relevant pre-existing data sets outside the health department, or through the development of new active or sentinel surveillance activities.**

**Description and Adequacy of Current Capacity:** Although syndromal and surrogate surveillance data systems exist in the state, the capacity has not existed in the WVBPH to evaluate syndromal and surrogate surveillance systems for BT and other infectious disease outbreaks. Only a few states have had the capacity to investigate these systems. Workgroup meetings of state health departments are planned in the future to share information between states (e.g., results of March 5, 2002 Region III State Health Officer meeting, Philadelphia, PA).

**Objective 1:** By August, 2003 evaluate the effectiveness of 1) syndromal surveillance systems to rapidly detect BT-caused illness from disease syndromes that mimic BT diseases (e.g., influenza-like illness (ILI) and botulism) and 2) surrogate indicators of terrorist events using available data bases such as hospital admissions, hospital EDs occupied, ER visits and records, and pharmacy records.

**State Plan:** DSDC's BT Coordinator will attend 2 meetings/conferences in which effectiveness and feasibility of using syndromal and surrogate surveillance systems for surveillance of BT events are discussed. DSDC will determine which states have evaluated syndromal and surrogate surveillance



systems, obtain reports, and evaluate their data. DSDC's BT Coordinator will visit 3 states to discuss their data on syndromal and surrogate surveillance systems. DSDC will evaluate the feasibility of developing these data systems to link and evaluate data in WV for surveillance purposes.

**Local Plan:** None.

**Evaluation:** DSDC will evaluate the effectiveness and feasibility of syndromal and surrogate surveillance systems by August, 2003 and if feasible, develop plans for the development of systems in WV.

## II. PUBLIC HEALTH EPIDEMIOLOGIC INVESTIGATION AND RESPONSE CAPACITIES

**II.A. CRITICAL CAPACITY:** To rapidly and effectively investigate and respond to a potential terrorist event as evidenced by a comprehensive and exercised response plan that addresses surge capacity, delivery of mass prophylaxis and immunizations, and pre-event development of specific epidemiologic investigation and response needs.

**Description and Adequacy of Capacity:** The capacity of having 1 epidemiologist per population of 500,000 and having a full time BT coordinator has been met. Coordination of statewide threat preparedness planning has been underway since 2001. A state-wide advisory group and multidisciplinary workgroup including state and local health, external subject experts in hospital and infection control, infectious disease, physician education, state emergency operations, and law enforcement have been established to complete the state planning process and to offer guidance to LHDs for the local planning process. Workgroups have been formed to prepare plans for a variety of functional areas that include infectious disease surveillance and epidemiologic investigation and hospital preparedness. A schedule for workgroup meetings and a timetable for completion of a threat preparedness plan has been developed. These workgroups need to be convened to complete the state threat preparedness planning and provide guidance to complete local threat preparedness planning.

LHDs serve on every committee and are instrumental in developing the plans and guidance, for both the state and local planning process, through these committee meetings and through their own planning process.

Each county in West Virginia has the services of a least one registered sanitarian. The state Office of Environmental Health Services has five district offices located around the state which are staffed with registered sanitarians and professional engineers. Sanitarians in local health departments are responsible for the food safety and individual water supply programs in their respective counties. They provide routine surveillance and monitoring of retail food establishments and sampling of individual water supplies. Local health department sanitarians also respond to consumer food complaints and reports of foodborne illness outbreaks. However, in many instances, there are not enough local sanitarians to perform the routine work.

Professional engineers in the district offices are responsible for providing routine surveillance and monitoring of each of the community and non-community public water supplies with their respective districts. District sanitarians have the responsibility of regulating the "Grade A" Milk Program (production and distribution) in the state and regulate the food processing plants and small cottage industries that produce food, except for those that are regulated by the state Department of Agriculture.

**CRITICAL BENCHMARK #9 (OBJECTIVE 1):** Assess current epidemiologic capacity and prepare a timeline for achieving the goal of providing at least one epidemiologist for each Metropolitan Statistical Area (MSA) with a population greater than 500,000.

**State Plan:** The objective for this Critical Capacity is complete. The DSDC has 6 epidemiologists in addition to 6 regional epidemiologists (1 per 300,000 population). Only the BT Coordinator and one regional epidemiologist are funded under the base grant.

**Local Plan:** As described above, this objective is complete.

**Evaluation:** This objective is complete.

**Objective 2:** Ensure that a full-time coordinator for BT, other infectious disease outbreaks and other public health threats and emergencies has been designated at the appropriate state and/or local levels.

**State Plan:** The objective for this Critical Capacity is complete as a full-time BT Coordinator was hired on December 1, 2001, and DSDC has coordinators for zoonotic, foodborne, and vaccine preventable diseases.

**Local Plan:** As described above, this objective is complete.

**Evaluation:** This objective is complete.

**Objective 3:** By August, 2003, through the state and local planning process, DSDC will coordinate all epidemiologic response-specific planning in this section with the overall planning conducted in Focus Area A, and with hospital preparedness activities facilitated by the HRSA funded "Hospital Preparedness" efforts.

**State Plan:** By August, 2002, DSDC and LHDs will identify selected LHD representatives, physicians, other health providers, other experts with key BT-related skills (e.g., those who have seen smallpox), and key partners and stakeholders to be employed on a surveillance and epidemiologic investigations (SEI) workgroup to participate in statewide planning. By March 2003, DSDC with LHDs will facilitate the SEI workgroup to develop a state SEI plan that will include definitions of threat, disease protocols, and procedures for notification, case investigation, contact tracing, legal or regulatory provisions, public communication and information dissemination, and guidance to LHDs for local SEI planning. By July 2003, DSDC will hold meetings with LHDs to educate them in the state plan and in guidance for local planning. During the grant period, DSDC will provide consultation to LHDs as necessary in the development of local plans. By August, 2003, WVBPH will revise its state plan accordingly after input from LHDs following development of local plans.

**Local Plan:** By August, 2002, LHDs, other providers, and other experts with key BT-related skills (e.g., those who have seen smallpox) to be employed on working groups to participate in local SEI planning. Selected LHD's representatives will participate on the SEI working group facilitated by DSDC to develop the state plan. By July, 2003, LHDs will participate in meetings with DSDC to receive information on the state plan and guidance for local planning if this is needed after the local planning process has been completed. By August, 2003, LHDs in collaboration with DSDC will develop local plans and will address the guidance in the state plan.

**Evaluation:** To have state and local plans developed by August, 2003.

**Objective 4:** By August, 2003 train state and local public health staff who would respond to a bioterrorism event in their roles and in the specifics of their jurisdiction's plan.

**State Plan:** By December, 2002, DSDC will develop or acquire information and fact sheets about bioterrorism for all CDC Category A diseases, other infectious disease outbreaks, and other relevant technical information for public use in a terrorist event. By January, 2003, DSDC will post its state SEI plan and fact sheets to a secure, Web-based communications system that provides for rapid and accurate reporting and discussion of disease outbreaks and other acute health events that might suggest a BT event. By July, 2003, DSDC will conduct meetings with key health provider organizations in the state (eg, WVAPIC, WV Medical Association, WV Hospital Association, etc) to educate them on the elements of the state plan. These meetings will be coordinated with meetings to educate LHD staff proposed in Objective 3. By August, 2003, DSDC will identify and train state epidemiologic response teams capable of conducting field epidemiologic investigations, rapid needs assessments, exposure assessments, and response activities. By August, 2003, DSDC will offer guidance to LHDs in developing plans for exercises in drilling the procedures in the state and local SEI plans.

**Local Plan:** By August, 2003, LHDs will train their LHD staff and reporting source staff in their jurisdiction on their local SEI plans. By August, 2003, LHDs will identify and train a local epidemiologic response team capable of conducting field epidemiologic investigations, rapid needs assessments, exposure assessments, and response activities. By August, 2003, LHDs will educate key health providers in their jurisdiction on their local plans. By August, 2003, in collaboration with DSDC, LHDs will develop plans for exercises in drilling the procedures of their local plans.

**Evaluation:** Completion of all milestones in the state and local plan by August, 2003.

**Objective 5:** By August, 2003, ensure the performance of risk and vulnerability assessments of food and water to include assessments of production, processing, and/or distribution facilities.

**State Plan:** By August, 2003, the following tasks will be completed: a) assure sanitarians in the state are aware of the FDA guidance for industry: "Food Producers, Processors, Transporters, and Retailers: Food Security Preventive Measures.", b) provide a copy of the above guidance to each food processor in the state, c) respond to all food consumer complaints where the food source is an in-state food processor and refer complaints on out-of-state firms to the appropriate agency, d) respond to consumer water complaints and conduct necessary investigations of public water supply facilities, e) consult with water utility operators about the need for them to review/modify the security plans for their systems, f) coordinate with the state Department of Agriculture on their response plan for the food processing industries for which they have responsibility, i.e., meat processing and Aquiculture, and g) take enforcement and corrective measures as necessary.

**Local Plan:** By August, 2003, the following tasks will be completed: a) distribute a copy of FDA's industry guidance on Food Security Preventive Measures to each retail food establishment, b) respond to all consumer complaints received involving drinking water, and if the water supply is a public system, refer the complaint to the appropriate district water engineer, c) respond to all consumer food complaints and if the complaint involves an in-state food processor, refer the complaint to the appropriate district sanitarian or state central office, d) respond to all reports of foodborne and waterborne illnesses, and e) take enforcement and corrective measures as necessary.

**Evaluation:** Completion of the assessment of vulnerability of food and water by August, 2003.

**II.B. CRITICAL CAPACITY: To rapidly and effectively investigate and respond to a potential terrorist event as evidenced by ongoing effective state and local response to naturally occurring individual cases of urgent public health importance, outbreaks of disease, and emergency public health interventions such as emergency chemoprophylaxis or immunization activities.**

**Description and Adequacy of Capacity:** At this time the state and local health department system can handle small or modest outbreaks but cannot handle large outbreaks. Even the reaction of the worried well to the few letters with anthrax sent to high profile people during October-December, 2001 completely inundated the state and local epidemiologic and laboratory response system. Even before September 11, 2001, DSDC and LHDs established a 24/7 response system in which outbreaks for any reportable disease can be reported around the clock to DSDC epidemiologists, OLS laboratorians, and LHDs. DSDC, OLS, and LHD staff have responded 24/7 for the past year to outbreak related epi-consults. The DSDC BT Coordinator, DSDC infectious disease program coordinators, and the WVBPH State Epidemiologist participate in the interactive CDC Epidemic Information Exchange Program, Epi-X BT forums, and periodic CDC/State Health BT conference calls. WVBPH has participated with LHDs in applying information technology to enhance response capacity. The Health Alert Network has been established where all LHDs are tied to the WV BPH electronically through the internet. Group fax capability from the WVBPH to all LHDs has been established. Electronic data bases to track immunizations are in place.

Although systems are in place that can handle a modest number of outbreaks, much more is needed to prepare for large disease epidemics. Additional state and local staff are needed who are full time or at least primarily employed to conduct infectious disease surveillance and to develop state and local plans and protocols with field procedures for identifying cases, finding contacts, tracking cases who have received prophylaxis or immunizations, and evaluating adverse events in a rapidly developing dynamic outbreak.

**Objective 1:** By August, 2003, achieve an around-the-clock capacity for immediate response to reports of urgent cases, outbreaks, or other public health emergencies, including any events that suggest intentional release of a biologic agent.

**State Plan:** By August, 2003, with LHDs, WVBPH will ensure sufficient staff to respond on a 24/7 basis to urgent cases and disease outbreaks at the state and local level. Hiring of new personnel proposed in this workplan (CC I.A, Objectives 4 and 5) will increase capability to meet this objective. By February, 2003, DSDC will hire a Secretary I to support the additional work and new staff proposed in this work plan. By August, 2003 with LHDs, DSDC will ensure the competence of the state and LHD staff by providing the necessary supplies, equipment, and training in epidemiology, outbreak investigation, interpretation of clinical and laboratory information, communications systems, and management of secure information. By August, 2003 with LHDs, DSDC will educate key policy makers, partners and stakeholders in each jurisdiction regarding the elements of the state SEI plan including the nature of public health investigation, response and control of BT and reportable diseases. (These trainings will be coordinated with those proposed in CC I.A and II.A).

**Local Plan:** By August, 2003 LHDs will hire and train sufficient staff to respond on a 24/7 basis to urgent cases and disease outbreaks. By August, 2003, LHDs with DSDC will ensure the competence of the LHD staff by providing the necessary supplies, equipment, and training in epidemiology, outbreak investigation,

interpretation of clinical and laboratory information, communications systems, and management of secure information. By August, 2003 LHDs with the help of DSDC will educate key policy makers, partners and stakeholders in each jurisdiction regarding the elements of their local plans including the nature of public health investigation, response and control of BT and reportable diseases.

**Evaluation:** To have met the objective of having sufficient, trained staff in place by August, 2003 in order to respond on a 24/7 basis to urgent case outbreaks of reportable diseases.

**Objective 2:** By December, 2002, to assess the adequacy of state and local public health response to outbreaks of disease and other public health emergencies.

**State Plan:** By December, 2002, DSDC will assess the adequacy of the WVBPH to respond to urgent cases, disease outbreaks, and public health emergency interventions. Results of this assessment will be communicated to the LHDs.

**Local Plan:** By December, 2002, LHDs will assess the adequacy of their LHD to respond to urgent cases, disease outbreaks, and public health emergencies in their jurisdiction. Results of this assessment will be communicated to DSDC and the State-Local Preparedness Oversight Committee.

**Evaluation:** To complete the assessment of the adequacy of state and LHD staff to respond to urgent case outbreaks by December, 2002.

**Objective 3:** By July, 2003, to assess and strengthen links with animal surveillance systems and the animal health community.

**State Plan:** By July, 2003, DSDC will assess links with animal surveillance systems and the animal health community. Links to the WV Department of Agriculture will be developed to coordinate assessment of these links. By August, 2003, links with animal surveillance and the animal health community will be strengthened by hiring an epidemiologist I position to increase capacity in zoonotic/vectorborne disease surveillance (See CC I.A, Objective 4). In addition, a zoonosis task force of representatives in the surveillance and animal health communities will be convened to recommend a plan on how to strengthen these links.

**Local Plan:** LHDs will collaborate with DSDC during the grant period and will assist DSDC to assess and strengthen links.

**Evaluation:** Completion of this objective by August, 2003.

## BUDGET FOR FOCUS AREA B

<b>A. KEY PERSONNEL</b>		<b>205,404</b>
<b>B. FRINGE BENEFITS</b>		<b>72,525</b>
010 Civil Service	1,183	
011 Social Security	15,713	
012 Employee Insurance	26,400	
014 Worker's Compensation	9,716	
016 Pension and Retirement	19,513	
<b>C. TRAVEL</b>		<b>24,002</b>
261 In-state	14,242	
262 Out-of-state	9,760	
<b>D. EQUIPMENT</b>		<b>18,500</b>
170 Computers and printers		
<b>E. SUPPLIES</b>		<b>9,460</b>
054 Computer supplies	5,500	
Desk supplies	3,960	
<b>F. CONTRACTUAL</b>		<b>1,800,000</b>
127 LHD Implementation Subrecipient Agreements	1,740,000	
Wetzel-Tyler contract for Regional Epidemiologist	60,000	
<b>H. OTHER</b>		<b>39,322</b>
521 Training	13,000	
Miscellaneous	26,322	
<b>I. TOTAL DIRECT COST:</b>		<b>2,169,213</b>
<b>J. TOTAL INDIRECT COSTS (14.7% of direct personnel expenditures)</b>		<b>30,194</b>
<b>K. TOTAL</b>		<b>2,199,407</b>

## BUDGET

### KEY PERSONNEL

Name and Position Title	Annual Salary Rate	% Time	No. Months Budget	Total Requested
Epidemiologist II - DSDC Bioterrorism Coordinator		100	12	
Epidemiologist I - DSDC Assistant BT Coordinator-(New)	36,000	100	9	27,000
Epidemiologist I - DSDC zoonosis group- (New)	36,000	100	9	27,000
Systems Programmer Analyst III -DSDC (New)	60,000	50	12	30,000
Health Education Specialist III - DSDC Training Coordinator (New)	33,000	100	9	24,750
Secretary I - DSDC (New)	23,000	100	15	28,750
<b>Subtotal</b>				<b>205,404</b>
<b>Fringe Benefits</b>				<b>72,525</b>
<b>TOTAL</b>				<b>\$277,929</b>



## BUDGET JUSTIFICATION

### A. PERSONNEL

**\$205,404**

#### DSDC BT Coordinator

This existing position has overall responsibility for coordinating all aspects of the bioterrorism epidemiology project within the WVBPH and coordinating with other participating state agencies. This position was hired as part of the base grant workplan and will continue to be funded under this supplemental workplan. Duties include training and education of local health departments and reporting sources, and development and facilitation of state SEI BT preparedness plans. This position will also be part of the first epidemiologic response teams when a BT attack is suspected.

#### Assistant BT Coordinator (New - Epidemiologist I)

\$27,000

The Epidemiologist I in the DSDC BT group will serve as the Assistant BT Coordinator and have responsibility for assisting in development of state and local plans for SEI of BT events, and will be a member of a first response team if a BT attack is suspected. This position is needed to meet the proposal for planning and increased training of LHDs and reporting source staff. This position will be hired when state and local planning and assessments in Focus Area A are completed after the first 6 months. Duties will include 1) assisting in updating the reportable disease manual including the development of protocols for BT diseases and procedures for epidemiologic investigations, 2) preparing supporting material for the state SEI plan for BT threats, 3) preparing training materials and assist in training of the state response team, LHD and reporting source staff.

#### Epidemiologist for zoonosis group (New - Epidemiologist I)

\$27,000

The Epidemiologist I in the DSDC zoonotic disease group will provide support to surveillance and investigation of vectorborne diseases including assistance for the state public health veterinarian with the rabies vaccination program. This position is needed to increase capacity to improve the reportable disease surveillance system and BT disease surveillance for vector-borne diseases in humans as well as animal surveillance. This position will be hired when state and local planning and assessments in Focus Area A are completed after first 6 months. Duties will include surveillance of vectorborne disease including case-report reviews from LHDs and reporting sources, development of training and assisting in training for LHDs and reporting sources in surveillance of vectorborne disease.

#### Systems Programmer Analyst III (New)

\$30,000

The Systems Programmer Analyst III will provide 50% of time in support to database development of data base systems for epidemiologic investigation of BT events and GIS software development (Focus Area B activities) and National Pharmaceutical Stockpile distribution accounting systems (Focus Area A activities). The position will also provide 50% of time in support of development of laboratory data base systems to enhance NEDSS (Focus Area C and D activities) . This position will be hired when state and local planning and assessments in Focus Area A are completed after the first 6 months. Duties will consist of 1) liaison to the NEDSS team for analysis of NEDSS data, 2) development of enhancements to NEDSS and GIS software to support epidemiologic investigations, 3) development of systems for support of the

National Pharmaceutical Stockpile plan including pharmaceutical distribution, patient vaccinations, and patient adverse reaction tracking systems, 4) statistical analysis of reportable disease surveillance data particularly those that mimic BT diseases, and 5) development of cross-cutting, syndromal, and surrogate surveillance data base systems.

DSDC Training Coordinator - (New - Health Education Specialist III)    \$24,750

The Health Education Specialist III will serve as the DSDC Training Coordinator. This position will be hired when state and local planning and assessments in Focus Area A are completed after the first 6 months. This individual will arrange approximately 25 training and educational meetings for 55 LHDs, numerous reporting source personnel, and key partners and stakeholders proposed by this workplan. Duties will include scheduling meetings, making meeting arrangements, material preparation, and meeting facilitation.

Secretary - (New - Secretary I)    \$28,750

The Secretary I position will be responsible to provide administrative assistance to the BT and DSDC infectious disease staff in the area of surveillance of BT and reportable diseases. This position will be hired immediately to meet surge capacity for planning under this proposed workplan. Duties will require word processing support for preparation of training materials, state planning documents, and routine correspondence connected to the BT workplan; travel and purchasing support; office supply procurement; and other administrative secretarial support activities.

**B. FRINGE BENEFITS**    **\$72,525**

West Virginia fringe benefits requirements for 5.5 FTE and \$205,404 budgeted for personnel salaries include the following based on the given calculations: Social Security (7.65%), Personnel fees (\$215 per FTE), Public Employee Health Insurance (\$4800 per FTE), Workers Compensation (4.73%), and Pension and Retirement (9.5%).

**C. TRAVEL**    **\$24,002**

In-state travel    (\$14,242)

Critical Capacity I.A:

1. Eight monthly meetings at Flatwoods, WV for training in communicable disease manual

In-state travel is necessary for the State Epidemiologist, DSDC infectious disease team of eight people (DSDC director, BT Coordinator, Zoonotic Disease Coordinator, Foodborne Disease Coordinator, Vaccine-Preventable Disease Coordinator, Training Coordinator, and administrative assistant to participate in training of the reportable disease manual. Eight training meetings at Flatwoods, WV is proposed for LHDs and reporting source personnel. Typically over 100 individuals attend these sessions. These individuals are the core epidemiologic response team for BT events and will complete the work plan for proposed trainings under this grant.

8 trips x 3 people x 134 mi x \$.365/mi = \$1,174  
 2 days per diem x 8 trips x 3 people x \$30/day = 1,440  
 1 night lodging x 8 trips x 3 people x \$70/day = 2,800

**Total** **\$5,414**

2. Two meetings with LHDs at Flatwood, WV to discuss enhanced NEDSS system design

Two meetings are budgeted at Flatwoods, WV for planning of enhancements to NEDSS and GIS system software that will be employed at both the state and local level. These software will be real-time electronic surveillance support systems that will be online at the DSDC, OLS, and LHDs. The purpose of these meeting will be to discuss design specifications for these systems. Five key WVBP staff will attend including the State Epidemiologist, DSDC's BT coordinator or assistant BT Coordinator (Epidemiologist I), and Systems Programmer Analyst, and the NEDSS project manager and data base coordinator.

2 trips x 2 people x 150 mi x \$.365/mi = \$219  
 1 day per diem x 2 trips x 5 people x \$30/day = 300

**Total** **\$519**

Critical Capacity II.A

1. One meeting with LHDs at Flatwoods, WV to discuss state SEI plan

One meeting at Flatwoods, WV of representatives of all LHDs will be held to discuss the state SEI plan. LHD representatives who serve on the workgroup to develop the plan will be in attendance and collaborate in the presentation of the plan to representatives of the 55 LHDs. Five key DSDC staff will attend including the State Epidemiologist, the Director DSDC, the DSDC BT Coordinator, Assistant BT coordinator, and Foodborne Disease Coordinator. This staff will serve as the core epidemiologic response team for BT events. These individuals are the core epidemiologic response team for BT events and will complete the workplan for proposed trainings under this grant.

1 trip x 3 people x 150 mi x \$.365/mi = \$164  
 1 day per diem x 1 trips x 5 people x \$30/day = 150

**Total** **\$314**

2. Six meetings regionally to discuss local planning with LHDs, key organizations, and partners/policy makers

One meeting will be held in each of 6 regions of WV with LHDs, key partners, policy makers, and health providers to discuss the state SEI plan and guidance for local SEI planning. Five key DSDC staff will attend including the State epidemiologist, the Director of DSDC, and DSDC's BT

Coordinator, the assistant BT coordinator (Epidemiologist I), and the foodborne disease coordinator. These individuals are the core epidemiologic response team for BT events and will complete the workplan for proposed trainings under this grant.

6 trips x 2 people x 250 mi x \$.365/mi =	\$1,095
3 day per diem x 6 trips x 5 people x \$30/day =	2,700
2 night lodging x 6 trips x 5 people x \$70/day =	<u>4,200</u>
<b>Total</b>	<b>\$7,995</b>

Out-of -State Travel (\$ 9,760)

Critical Capacities I.A and II.A&B

One meeting for BT conference and training for the BT and Assistant BT Coordinators that are given by CDC or other organizations.

2 people x \$1000 airfare=	\$2000
2 people x 3 days x per diem x \$50=	300
2 people x 2 nights lodging x \$110=	440
2 people x \$50 ground transportation=	100
2 people x \$50 miscellaneous=	<u>100</u>
<b>Total</b>	<b>\$2,940</b>

Enhanced Capacity I.B and I.C:

Two meetings are planned for DSDC's BT coordinator and Assistant Coordinator (Epidemiologist I) to attend CDC regional BT meetings and visit 3 states to discuss data on the feasibility of cross-cutting, syndromal, and surrogate surveillance systems for BT diseases. Presently, California, Maryland, and New York City have had projects to evaluate these systems.

1. One regional meeting /conference on cross-cutting, syndromal, and surrogate surveillance systems.

2 people x \$1000.00 airfare =	\$2,000
2 people x 3 days per diem x \$50/day =	300
2 people x 2 nights x \$110/night =	440
2 people x \$50 ground transportation =	100
2 people x \$50 miscellaneous=	<u>100</u>

**Total** **\$2,940**

2. Visits to 2 states to discuss their results assessing cross-cutting, syndromal, and surrogate surveillance systems.

2 trips x 2 people x \$500.00 airfare =	\$2,000
2 trips x 2 people x 3 days per diem x \$50/day =	600
2 trips x 2 people x 2 nights x \$110/night =	880

2 trips x 2 people x \$50 ground transportation =	200
2 trips x 2 people x \$50 miscellaneous=	200

**Total** **\$3,880**

**D. EQUIPMENT** **\$18,500**

Computers (\$18,500)

These funds will be used to purchase 5 computers, one for each new position (5 new personnel x \$2,500 per person) and 3 printers at \$2,000 each.

**E. SUPPLIES** **\$9,460**

Computer Supplies (\$5,500)

Funds in the amount of \$1,000 apiece are needed for 5.5 FTE/staff computers to include basic wordprocessing, spreadsheet, power point, and internet capability.

Desk Supplies (\$3,960)

Desk supplies are calculated at \$60 per month per FTE=66 person months for the 5.5 FTE over the budget period.

**F. CONTRACTUAL** **\$1,800,000**

REGIONAL EPIDEMIOLOGIST AGREEMENT (\$60,000)

Contractual funds are also requested in the amount of \$60,000 for the continuation of the contract with Wetzel-Tyler Health Department to provide for a regional epidemiologist in their region (fulfillment of benchmark #9 to provide 1 epidemiologist per 500,000 population).

Contractor: Wetzel-Tyler Health Department

Performance Period: August 30, 2002-August 31, 2003

(extension of current contract)

Scope of Work: Enhance disease reporting through liaison with providers, and developing regional expertise in bioterrorism. Coordinate meetings and training with local resources and DSDC's BT coordinator. They will have multi-jurisdictional responsibility.

Line item Budget:

Salary and benefits	\$40,000
Travel within region	7,250
Newsletter/data publication and distribution	1,000
Provider Education and Outreach	2,000
Educational Materials and Training	9,750

LHD Implementation Subrecipient Agreements (\$1,740,000 )

Funds for subrecipient agreements to 49 local health jurisdictions covering 55 counties are requested for LHD implementation of plans developed through the local health assessment and planning phase. These funds will be used to address Focus Area B critical capacities at the local level. These funds will be joined with LHD implementation dollars in other focus areas to form a single subrecipient agreement to each LHD to address the critical capacities of this cooperative agreement. Although provided under a single agreement, LHDs will track use of funds by focus area. Distribution of funds will be on a per capita basis.

**H. OTHER**

**\$39,322**

Training (\$13,000)

The State DSDC will conduct 13 monthly training meetings after the state and local planning stage in Focus Area A is completed. Training will be held at the Day's Inn in Flatwoods, West Virginia (a central location for statewide training).

Meeting Room \$600/day x 13=	\$7,800
Hospitality \$400/day x 13=	<u>5,200</u>
<b>Total</b>	<b>\$13,000</b>

Miscellaneous (\$26,322)

Object code (WV use only)	Item	Amount for 5.5 full-time employees
021	Printing and binding (5.5 FTE x \$125)	\$688
022	Rental expense (5.5 x \$2284)	\$12,562
023	Utilities - (5.5 x \$549)	\$3,020
024	Telecommunications (Phone @ \$20/mo/66 months x Conference calls @ 6 x \$90/call, wireless phone @ \$60/month x 51 months, pager @ \$25/month x 51 months)	\$6,195
025	General Janitorial and Security Services (391 x 5.5)	\$2,151
053	Postage (\$50/month x 12 )	\$600
030	Rentals - copy machine, fax, etc. (\$187 x 5.5)	\$1,029

Object code (WV use only)	Item	Amount for 5.5 full-time employees
038	Routine maintenance contracts (\$14 x 5.5)	\$77
<b>I. TOTAL DIRECT COST</b>		<b>\$2,169,213</b>
<b>J. TOTAL INDIRECT COST (14.7% OF DIRECT PERSONNEL EXPENDITURES)</b>		<b>\$30,194</b>
<b>K. TOTAL DIRECT AND INDIRECT COSTS</b>		<b>\$2,199,407</b>

## PROGRESS REPORT FOR THE PERIOD AUGUST 30, 2001-AUGUST 31, 2002

Presently, the state has the infrastructure in place to address urgent reportable disease outbreaks. However, the supplemental funding will allow capacity to handle large outbreaks. The following report describes the project under the base BT grant for the period August 30, 2001-August 31, 2003.

1. **Surveillance coordination:**

Harlan Amandus, Ph.D, was hired as the full time BT-Coordinator in DSDC on December 1, 2001. This fulfills benchmark number 8 of the supplemental funding grant and the base grant milestone. Dr. Amandus has been given full responsibility for coordination of the surveillance and epidemiologic response to BT events and BT threat preparedness planning.

2. **Field Investigation:**

Emergency Response Plan. Dr. Amandus has begun coordinating state planning activities for surveillance and epidemiological investigations. He has developed ties with other state BT coordinators and reviewed other state BT and NPS plans. He has attended CDC smallpox training, attended CDC/state conference calls, and attended two regional meetings on BT issues. He has put together and will facilitate a Surveillance and Epidemiologic Investigations Workgroup (SEIW) to develop a state plan for surveillance and epidemiological investigations. The SEIW is scheduled to meet on April 12, 2002 to begin working on the state SEI plan. Dr. Amandus has already prepared a draft plan for the SEIW to begin working.

Epidemiological Investigation Team Capacity. A sixth regional epidemiologist was hired to provide epidemiologic response coverage to every 300,00 persons in the state. This fulfills benchmark #9 of the supplemental funding grant announcement as well as the base grant objective. These individuals together with increased capacity from the supplemental funds should allow one full time employee per region who will work solely on BT and reportable disease surveillance. When these persons are hired and trained in the state and local surveillance and epidemiological investigation plans developed, the state's capacity to handle large disease outbreaks due to BT events will be greatly increased.

3. **Surveillance Authority:** Legal authority for the powers and duties of the Commissioner for Public Health, or his lawful designee, resides in state code and legislative rules pertaining to reportable diseases. The list of reportable diseases has been recently updated in 2001 to include all CDC category A BT diseases. While all Category B and C diseases are covered indirectly, as all outbreaks of potential public health significance are to be reported, in the future all Category B and C diseases will be considered for inclusion. This issue will be considered by the SEIW by September, 2002.

4. **Public Health and Surveillance and Epidemiologic Response plan:** A directory of emergency resources and contacts was developed. During 2001, state and LHD contacts and telephone numbers for 24/7 emergencies were developed and distributed to all LHDs.

Preparations for a Multiple Agency Surveillance and Epidemiologic Response Plan were initiated. Progress on the state plan during the grant period is as follows: 1) procedures for definitions of threat were developed; 2) fact sheets for the public and physicians were prepared for anthrax, plague, tularemia and smallpox; and 3) recording forms were developed for anthrax exposure,



anthrax case outbreaks reporting forms, laboratory submittals of exposure samples, telephone intakes and epi-investigations. Procedures were developed for transmittal of samples to the lab, and state and LHD roles in BT events were developed. During October-December, 2001, over 600 exposure samples and epi-consults were triaged by the OLS and DSDC. Approximately 400 individuals who were employed downstream from the Brentwood, Maryland facility, and believed to have been exposed by the Senator Daschle letter, were triaged in Jefferson County, WV and given prophylaxis for anthrax exposure.

As described above the SEIW has been formed and consists of representation of LHDs, infectious disease physicians, physicians with small pox expertise, infection control, physician education, local, regional, and state epidemiologists, and law enforcement (FBI and state police). Meetings to begin the development of state plans are scheduled and draft material is being developed.

5. **Emergency communications:** This benchmark has been completed.

6. **Collaboration:**

During this grant period, five presentations were conducted in areas throughout the state on BT facts and protocols to medical schools, legislators, and public health. When CDC conducted special BT teleconferences following 9/11, the WV Bureau for Public Health:

1. Disseminated broadcast notices to every local health department.
2. Identified a "Diamond Building" site for most of the broadcasts.
3. Videotaped most broadcasts.
4. Duplicated tapes and distributed to every local health department.
5. Made tapes available for state personnel and other interested persons.

7. **Integration of BT Surveillance and Epidemiological Response Efforts and Epidemiological Infrastructure:** Enhancement of collaboration between public health and partners on infectious disease surveillance and epidemiology relative to BT has progressed through global statewide threat preparedness planning. The following groups have been formed (or are forming) to facilitate statewide planning and enhance collaboration between partners:

**Governor's Commission on Public Health Threat Preparedness.** This commission is made up of local health, the WV Department of Military Affairs and Public Safety/Office of Emergency Services, State Police, Office of Rural Health, Community Health Centers, Academic Medical Community, Emergency Medical Services, Fire Marshall's Office, WV Hospital Association, American Red Cross, Behavioral Health and representatives from the DHHR Secretary's and Governor's offices. This commission will approve of the final state threat preparedness plan including the surveillance and epidemiological investigations component.

**Threat Preparedness Work Group.** This group is made up of WVBPH and DHHR staff who work in key areas during BT events (OLS, DSDC, EMS, nursing administration, environmental health, communication, IT, education and training, behavioral health, WVBPH Commissioner's Office,

etc.), LHDs, and poison control. This group facilitates the planning and development of the overall state threat preparedness plan including the surveillance and epidemiological component.

**SEIW.** As described above, this workgroup has specifically been assigned to develop the surveillance and epidemiologic investigations plan and has brought key partners in the state together.

**APPENDIX: B-1**  
**SUMMARY OF OBJECTIVES, MILESTONES AND COMPLETION DATES FOR FOCUS AREA B**

**Instructions:** The following tool is used to self-report progress semi-annually. This same tool will be used by CDC to review performance and provide necessary feedback to enable the project to take appropriate action. The state and local workplan activities and completion dates are subject to change pending the results of the state and local planning process to be completed within the first six months of the grant period as specified in Focus Area A.

**Goals for Critical Capacity I.A, Enhanced Capacities I.B and I.C, and Critical Capacities II.B and II.C**

<b>I.A</b>	<b>To rapidly detect a BT event through a highly functioning, timely and complete reportable disease system</b>
<b>I.B</b>	<b>To rapidly detect and obtain information on BT and other disease outbreaks and emergencies through cross-cutting surveillance systems</b>
<b>I.C</b>	<b>To rapidly detect and obtain information on BT and other disease outbreaks and emergencies through syndromal and surrogate surveillance systems</b>
<b>II.A</b>	<b>To rapidly and effectively investigate and respond to a potential terrorist event by a comprehensive and exercised response plan.</b>
<b>II.B</b>	<b>To rapidly and effectively investigate and respond to a potential terrorist event by effective state and local response to naturally occurring individual cases of urgent public health importance.</b>

Year 4: Critical Capacity I.A Goal	To rapidly detect a bioterrorist (BT) event through a highly functioning, mandatory reportable disease surveillance system as evidenced by ongoing timely and complete reporting by providers and laboratorians in a jurisdiction, especially of illnesses and conditions possibly resulting from bioterrorism, other infectious disease outbreaks, and their public health threats and emergencies			
Critical Capacity Objective	Critical Bench- mark	Activity	Completion Date(s) in application	Comments
1. WVBPH and LHDs will ensure the capability to receive and evaluate urgent disease reports from all parts of our state on a 24 hour per day, 7 day per week basis	#8	State: -Notify LHDs of emergency response numbers. -Evaluate effectiveness of 24/7 coverage.  Local: -Notify reporting sources and first responders of emergency numbers.	September, 2002  August, 2003  September, 2002	
2. WVBPH will ensure legal authority to require and receive reports on and investigate any suspect cases, potential terrorist events, or unusual illness clusters.		State: -Update legislation with Category B and C BT diseases. -Notify LHDs of legislative updates.  Local: -Notify reporting sources of legislative updates.	September, 2002  November, 2002  December, 2002	

<p>3. WVBPH and LHDs will routinely assess the timeliness and completeness of the reportable disease surveillance system, especially for naturally occurring illnesses and conditions mimicking those resulting from a terrorist action.</p>		<p>State:          -Routinely assess timeliness and completeness of reportable disease system.          -Complete annual report that includes assessment.</p> <p>Local:          -Routinely assess timeliness and completeness of reportable disease system in jurisdiction.          -Send DSDC's annual report to reporting sources.</p>	<p>August, 2003,          August, 2003          August, 2003          August, 2003</p>	
<p>4. WVBPH and LHDs will ensure the existence of systems to provide ongoing disease surveillance and epidemiology training for public health, clinical, and other healthcare professionals and to develop subject matter expertise within the public health system.</p>		<p>State:          -Develop protocols for all Category A BT diseases, update reportable disease manual, develop training materials, and identify key LHD staff on these protocols.          -Hire 2 epidemiologists in DSDC's BT and zoonosis groups.          -Provide training on reportable disease manual to key LHD and reporting staff.</p> <p>Local:          -Identify key LHD and reporting staff responsible to train LHD and reporting source staff.          -Key staff participate in DSDC training.</p>	<p>December, 2002          February, 2003          August, 2003          December, 2002          August, 2003</p>	

<p>5. With the input of local public health agencies, DSDC will evaluate and improve the timely and complete reporting of outbreaks of illness and/or key categories of cases of reportable diseases, such as influenza; invasive bacterial diseases, vaccine preventable diseases, vectorborne diseases, and food- and water-borne diseases.</p>		<p>State:          -Increase regular trainings of LHDs and reporting sources from quarterly to every 2 months after new epidemiologists and training coordinator are hired.          -Hire systems programmer analyst          -Develop software to enhance NEDSS          -Develop software to enhance GIS          -Design software for NPS support</p> <p>Local:          -Key staff will participate in regular DSDC trainings.          -Key staff will train local staff.          -LHDs will collaborate in systems design of enhancements to NEDSS and GIS.</p>	<p>August, 2003</p> <p>February, 2003          August, 2003          August, 2003          August, 2003</p> <p>August, 2003</p> <p>August, 2003          August, 2003</p>	
<p>6. WVBPH and LHDs will assess capacities associated with monitoring dermatological/rash illness and develop plans to improve this component of the surveillance system.</p>		<p>State:          -Develop guidelines to assess capacity for rash illness surveillance.          -Assess rash illness surveillance capacity and with LHDs develop plans to improve capacity.</p> <p>Local:          -Assess capacity for rash illness surveillance and with DSDC develop plans to improve rash illness surveillance capacity.</p>	<p>March, 2003</p> <p>August, 2003</p> <p>August, 2003</p>	

Year 4: Critical Capacity I.B Goal	To rapidly detect and obtain additional information about bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies through core, cross-cutting health department surveillance systems such as vital record death reporting; medical examiner reports; emergency department, provider, or hospital discharge reporting; or ongoing population-based surveys.			
Critical Capacity Objective	Critical Benchmark	Activity	Completion Date(s) in application	Comments
1. In coordination with LHDs, DSDC will assess the effectiveness and feasibility of employing cross-cutting health department surveillance systems as described in this capacity to rapidly identify disease outbreaks particularly those due to BT events.		<p>State: -Attend regional meetings, to obtain information from states that have investigated these systems, contact states and obtain reports and input, visit 3 states and review their results, and determine feasibility and effectiveness of systems.</p> <p>Local: none</p>	August, 2003	

Year 4: Critical Capacity I.C Goal	To rapidly and effectively investigate and respond to a potential terrorist event as evidenced by ongoing effective state and local response to naturally occurring individual cases of urgent public health importance, outbreaks of disease, and emergency public health interventions such as emergency chemoprophylaxis or immunization activities.			
Critical Capacity Objective	Critical Bench- mark	Activity	Completion Date(s) in application	Comments
1. Evaluate the effectiveness of 1) syndromal surveillance systems to rapidly detect BT-caused illness from disease syndromes that mimic BT diseases [e.g., influenza-like illness (ILI) and botulism] and 2) surrogate indicators of terrorist events using available data bases such as hospital admissions, hospital EDs occupied, ER visits and records, and pharmacy records.		State: -Attend regional meetings, to obtain information from states that have investigated these systems, contact states and obtain reports and input, visit 3 states that have investigated the systems and review their results, and determine feasibility and effectiveness of systems.  Local: none	August, 2003	



Year 4: Critical Capacity II.A Goal	To rapidly and effectively investigate and respond to a potential terrorist event as evidenced by a comprehensive and exercised response plan that addresses surge capacity, delivery of mass prophylaxis and immunizations, and pre-event development of specific epidemiologic investigation and response needs.			
Critical Capacity Objective	Critical Bench- mark	Activity	Completion Date(s) in application	Comments
1. Assess current epidemiologic capacity and prepare a timeline for achieving the goal of providing at least one epidemiologist for each Metropolitan Statistical Area (MSA) with a population greater than 500,000.	#9	State: Objective is completed with the continuing employment of 6 regional epidemiologists (1 funded out of this BT grant).	Completed	
2. Ensure that a full-time coordinator for BT, other infectious disease outbreaks and other public health threats and emergencies has been designated at the appropriate state and/or local levels.		State: Objective is completed with hiring of the BT Coordinator on December 1, 2001.	Completed.	

<p>3. With local public health agencies, DSDC will coordinate all epidemiologic response-specific planning in this section with their jurisdiction's overall planning conducted in Focus Area A, and with hospital preparedness activities facilitated by the Health Resources Services Administration grant.</p>		<p>State:          -Assemble surveillance and epidemiologic investigations workgroup (SEIW) to develop state SEI plan.          -Facilitate SEIW to develop state plan          -Educate LHDs in state plan          -Provide consultation to LHDs on guidance for local plans.          -Revise state plan with input from local plans.</p> <p>Local:          -Assemble work group to develop local plan.          -Selected LHDs will participate on SEIW to develop state plan.          -Participate in meetings on state plan.          -Develop local plan.</p>	<p>August, 2002</p> <p>March, 2003          July, 2003          August, 2003,          August, 2003          August, 2002</p> <p>August, 2002          August, 2002</p> <p>July, 2003          August, 2003</p>	
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<p>4. Train state and local public health staff who would respond to a bioterrorism event in their roles and in the specifics of their jurisdiction's plan.</p>		<p>State:          -Develop fact sheets for Category A BT diseases.          -Disseminate fact sheets to web site.          -Educate health provider organizations in state plan.          -Train epidemiologic response teams          -Offer guidance to LHDs in developing plans for exercises to drill state and local plans.</p> <p>Local:          -Train LHD and reporting source staff on local SEI plans.          -Train local epidemiologic response teams          -Educate health providers on local plan.          -With DSDC, develop plans for exercises to drill local plan.</p>	<p>December, 2002           January, 2003          July, 2003           August, 2003          August, 2003           August, 2003           August, 2003          August, 2003          August, 2003</p>	
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		<p>received involving drinking water, and if the water supply is a public system, refer the complaint to the appropriate district water engineer.</p> <ul style="list-style-type: none"><li>-Respond to all consumer food complaints and if the complaint involves an in-state food processor, refer the complaint to the appropriate district sanitarian or state central office.</li><li>-Respond to all reports of foodborne and waterborne illnesses.</li><li>-Take enforcement and corrective measures as necessary.</li></ul>		
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Year 4: Critical Capacity II.B Goal	To rapidly and effectively investigate and respond to a potential terrorist event as evidenced by ongoing effective state and local response to naturally occurring individual cases of urgent public health importance, outbreaks of disease, and emergency public health interventions such as emergency chemoprophylaxis or immunization activities			
Critical Capacity Objective	Critical Benchmark	Activity	Completion Date(s) in application	Comments
1. To achieve an around-the-clock capacity for immediate response to reports of urgent cases, outbreaks, or other public health emergencies, including any events that suggest intentional release of a biologic agent.		<p>State:</p> <ul style="list-style-type: none"> <li>-Ensure sufficient staff to respond on a 24/7 basis to urgent cases and disease outbreaks.</li> <li>-Hire a Secretary I</li> <li>-Educate key policy makers, partners, and stakeholders in state SEI plan.</li> </ul> <p>Local:</p> <ul style="list-style-type: none"> <li>-Ensure sufficient staff to respond on a 24/7 basis to urgent cases and disease outbreaks.</li> <li>-With DSDC will educate key policy makers, partners, and stakeholders in local plan.</li> </ul>	<p>August, 2003</p> <p>February, 2003 August, 2003</p> <p>August, 2003</p> <p>August, 2003</p>	
2. To assess the adequacy of state and local public health response to outbreaks of disease and other public health emergencies		<p>State:</p> <ul style="list-style-type: none"> <li>-Assess adequacy of the WVBPH to respond to urgent cases and disease outbreaks.</li> </ul> <p>Local:</p> <ul style="list-style-type: none"> <li>-Assess adequacy of the LHD to respond to urgent cases and disease outbreaks.</li> </ul>	<p>December, 2002</p> <p>December, 2002</p>	

<p>3. To assess and strengthen links with animal surveillance systems and the animal health community.</p>		<p>State:          -Assess links with animal surveillance systems and animal health community          -Zoonosis task force will recommend plans on how to strengthen these links</p> <p>Local:          -LHDs will collaborate and assist DSDC in this assessment.</p>	<p>July, 2003          August, 2003          August, 2003</p>	
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**FOCUS AREA C:  
LABORATORY CAPACITY  
FOR  
BIOLOGIC AGENTS**



## Focus Area C - Laboratory Capacity Biological Agents

### A. LABORATORY SERVICES

**CRITICAL CAPACITY:** To develop and implement a jurisdiction-wide program to provide rapid and effective laboratory services in support of the response to bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies.

**Description and Adequacy of Current Capacity:** A Microbiologist II was hired to serve as the Laboratory Bioterrorism Coordinator and began employment on October 1, 2001. She was registered as a user on the Laboratory Response Network (LRN) Secure website and began training on the Level A and Level B protocols for the Category A agents.

From October 11, 2001 through March 6, 2002 the Threat Preparedness and Response Unit of the West Virginia Office of Laboratory Services processed 391 specimens to rule out the presence of Bacillus anthracis.

A Bioterrorism Laboratory Submission form and Specimen Submission Guidelines were distributed to local health department and law enforcement agencies.

Laboratories in West Virginia considered to be anti-bioterrorism "Level A Capable" were identified based upon CLIA records and participation in comprehensive proficiency testing programs.

The Office of Laboratory Services and the National Laboratory Training Network co-sponsored a workshop on "Laboratory Preparedness for Bioterrorist Activities" on November 30, 2001.

The Office of Laboratory Services is the only laboratory in the state of West Virginia with the capability of performing Level B tests and processing environmental samples.

There is inadequate personnel to handle surge capacity. The Threat Preparedness and Response Unit at OLS consists of only two people, the Laboratory Director and the Laboratory Bioterrorism Coordinator. The Director has been trained at the CDC in all Level A and B protocols for all Category A agents while the newly hired Bioterrorism Coordinator has been trained only in anthrax protocols.

There is no full-time clerical help for the Threat Preparedness and Response Unit to maintain the database, transcribe reports and generate correspondence.

There is no capacity to perform real time polymerase chain reaction (PCR) or other rapid assays.

There is no uniform method for specimen transport to OLS for testing.

No assessment has yet been performed to determine the capacity of Level A laboratories within the state.

**CRITICAL BENCHMARK #10 (Objective 1): Prepare a timeline for the development of a plan to improve working relationships and communication between Level A (clinical) laboratories and Level B/C Laboratory Response Network laboratories to ensure that Level A laboratories maintain core capacity to (a) perform rule out testing on critical BT agents, (b) safely package and handle specimens and, (c) refer to higher level laboratories for further testing.**

**State Plan:** *(see activities below and Critical Benchmark #10 attached)*

- a. Establish a laboratory work group including representation from (1) OLS, (2) BPH, (3) LHD, (4) Level A clinical laboratories, (5) Level A commercial laboratories, (6) medical schools, (7) medical technology departments, (8) infectious disease specialists, (9) infection control practitioners, (10) information technologists.
- b. Identify all Level A laboratories in the state of West Virginia.
- c. Identify benchmarks to assess the capabilities of Level A laboratories with regard to testing practices, personnel adequacy, safety practices, communication capabilities hardware, software and internet connectivity.
- d. Survey Level A laboratories within the state to assess benchmarks identified in c.
- e. Hire a Microbiologist III as a Laboratory Program Advisor (LPA) to provide communication and coordination among OLS, other BPH agencies, LHD's and Level A laboratories within the state. The LPA will provide assistance to develop an integrated system of public health, hospital and independent laboratories for preparedness and detection of bioterrorism events and diseases of public health importance.
- f. Share 0.5 FTE Programmer Analyst III with Epidemiology (Focus Area B) to ensure the development of inter-operable information systems between OLS, other BPH programs, LHDs and Level A laboratories and to provide technical support for internal laboratory management systems.
- g. Hire full-time I.T. support technician to manage the Lab's computers and network environment ensuring system availability and reliability.
- h. Develop and provide educational materials on agents of bioterrorism including rule out testing, laboratory safety practices, safe specimen handling and transport and maintenance of chain of custody.
- i. Offer training workshops.
- j. Assess availability of proficiency testing materials and design and implement mechanisms to deliver proficiency testing samples to assess rule out capability of Level A laboratories.

**Local Plan:**

- a. Agree to serve on the laboratory workgroup.
- b. Assist in identifying Level A laboratories on West Virginia.
- c. Assist in identifying critical benchmarks to assess the capabilities of Level A laboratories.
- d. Assist in distributing survey to Level A laboratories.
- e. Assist LPA to develop an integrated system of laboratories for preparedness and detection of bioterrorism events and diseases of public health importance.
- f. Assist Programmer Analyst III to ensure the development of inter-operable information systems.
- g. Assist in the development and distribution of educational materials.
- h. Attend training workshops.
- i. Participate in proficiency testing activities.

**Objective 2:** Develop an integrated response plan that directs how the laboratories within your jurisdiction will respond to a bioterrorism incident to include (1) roles and responsibilities, (2) inter- and intra - jurisdictional surge capacity, (3) how the plan integrates with other department-wide emergency response efforts, (4) protocols for safe transport of specimens by air and ground and, (5) how lab results will be reported and shared with local public health and law enforcement agencies.

**State Plan:**

- a. Identify Level A and Level B laboratories within the state and define roles, responsibilities and capabilities.
- b. Educate/train Level A laboratories on agents of bioterrorism including rule out testing, safe specimen packaging and appropriate referral of test specimens.
- c. Coordinate with epidemiologists, LHDs, HAN, and IT to develop a communication plan for release of laboratory results related to bioterrorism or other outbreaks to appropriate agencies.
- d. Participate in the establishment of secure electronic linkages for real time reporting.

**Local Plan:**

- a. Serve on lab workgroups to identify Level A labs within state.
- b. Assist in developing educational materials and attend training sessions.
- c. Coordinate with epidemiologists, HAN and IT to develop a communication plan for release of laboratory results related to bioterrorism or other outbreaks.
- d. Participate in the establishment of secure electronic linkages for real time reporting.

**Objective 3:** Establish operational relationships with local members of hazmat teams, first responders, and FBI to provide laboratory support for their response to bioterrorism, including environmental testing and chain-of-custody procedures. For example, enhance these relationships through establishment of designated points of contact, cross training in each discipline and/or joint sponsorship of conferences.

**State Plan:**

- a. Identify key contacts and meet with each of the partners to establish plans and procedures that will be in place in times of increased activity.
- b. Co-sponsor joint conferences to communicate response plans and interaction of each of the partners.

**Local Plan:**

- a. Identify key contacts within jurisdiction and meet with each of the partners to establish plans and procedures that will be in place in times of increased activity.
- b. Co-sponsor joint conferences to communicate response plans and interaction of each of the partners.

**Objective 4:** Enhance relationships with community laboratory practitioners, university laboratories, and infectious disease physicians through participation in infectious disease rounds and conferences.

**State Plan:**

- a. Include community laboratory practitioners, university laboratories and infectious disease physicians as well as state and local public health practitioners on the laboratory workgroup to design and execute studies to assess and improve capabilities and capacities of Level A laboratories within the state.
- b. Present findings at “Grand Rounds” or other seminars at local hospitals.

**Local Plan:**

- a. Agree to serve on laboratory workgroup.
- b. Invite public health staff and other workgroup members to participate in hospital grand rounds.

**Objective 5:** Develop operational plans and train personnel to collect, process, and transport blood and urine samples to CDC, or a CDC supported laboratory, for analysis of chemical agents. Plans should be consistent with CDC supplied protocols.

**State Plan:**

- a. Download CDC collection protocols from website.
- b. Include collection, processing and transport protocols in training materials.
- c. Train personnel to collect, process and transport blood and urine samples.

## B. LABORATORY INFRASTRUCTURE

**CRITICAL CAPACITY:** As a member of the Laboratory Response Network (LRN) to ensure adequate and secure laboratory facilities, reagents and equipment to rapidly detect and correctly identify biological agents likely to be used in a bioterrorist incident.

**Description and Adequacy of Current Capacity:** A Microbiologist II was hired to serve as the Laboratory Bioterrorism Coordinator and began employment on October 1, 2001. She was registered as a user on the LRN, secure website and began training on the Level A and Level B protocols for the Category A agents.

The Bioterrorism Coordinator is scheduled to attend the CDC's course "Agents of Bioterrorism Rapid Detection Methods" class that will meet April 8-12, 2002.

The reagents for performing Level B rule out testing for Bacillus anthracis were successfully ordered from the LRN website.

The Threat Preparedness and Response Unit of OLS was activated on October 11, 2001 and processed 391 specimens through March 6, 2002 to rule out anthrax.

The Threat Preparedness Response Unit personnel successfully participated in the CDC sponsored anthrax proficiency test in January.

CDC LITS Plus software was installed and modules constructed for several areas in the laboratory.

Security issues that were addressed at OLS included changing the locks on all external doors and installing key pad access, and installation of dusk to dawn lights at strategic locations on the lab facility.

An agreement exists with the state of Virginia to perform Clostridium botulinum toxin testing.

The facility housing the Office of Laboratory Services was built in 1953 and is in dire need of repair. Problems have included multiple gas leaks, uninsulated electrical wiring, a water leak in the basement, unencapsulated asbestos and inadequate ventilation which prevents the laboratory from achieving BSL-3 working conditions or performing molecular amplification procedures. There is also a critical space shortage which prevents the lab from expanding its testing capabilities.

The Threat Preparedness and Response Unit is staffed by two people, the Lab Director and the newly hired Bioterrorism Coordinator, and has no surge capacity.

The Unit operates with part time clerical help to maintain the database, generate correspondence, and transcribe specimen workshops.

OLS does not have the appropriate instrumentation and appropriately trained staff to perform CDC developed real-time polymerase chain reaction (PCR) and time resolved fluorescence (TRF) rapid assays.

There is no uniform system for specimen transport to OLS in South Charleston.

There is no on-site computer support personnel.

**Objective 1:** Develop operational plans and protocols that include: (a)specimen samples transport and handling, (b) worker safety, (c) appropriate Bio-Safety Level (BSL) working conditions for each threat agent, (d) staffing and training of personnel, (e) Quality control and assurance (adherence to and validation of laboratory methods and protocols), (f) internal and external proficiency testing, (g)triage procedure for prioritizing intake and testing of specimens/samples before analysis, (h) secure storage of critical agents and (i) appropriate levels of supplies and equipment needed to respond to disease outbreaks or bioterrorism events with a strong emphasis on surge capacities needed to effectively respond to a bioterrorism incident.

**State Plan:**

- b. Establish a specimen transport system for specimens suspected of containing bioterrorist agents as well as other specimens of public health importance.
- c. Promote Bioterrorism Coordinator from Microbiologist II to Microbiologist III after training is completed.
- d. Hire additional personnel:
  - i. Microbiologist III to serve as Laboratory Program Advisor (See Focus Area C Critical Capacity A-1).
  - ii. Programmer Analyst III 0.5 FTE (See Focus Area C Critical Capacity A-1).
  - iii. I.T. Support Technician 1 FTE (See Focus Area C Critical Capacity A-1)
  - iv. Microbiologist I responsible for logging in specimens, processing samples, performing and interpreting the results of laboratory tests, preparing media and ordering and stocking supplies.
  - v. Microbiologist II to work as a molecular microbiologist to develop and validate assays for the detection of bioterrorist agents and other infectious diseases.
  - vi. Office Assistant III to provide clerical support to the Threat Preparedness and Response Unit. Duties will include routine typing of correspondence; mailing of surveys and data entry of results, generating, mailing, and faxing laboratory results, rapidly disseminating laboratory guidelines to hospitals and other laboratories and assistance during emergency response by taking phone calls and faxing information.
  - vii. Data Entry Operator I to enter patient demographic data, electronically report or produce results for a variety of infectious disease tests.
  - viii. Threat Preparedness Specialist as a 90-day temporary employee whose duties will be to assess the capabilities of OLS to meet a variety of public health threats. The specialist will develop a plan of action to define laboratory needs in regard to space, staffing instrumentation, analytical procedures, and safety issues. The specialist will also develop a design for the overall process and identify outside resources that may be needed, quality assurance procedures and personnel training.

- e. Cross train new and existing staff at OLS on the use of existing LRN protocols as well as new protocols as they are approved to ensure coverage during times of increased demand.
- f. Establish MOU's with other members within the state and out of the state to provide testing during times of increased demand.
- g. Purchase equipment and supplies needed to respond quickly to infectious disease outbreaks or bioterrorist events.
  - i. Pulsed field gel electrophoresis equipment to be used as a back up for an existing unit or in times of surge capacity.
  - ii. NASBA system for nucleic and viral amplification and testing.
  - iii. Tecan Liquid Handling instrumentation used for DNA amplification assays.
  - iv. Biolog Microstation for the rapid identification of bacteria inducing bioterrorist agents, yeast and filamentous fungi.

**Objective 2:** ensure capacity exists for LRN validated testing of the following BT threat agents on the Category A list.

- a. Bacillus anthracis.
- b. Yersinia pestis.
- c. Francisella tularensis.
- d. Clostridium botulinum toxin.
- e. Other Level B and C protocols as they are approved.

**State Plan:**

- f. Purchase CDC approved laboratory equipment that meets the requirements of rapid identification methods.
  - i. Light cycler for Polymerase Chain Reaction (PCR).
  - i. Smart cycler for Polymerase Chain Reaction (PCR).
  - ii. Wallac Victor 2 for Time Resolved Fluorescence (TRF).

**Objective 3:** Ensure at least one public health laboratory in your jurisdiction has the appropriate instrumentation and appropriately trained staff to perform CDC-developed real-time polymerase chain Reaction (PCR) and time resolved fluorescence (TRF) rapid assays. Integrate new advanced rapid identification methods into the current laboratory testing algorithm. Contact CDC technical support staff for further information on approved equipment as necessary.

**State Plan:**

- a. Purchase CDC approved laboratory equipment that meets the requirements of rapid identification methods. (See equipment lists under #2).
- b. Send appropriate technical staff to CDC for training in CDC validated PCR and TRF protocols.

**Objective 4:** Conduct at least one simulation exercise per year that specifically tests laboratory readiness and capability to detect and identify at least one BT threat agent on the Category A list.

**State Plan:**

- A. Assess availability of proficiency testing materials and design and implement mechanisms to deliver proficiency testing samples.

**Local Plan**

- A. Participate in proficiency testing to assess rule out capability of Level A labs.

**Objective 5:** Ensure at least one operational Bio-Safety Level 3 (BSL-3) facility in your jurisdiction. If not immediately possible, BSL-3 practices, as outlined in the CDC - NIH publication "Bio-Safety in Microbiological and Biomedical Laboratories, 4<sup>th</sup> Edition" (BMBL) should be used.

**State Plan:**

- A. Purchase modular BSL-3 unit to provide adequate space with appropriate safety levels.
- B. Renovate existing space at OLS to improve safety conditions and to provide space for surge capacity.
- C. Explore the possibility of locating a surge capacity laboratory in another area of the state and renovate to bring the laboratory up to at least BS2+ level.

**Objective 6:** Ensure that laboratory security is consistent, at a minimum with the guidelines set forth in BMBL appendix F and any subsequent updates. Enhance laboratory security as needed through use of measures such as (a) video surveillance, (b) perimeter security and (c) screening for radiological, explosive and chemical ash of specimens prior to biological analyses or others.

**State Plan:**

- A. Install secure fence along back perimeter of the laboratory property.
- B. Hire a Threat Preparedness Specialist to investigate mechanisms to screen for radiological, explosive and chemical ash of specimens prior to biological analysis.

**Objective 7:** Enhance electronic communications within the LRN to enable network capacity monitoring BT sentinel surveillance, support of proficiency-testing. Multi Center Validation studies for new methods, and support for future LRN site enhancements, laboratories should have appropriate computer equipment and high-speed internet connectivity to access the LRN's protocols, reagents and lab user applications.

**State Plan:**

- A. Assess hardware, software and high-speed internet connectivity of other Level A labs within the state.



**CRITICAL BENCHMARK #10  
TIMELINE FOR DEVELOPMENT OF A PLAN  
TO IMPROVE WORKING RELATIONSHIPS WITH LEVEL A LABS**

**CRITICAL CAPACITY A:** To develop and implement a jurisdiction wide program to provide rapid and effective laboratory services in support of the response to bioterrorism, other infectious disease outbreaks and other public health threats and emergencies.

Milestone	Completion Date
Critical Benchmark #10 (Objective 1) Develop plan to improve working relationships between Level A and Level B/C Laboratory Response Network Laboratories.	
A. Establish a laboratory work group	4/15/02
B. Identify all Level A laboratories in West Virginia	6/01/02
C. Identify benchmarks to assess capabilities of Level A laboratories	7/01/02
D. Survey all Level A laboratories	9/30/02
E. Hire Laboratory Program Advisor	8/01/02
F. Hire Programmer Analyst III	8/01/02
G. Hire Information System Specialist I	8/01/02
H. Develop and provide educational materials	10/01/02
I. Offer training workshops	11/01/02 - 6/30/03
J. Assess availability of proficiency testing materials	8/30/03

**FOCUS AREA C: BIOLOGICAL AGENTS  
BUDGET  
WEST VIRGINIA**

<b>A.</b>	<b>PERSONNEL</b>		<b>\$236,100</b>
<b>B.</b>	<b>FRINGE</b>		<b>\$89,272</b>
	010 Civil Service	\$1,612	
	011 Social Security	\$18,062	
	012 Employee Insurance	\$36,000	
	014 Worker's Compensation	\$11,168	
	016 Pension & Retirement	\$22,430	
<b>C.</b>	<b>TRAVEL</b>		<b>\$9,695</b>
	262 Out-of-State	\$6,600	
	261 In-State	\$3,095	
<b>D.</b>	<b>EQUIPMENT</b>		<b>\$447,028</b>
	072 Laboratory Equipment	\$414,028	
	170 Computers	\$33,000	
<b>E.</b>	<b>SUPPLIES</b>		<b>\$28,100</b>
	037 Laboratory	\$28,100	
<b>H.</b>	<b>OTHER</b>		<b>\$392,890</b>
	Upgrade for Services & Transport	\$370,000	
	038 Maintenance	\$20,890	
	053 Postage/Freight	\$2,000	
<b>I.</b>	<b>TOTAL DIRECT COSTS</b>		<b>\$1,203,085</b>
<b>J.</b>	<b>INDIRECT COST (23.9%)</b>		<b>\$56,428</b>
<b>K.</b>	<b>TOTAL DIRECT AND INDIRECT COSTS</b>		<b>\$1,259,513</b>

## BUDGET

### KEY PERSONNEL

Name and Position Title	Annual Salary Rate	% Time	No. Months Budget	Total Requested
Microbiologist III		100	12	
Microbiologist III	32,000	100	12	32,000
Microbiologist I	23,000	100	12	23,000
Microbiologist II	26,000	100	12	26,000
Programmer Analyst III	60,000	50	12	30,000
Information Systems Specialist I	38,000	100	12	38,000
Office Assistant III	20,000	100	12	20,000
Data Entry Operator I	18,000	100	12	18,000
Threat Preparedness Specialist	21,600			21,600
<b>Subtotal</b>				<b>\$236,100</b>
<b>Fringe Benefits</b>				<b>\$89,272</b>
<b>TOTAL</b>				<b>\$325,372</b>

## BUDGET INFORMATION

### Focus Area C Budget Justification

#### A. PERSONNEL

**\$236,100**

Microbiologist III (100%)

This individual is currently a Microbiologist II and functions as the Laboratory Bioterrorism Coordinator (LBC). She will be promoted to a Microbiologist III after successfully completing her Level B and Level C training. The LBC directs the overall technical operations of the Threat Preparedness and Response Unit at OLS. The LBC will attend appropriate training sessions at the CDC and will then train other OLS personnel in specimen collection, identification procedures and specimen handling and shipping. The LBC will select appropriate equipment and will participate in validation studies of new methodologies. The LBC serves as a representative on the DHHR Threat Preparedness Work Group as well as the Laboratory Work Group and the OLS Safety Committee. The LBC answers directly to the Laboratory Director.

Microbiologist III (100%) \$32,000

This individual will function as the Laboratory Program Advisor (LPA). The LPA will communicate information and coordinate education and training among staff from OLS, other BPH agencies, LHD's and Level A laboratories within the state. The LPA will assist in the development of an integrated system of public health, hospital and independent laboratories for preparedness and detection of bioterrorism events and diseases of public health importance. The LPA will serve on the Laboratory Work Group and will chair the Safety Committee at OLS. The LPA will answer directly to the Laboratory Director.

Microbiologist I (100%) \$23,000

This individual will be assigned to the Threat Preparedness and Response Unit and will be responsible for logging in specimens, processing samples, performing and interpreting the results of laboratory tests, preparing medic and ordering and stocking supplies. This individual will answer to the Laboratory Bioterrorism Coordinator.

Microbiologist II (100%) \$26,000

This individual will perform molecular diagnostic assays for the detection of a variety of infectious disease agents. The individual will validate new assays and cross train other OLS staff to provide surge capacity.

Programmer Analyst III (50%) \$30,000

The Program Analyst III (PA III) will be responsible for the development of interoperable information systems among OLS, other BPH agencies, LHD's, Level A laboratories and other agencies. The PA III will provide technical support for internal OLS laboratory information management systems. The PA III will be a member of the Laboratory

Workgroup and will interact with staff from MIS and HAN. The PA III will report directly to the Laboratory Director.

Information Systems Specialist I (100%)                            \$38,000

The I.T. Support Technician will be responsible for supporting all P.C.s' file servers, and networking components utilized by the Lab. This individuals primary mission is to ensure availability of systems and reliability of systems thereby supporting the primary mission of the Lab.

Office Assistant III (100%)    \$20,000

The Office Assistant III (OA III) will provide clerical support to the Threat Preparedness and Response Unit. The duties of the OA III will include routine typing of correspondence, maintaining the database, mailing surveys and laboratory results, scheduling meetings of the Laboratory Workgroup, travel arrangements and providing assistance during emergencies by directing phone inquiries to the appropriate source and disseminating information. The OA III will report directly to the Laboratory Director.

Data Entry Operator I (100%)    \$18,000

The Data Entry Operator I (DEO) will rotate between the Threat Preparedness Unit and other units at OLS involved in infectious disease testing. The DEO will enter patient demographic data and test results into the computer.

Threat Preparedness Specialist (100%)                            \$21,600

The Threat Preparedness Specialist is a temporary employee whose duties will be to assess the capabilities of OLS to meet a variety of public health threats. The specialist will develop a plan of action to define laboratory needs in regard to space, staffing, instrumentation, analytical procedures, and safety issues. The specialist will also develop a design for the overall process and identify outside resources that may be needed, quality assurance procedures and personnel training.

**B. FRINGE BENEFITS** **\$89,272**

Fringe benefits are calculated as follows: Social Security (7.65%), Employee Health Insurance (\$400/month/FTE), Workers Compensation (4.73%), Civil Service Fee (\$215 per FTE) and Pension and Retirement (9.5%).

**C. TRAVEL** **\$9,695**

In-State Travel \$3,095

In-state travel funds will be used to reimburse the LPA and the PA III for necessary travel and other allowable costs for evaluation of BT Level A laboratories and training staff.

Personal Auto Expense  
 (3,000 miles @ 36.5 cents per mile                            \$1,095  
 Lodging at \$70/night x 10 nights x 2 people            \$1,400  
 Meals (10 days per diem @ \$30) x 2 people            \$600

Out-of-State Travel \$6,600

Out of state travel funds are requested to support travel to the CDC for the Laboratory BT Coordinator, the Programmer Analyst III and the Laboratory Program Advisor to attend training sessions and for the Laboratory Director to attend national meetings.

4 trips to CDC in Atlanta @ \$500 airfare =	\$2,000
5 nights lodging @ \$110/night x 4 people =	\$2,200
5 days per diem @ \$50/day x 4 people =	\$1,000
4 trips - ground transportation @ \$50=	\$200
4 trips x miscellaneous @ \$50=	\$200

Travel funds are also requested for a trip to San Francisco, California to attend training on the Biolog Microstation System. All expenses will be paid by Biolog with the exception of airfare.

1 trip to San Francisco @ \$1,000 =	\$1,000
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**D. EQUIPMENT \$447,028**

Light Cycler \$57,500

A Roche Light Cycler is requested to perform CDC developed real-time polymerase chain reaction assays (PCR).

Smart Cycler \$52,240

A Cepheid Smart Cycler Thermal Cycler System is requested to perform CDC-developed real-time polymerase chain reaction (PCR) assays

1 Smart Cycler Starter System	\$27,495
1 Additional 16-site processing block	\$24,745

Wallac Victor 2 \$48,093

A Wallac Victor 2 is requested to perform CDC-developed Time Resolved Fluorescence (TRF) assays.

1 Starcher/Robotic Victor 2 W/TRF, shaker and bottom reading	\$37,808
1 Computer	\$1,995
1 Monitor	\$450
1 HP Laser Jet Printer	\$795
1 Wallac Columbus Strip Washer with 12 per manifold	\$5,250
1 Microplate Support Software Package	\$1,050
1 Remote Support Software Package includes external modem and PC to Modem Cable	\$595
Shipping Charges	\$150

Biolog Microstation \$38,750

A Biolog Microstation is requested to perform rapid identification of Level B priority threat agents, other aerobic and anaerobic bacteria, yeasts and filamentous fungi. The database can be customized to track the occurrence of isolates and get graphical cluster analysis data.

1 Microstation System w/computer	\$33,200
1 Gram-Negative Aerobic Database	\$675
1 Gram-Positive Aerobic Database	\$675
1 Anaerobic Database	\$725
1 Yeast Database	\$675
1 Filamentous Fungi Database	\$2,250
1 Dangerous Pathogens Database	\$250
1 Freight	\$300

Pulsed Field Gel Electrophoresis Equipment \$36,645

Pulsed Field Gel Electrophoresis Equipment is requested to provide more real time subtyping of isolates recovered in outbreak investigations.

1 Gel Doc 2000 Gel Documentation System	\$9,995
1 Chief Mapper XA Chiller System	\$22,650
1 TDS Quantity One PC	\$4,000

Tecan Genesis Liquid Handling System \$39,900

A Tecan Genesis Liquid Handling System is requested for pipetting in DNA amplification assays.

1 Tecan Genesis RSP 100/4 (1 meter deck with 4 tips)	\$39,900
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NASBA Equipment \$70,000

NASBA Equipment is requested to perform nucleic acid viral amplification and testing especially for animal and mosquito pool testing for West Nile Virus.

1 Nuclei Sens Extractor	\$50,000
1 Nucli Sens Reader System w/printer	\$20,000

QIAGEN Mixer Mill MM30 \$7,500

The Mixer Mill MM300 is needed for the disruption of biological material prior to DNA isolates.

Table Top Centrifuge \$10,000

A table top centrifuge is requested for use in a variety of assays to recover organisms from contaminated sources

1 Table Top Centrifuge \$10,000

Water Baths \$3,400

Water baths are needed for pulsed-field gel electrophoresis (PFGE) plug preparation and incubation.

2 Water baths @ \$600 \$1,200

1 Shaking Water bath \$2,200

Microscope \$21,000

A compound microscope with 4X, 10X, 40X and 100X (oil immersion) objectives is requested to allow visualization of bacteria and parasites. A fluorescence microscope is requested in order to subtype influenza isolates and perform fluorescence antibody assays for BT threat agents.

1 Compound Microscope \$10,000

1 Fluorescence Microscope \$11,000

CO<sub>2</sub> Incubator \$7,000

A new CO<sub>2</sub> incubator is requested for complete bacterial identification since some organisms require a reduced oxygen/CO<sub>2</sub> environment.

1 CO<sub>2</sub> Incubator \$7,000

General Purpose Incubator \$6,000

A General Purpose Incubator is requested to ensure the successful growth of bacterial cultures.

1 General Purpose Incubator \$6,000

Centrifuge (Low Speed) \$6,000

A low speed centrifuge is requested to facilitate recovery of organisms from contaminated sources.

1 Low Speed Centrifuge \$6,000

Satellite Dish \$10,000

Funds are requested to purchase and install a satellite dish at the laboratory in order to be a down link site for training and communication activities.

Computers \$6,000

Laptop computers are requested for the BT Coordinator and Laboratory Program Advisor when performing assessments and training in the field.



2 Laptop Computers @ \$3,000.00 \$6,000

Windows XP Server \$15,000

A SQL based server is requested to provide support to the ever growing LITS Plus System. LITS contains all laboratory specimen data for the majority of the OLS units. The current server will not be able to support LITS as information continues to be added.

Windows Based Web Server \$12,000

Windows server supporting IIS, XML, and HTTP Web protocols enabling presentation of lab results via the Web with real-time linkages into LITS.

**E. SUPPLIES \$28,100**

Supplies are needed for the collection and transport of specimens by the local health departments and for the performance of BT agent Levels A, B, and C protocols and protocols for other infectious disease and chemical agents.

A.	Collection and transport kits	\$5,100
B.	Media and reagents	\$2,000
C.	PCR and TRF supplies	\$15,000
D.	NASBA reagents	\$2,000
E.	Biolog Microstation supplies	\$4,000

**H. OTHER \$392,890**

Modular BSL3 Laboratory \$315,000

A modular laboratory is requested to provide biosafety level 3 capacity to OLS to perform tests for BT threat agents, West Nile Virus and other infectious disease agents.

Courier Service \$45,000

Funds are requested to establish a courier service to deliver specimens from all areas of West Virginia to OLS in South Charleston.

Security Fencing \$10,000

Funds are requested to purchase and install chain link fencing with barbed wire to provide security to the rear perimeter of the laboratory.

Maintenance Contracts for Laboratory Equipment \$20,890

Maintenance contracts are required for the certification of the Biological Safety Cabinets (2 certifications per year) and for the maintenance of the microscopes, PCR and Pulsed Field Gel Electrophoresis equipment.

Postage/Shipping \$2,000

Laboratory specimen collection kits, training materials and replacement supplies will be shipped to the BT Level A laboratories. Average shipping cost \$10.00.

200 shipments x \$10 = \$2,000

<b>I.</b>	<b>TOTAL DIRECT COST</b>	<b>\$1,203,085</b>
<b>J.</b>	<b>TOTAL INDIRECT COST (23.9% OF DIRECT PERSONNEL EXPENDITURES</b>	<b>\$56,428</b>
<b>K.</b>	<b>TOTAL DIRECT AND INDIRECT COSTS</b>	<b>\$1,259,513</b>

**FOCUS AREA E:**

**HEALTH ALERT NETWORK/  
COMMUNICATIONS  
AND  
INFORMATION TECHNOLOGY**

## **FOCUS AREA E: HEALTH ALERT NETWORK/COMMUNICATIONS AND INFORMATION TECHNOLOGY**

Building upon the capacity of the existing Health Alert Network and existing technology infrastructure both with the WV Bureau for Public Health (WVBPH) and 49 local health agencies (with 54 LHDs), the following activities are proposed for Focus Area E during the period of 4/15/02 through 8/30/03. The adequacy of state and LHD capacity including proposed improvements are discussed for each critical and selected enhanced capacity as required by the grant announcement. Critical Benchmarks and objectives are described for each capacity including state and local plans, timeline, and evaluation criteria.

Appendix E relates Information Technology Functions and Specifications to Appendix 6 of the original grant and brings focus to the I.T. infrastructure necessary to plan for and respond to public health threats.

### **A. COMMUNICATIONS AND CONNECTIVITY**

**CRITICAL CAPACITY:** To ensure effective communications connectivity among public health departments, healthcare organizations, law enforcement organizations, public officials, and others as evidenced by a) continuous high speed connectivity to the Internet; b) routine use of e-mail for notification of alerts and other critical communication; and c) a directory of public health participants (including primary clinical personnel), their roles, and contact information covering all jurisdictions.

#### **Description and Adequacy of Current Capacity:**

1. Ninety percent of the local health departments are covered under the existing Health Alert Network as implemented in 49 out of 54 counties with a health department. Using the HAN, State and Local jurisdictions exchange E-Mail, and data.
2. Public Health has one-way broadcasting capacity via E-mail, Fax, phone, and pager to a limited set of state healthcare partners (partners include local public health, primary care providers, hospital emergency personnel, and first responders) using West Virginia Medical Institute.
3. Public Health has not established a routine method for communicating with law enforcement.

**A.I. CRITICAL BENCHMARK #11:** Prepare a timeline for a plan that ensures that 90 percent of the population is covered by the Health Alert Network.

**Objective 1:** Continue efforts to identify key public health partners throughout the State of West Virginia to provide essential information dissemination to the population building on the existing Health Alert Network. **Complete by: April 30, 2002.**

**State Plan:** Expansion of communications and communications capacity survey instrument to include key public health partners. Review of survey results.

**Local Plan:** Continued identification of key local public health partners for inclusion into the health alert network. Development of collaboration with key local public health partners as members of the Health Alert Network.

**Evaluation:** All other key public health partners along with communications capabilities will be identified for inclusion into existing Health Alert Network by April 30, 2002.

**Objective 2:** Identify communication requirements (phone #, Fax #, Cell #, E-Mail,) needed to incorporate key public health partners identified by Objective 1 above into the existing Health Alert Network. **Complete by: April 30, 2002.**

**State Plan:** Through use of survey instrument identify multiple channels of communication (e.g. E-Mail, Fax, voice, radio frequency, etc.) and specific identifiers associated with each mode of communication..

**Local Plan:** Facilitate relationships with key local health partners and survey completion.

**Evaluation:** Means of communication with key public health partners will have been identified and incorporated into the Health Alert Network.

**Objective 3:** Engineer infrastructure, if needed; to connect key public health partners into the existing Health Alert Network. **Complete by: July 1, 2002.**

**State Plan:** Provide technical resources, if needed, to engineer the means and mode of multiple communication platform with key local public health partners.

**Local Plan:** Participate in engineering efforts to understand how to use various communications platforms and to ensure goodness of fit to the application.

**Evaluation:** Expansion to include key public health partners will have been engineered by July 1, 2002.

**Objective 4:** Implement the infrastructure to connect key public health partners into the existing Health Alert Network. **Complete by: September 1, 2002.**

**State Plan:** Provide technical skills and personnel to implement infrastructure necessary to include key public health partners.

**Local Plan:** Participate in the implementation process to ensure knowledge and skills transfer ensuring successful future usage of expanded Health Alert Network.

**Evaluation:** Expansion of the Health Alert Network will be completed and incorporate other key public health partners by September 1, 2002.

**Objective 5:** Test the expanded Health Alert Network to ensure that 90% of the State's population is reachable via the Health Alert Network. **Complete by: September 1, 2002.**

**State Plan:** Work with public health partners to devise and maintain a testing plan exercising the expanded Health Alert Network.

**Local Plan:** Work with State public health and local public health partners to devise and maintain a testing plan exercising the expanded Health Alert Network.

**Evaluation:** Testing of expanded local health network is successful and a documented testing plan is in place for future routine testing.

**A.2. CRITICAL BENCHMARK #12: Prepare a timeline for the development of a communications system that provides 24X7 flow of critical health information among hospital emergency departments, state and local health officials, and law enforcement officials.**

**Objective 1:** Continue efforts to identify key law enforcement and hospital emergency departments throughout the State of West Virginia building on the existing infrastructure of the Health Alert Network of public health agencies to provide 24X7 flow of critical health information. **Complete by: April 30, 2002.**

**State Plan:** Expansion of communications and communications capacity survey instrument to include key public health partners. Review of survey results.

**Local Plan:** Continued identification of key local public health partners for inclusion into the Health Alert Network. Development of collaboration with key local public health partners as members of the Health Alert Network.

**Evaluation:** Key public health partners along with contact information will be identified for inclusion into existing Health Alert Network by April 30, 2002.

**Objective 2:** Develop communications modalities enabling the flow of critical health information to law enforcement and hospital emergency rooms in addition to currently connected public health agencies. **Complete by: April 30, 2002.**

**State Plan:** Through use of survey instrument, identify multiple channels of communication (e.g. E-Mail, Fax, voice, radio frequency, etc...) and specific identifiers associated with each model.

**Local Plan:** Facilitate relationships with key local public health partners and survey completion.

**Evaluation:** Means of communication with key public health partners will have been identified by April 30, 2002.

**Objective 3:** Engineer or incorporate existing communications infrastructure needed to provide 24X7 flow of health information to law enforcement and hospital emergency departments in addition to public health agencies. **Complete by: July 1, 2002.**

**State Plan:** Provide technical resources as needed to engineer the means and mode of multiple communication platforms with key local public health partners.

**Local Plan:** Participate in engineering efforts to understand how to use identified communication platforms and to ensure goodness of fit to the application.

**Evaluation:** Expansion to include key public health partners will have been engineered by July 1, 2002.

**Objective 4:** Implement a communications infrastructure enabling 24X7 communications flow of health information to law enforcement and hospital emergency departments. **Complete by September 1, 2002.**

**State Plan:** Provide technical skills and personnel to implement infrastructure necessary to include key public health partners.

**Local Plan:** Participate in the implementation process to ensure knowledge and skills transfer ensuring successful future usage of the expanded Health Alert Network.

**Evaluation:** Expansion of the Health Alert Network will be completed and incorporate other key public health partners by September 1, 2002.

**Objective 5:** Test the communications infrastructure to ensure 24X7 communications flow of health information to law enforcement and hospital emergency departments. **Complete by September 1, 2002.**

**State Plan:** Work with State public health and local public health partners to devise and maintain a testing plan exercising the expanded Health Alert Network.

**Evaluation:** Testing of the expanded local health network is successful and a documented testing plan is in place for future routine testing.

**Objective 6:** Routinely test 24X7 communications infrastructure for effectiveness. **Complete by: September 1, 2002.**

**State Plan:** Work with local health officials to routinely test 24X7 communications infrastructure.

**Local Plan:** Work with State and local health partners to routinely test 24X7 communications infrastructure.

**Evaluation:** Routine testing of 24X7 communications capabilities is done and documented.

**A.3. BENCHMARK: Building on the Critical Benchmark above, assess the existing communication connectivity in your jurisdiction and determine whether this capacity is adequate. If not, improve this capacity during this budget cycle by:**

**A. Ensuring that at least 90 percent of your population is covered by state and local health agencies that have these capabilities (See Appendix 6, IT Functions and Specifications).**

**B. Providing for a 24X7 flow of critical health information alerts (See Appendix 6, IT Functions and Specifications, Functions #7-9) and critical event data (See Appendix 6, IT Functions #1-3) among hospital emergency departments, state and local public health officials, law enforcement, and other key participants.**

**C. Ensuring that the directory information (See Appendix 6, IT Function # 7) is up to date and complete.**

**Objective 1:** To analyze connectivity requirements, design a solution, implement a solution, and regularly exercise a 24X7 health alert communications system with public health partners by September 2002. (See Appendix E, Functions #7 and #8)

**State Plan:** To work with Local Health Partners to identify reliable, effective, and efficient means of communicating with all public health partners in the State. Provide technical guidance, assistance, and expertise as needed to engineer, implement, and manage a 24X7 communications system.

**Local Plan:** To work with State Bureau and local public health partners to assess capacity, identify means of communications, levels of communication, etc. Provide guidance, assistance, and expertise as needed to engineer, implement, and manage a 24X7 communications system.

**Evaluation:** A working 24X7 communications system enabling fast, reliable, and secure communications with public health partners will have been designed, implemented, and regularly tested by September 2002.



## **B. EMERGENCY COMMUNICATIONS:**

**CRITICAL CAPACITY:** To ensure a method of emergency communication for participants in public health emergency response that is fully redundant with E-Mail.

**Description and Adequacy of Current Capacity:** The current SPAN (State Public Health Alert Network) provides the ability to communicate with some public health partners using voice, Fax, pager, and E-Mail. However, the SPAN itself represents a single point of failure therefore a backup means for dissemination of information must be identified.

**B.1. BENCHMARK:** Assess the capacity in your jurisdiction for redundant communication devices (e.g. two-way radios, cell phones, voice mail boxes, satellite phones, or wireless messaging), the capacity of existing systems at the state and local level to broadcast and/ or autodial to automatically distribute alerts and messages to these devices, and the capacity to link to the emergency communication systems of local emergency response partners. If necessary, make improvements during this budget cycle.

**Objective 1:** Identify local emergency response partners along with their primary and alternate means of communications by April 2002.

**State Plan:** Work with state and local responding organizations to identify with whom emergency communications are required along with their primary and alternate means of communications.

**Local Plan:** Work with state and local responding organizations to identify with whom emergency communications are required and their primary and alternate means of communications.

**Evaluation:** By April 30, 2002 a listing of local emergency response partners and other public health partners will be developed including primary and alternative means of communication.

**Objective 2:** Acquire, engineer, or develop a reliable and secure means of both primary and secondary communications from public health to emergency responders and other public health partners by September 2002.

**State Plan:** Work with state and regional officials to identify options for emergency communications with local emergency responders and public health partners. Work with local public health to acquire, design, and implement a communications capability.

**Local Plan:** Work with State and regional officials to identify potential redundant means of communication with local emergency responders. Work with State and public health partners to acquire, design, and implement a communications system.

**Evaluation:** A fully redundant communications system will be in place offering multiple modes of communication (e.g. voice, cell, Fax, E-Mail, radio frequency, etc.) by September 2002.

**B.2. BENCHMARK:** Routinely assess the timeliness and completeness of the redundant method of alerting, as it exists to reach participants in public health response.

**Objective 1:** Upon implementation, the WV Bureau for Public Health will develop and exercise a regular testing plan for both the primary and backup means of communication with public health partners. Testing plans will be developed concurrently with Health Alert Network expansion by September 2002.

**State Plan:** Work with local health and public health partners to develop both a regular and unplanned testing methodology to exercise both the primary and backup communications medium.

**Local Plan:** Work with state health and public health partners to develop both a regular and unplanned testing methodology to exercise both the primary and backup communication platforms.

**Evaluation:** Both primary and backup communication platforms are regularly tested with results documented to substantiate performance and accuracy of testing by September 2002.

## C. PROTECTION OF DATA AND INFORMATION SYSTEMS

**CRITICAL CAPACITY:** To ensure the on-going protection of critical data and information systems and capabilities for continuity of operations. (See Appendix 6, IT Function # 8)

**Description and Adequacy of Current Capacity:** (See Appendix E Function # 9 for details)

Current weaknesses include:

- HIPAA Electronic Data Interchange (EDI) compliance
- Inconsistent security measures at the local level
- Limited business continuity planning at local and state levels
- Strong authentication capability

**C.1. BENCHMARK:** Assess the existing capacity in your jurisdiction regarding policies and procedures for protecting and granting access to secure systems for the management of secure information, system backups, and system redundancy. If necessary, develop a proposal for improvements during this budget cycle.

**Objective 1:** Complete an EDI security and vulnerability audit of the public health system including a representative sample of local health departments. Assessment will include HIPAA EDI compliance deliverables by October 31, 2002.

**State Plan:** Assist local health departments with checklists, audit materials, and on-site review of HIPAA EDI compliance issues, specifically data and system protection.

**Local Plan:** Work with State health and others to assess HIPAA based EDI data security capabilities.

**Evaluation:** All of public health (State and Local) will be thoroughly evaluated for HIPAA EDI compliance and related data/ systems protection by October 31, 2002. Areas of remediation will be identified.

**Objective 2:** Develop a remedial action plan to correct deficiencies identified through the efforts of Objective One above, by December 31, 2002.

**State Plan:** Develop remedial action plan for State level systems and areas of vulnerability. Assist local health departments with development of individual health department remedial action plans.

**Local Plan:** Develop local remedial action plan.

**Evaluation:** Development of State and local public health HIPAA EDI and data/system protection remedial action plans by December 31, 2002.

**Objective 3:** Implementation of remedial corrections to State and Local public health systems to be in compliance with HIPAA and data/systems protection by October 1, 2003.

**State Plan:** Fund and implement necessary steps to correct HIPAA based EDI and data/system protection deficiencies found within the State infrastructure.

**Local Plan:** Fund and Implement necessary steps to correct HIPAA based EDI and data/system protection deficiencies found within each local health department.

**Evaluation:** Minimum HIPAA based EDI and data/ system compliance for both State and Local public health by October 1, 2003.

**C.2. BENCHMARK: Perform regular independent validation and verification of Internet security, vulnerability assessment, and security and continuity of operations practices, and rapidly implement recommended remedial activities.**

**Objective 1:** Retain the services of an independent risk and security auditing firm to assess the vulnerability, security practices, and operational practices of both the State and Local public health data systems. Complete an audit of the entire public health network including local health departments by October 2002.

**State Plan:** Negotiate and administer a contract with an independent risk and security auditing firm. Coordinate audit activities with auditing firm. Participate in audit review and remedial action.

**Local Plan:** Work with State to select auditing firm. Coordinate, as needed, auditing of local health department IT functions, and participate fully in audit reviews and remedial action.

**Evaluation:** Execution of a signed contract for independent auditing and assessment services by August 2002. Completion of public health IT audit by October 2002. Remedial action plan to correct deficiencies completed by December 2002.

**Objective 2:** Implement corrective actions in response to audit and assessment findings immediately. Corrections implemented by October 2003.

**State Plan:** Create an audit and assessment response team with the responsibility of reacting to audit and assessment reports through immediate remedial action.

**Local Plan:** Participate actively on the audit response team. Take corrective action as prescribed by the auditor and response team.

**Evaluation:** Creation of a joint local and state level audit response team by November 2002. Complete IT audit by October 2002. Complete remedial action to correct deficiencies by October 2003.

## D. SECURE ELECTRONIC EXCHANGE OF PUBLIC HEALTH INFORMATION

**CRITICAL CAPACITY:** To ensure the secure electronic exchange of clinical, laboratory, environmental, and other public health information in standard formats between computer systems of public health partners. Achieve this capacity according to the relevant IT functions and Specifications.

**Description and Adequacy of Current Capacity:** West Virginia Public Health has limited capacity to exchange clinical, laboratory, environmental, and other public health information. However, the essential building blocks are in place or will soon be in place.

*Activities advancing public health's achievement of this critical capacity will be deferred to Year 5 of HAN funding and/ or Year 2 of this grant's supplemental funding.*

*The discussion below is intended to acknowledge recognition of the need to achieve this capacity while documenting a resource shortage preventing immediate activity under the current funding cycle.*

**D.1. BENCHMARK:** Assess the existing capacity in your jurisdiction to exchange electronic data in compliance with public health information and data elements exchange standards, vocabularies, and specifications as referenced in the NEDSS initiative. (See Appendix 6, IT Functions # 1-9). If necessary, develop a proposal for improvements during this budget cycle.

(See Appendix E IT Functions #1, #2, #4, AND # 5 for details)

**Objective 1:** Complete review of EDI capability of State systems, local systems, and those of public health partners to exchange data electronically using standards (e.g. HL7) and vocabularies (e.g. Snomed) by October 30, 2003.

**State Plan:** Lead the assessment effort to identify systems at the State level and local health partner level with whom electronic data exchange is required along with concomitant capabilities.

**Local Plan:** Participate in the identification of public health partners and key contacts with whom electronic data interchange is required. Participate in the assessment effort to ensure thorough evaluation of systems and capabilities.

**Evaluation:** Identification of public health partners, systems, and technical capabilities leading to a plan supporting the implementation of electronic exchange of data by April 30, 2003.

**Objective 2:** Continue implementation, at State level, of NEDSS base system along with NEDSS enhancements to LITS (Laboratory Information Tracking System) by December 31, 2002 (Date is dependent upon NEDSS availability from CDC. Work carried out under Focus Area B and Focus Area C Plans).

**State Plan:** Complete planning and implementation of NEDSS base system and LITS enhancement. (See Focus Area B and C Plans).

**Local Plan:** Participate in the development of a testing plan for NEDSS base system to test system during a phased implementation schedule.

**Evaluation:** Implementation of NEDSS base system by December 31, 2002.

**Objective 3:** Initiate NEDSS base system enhancements by August 2003. (See Focus Area B Plan)

**State Plan:** Hire programmer to initiate NEDSS base system enhancements and begin integration with Laboratory LITS system. This position is described and funded in Focus Area B and C Plans.

**Local Plan:** None

**Evaluation:** NEDSS system programmer on staff by August 2003.

**Objective 4:** Consolidate State Lab reporting onto LITS system with NEDSS enhancements by October 2003. (See Focus Area C Plan).

**State Plan:** Consolidate multiple lab information systems onto LITS for uniformity of data capture and presentation.

**Local Plan:** None

**Evaluation:** Consolidation of multiple lab systems onto LITS by October 2003.

**Objective 5:** Develop Web front end for LITS system by October 2003. (See Focus Area C Plan)

**State Plan:** Hire programmer to develop Web and XML front-end module to LITS for electronic results reporting. (See Focus Area C Plan for description and funding)

**Local Plan:** Assist with requirements definition, testing, and evaluation of electronic results reporting from LITS.

**Evaluation:** Web and XML LITS results capability developed by October 2003.

**D.2. BENCHMARK:** Ensure that the technical infrastructure exists to exchange a variety of data types, including possible cases, possible contacts, specimen information, environmental sample information, lab results, facilities, and possible threat information. (See Appendix 6, IT functions # 1-9).

**See Appendix E-1 IT Functions Plan for West Virginia.**

**Objective 1:** Complete NEDSS base system implementation by December 31, 2002. (See Focus Area B Plan)

**State Plan:** Complete NEDSS base system implementation by December 31, 2002.

**Local Plan:** None

**Objective 2:** Design Internet based architecture to enable HTTP, XML, and EDI data interchange between public health partners based on NEDSS by March 2003.

**State Plan:** Lead the endeavor to design the technical infrastructure needed to support secure, reliable, and robust data interchange using HTTP, XML, EDI among public health partners.

**Local Plan:** Participate in the design of the architecture supporting real time data interchange between public health partners.

**Evaluation:** Completion of design supporting EDI capability using HTTP, XML, with NEDSS by March, 2003.

**Objective 3:** Commence implementation of infrastructure supporting electronic exchange of data between public health partners during Quarter 3, 2003.

**State Plan:** Begin the implementation of components, hardware, software, protocols, security, etc. enabling the electronic exchange of data between public health partners.

**Local Plan:** Participate in the implementation; upgrade networking components, computer components, practices, and systems to support the electronic exchange of data.

**Evaluation:** Infrastructure improvements supporting EDI begins Quarter 3, 2003.

**D.3. BENCHMARK: Regularly confirm the successful transmission and receipt of information to and from public health partners.**

**Objective 1:** Test EDI between a few public health partners using aforementioned technical infrastructure during Quarter 4, 2003.

**State Plan:** Work with public health partners to develop a test plan for EDI using technical infrastructure.

**Local Plan:** Facilitate testing plan development and evaluation of results.

**Evaluation:** Testing of EDI between a few public health partners during Quarter 4, 2003.

**D.4. BENCHMARK: Implement message parsing technology to allow for the creation and processing of public health information messages.**

**Objective 1:** Develop a messaging protocol with embedded information specific to particular circumstances and relevant to the receiving party by March 2003. (Note: This objective assumes use of HL7, Snomed, SOAP formats)

**State Plan:** Work with message distribution vendors, local public health partners, and others to develop a messaging protocol identifying appropriate content, recipient, format, timing, etc that is specific to the circumstance.

**Local Plan:** Work with local public health partners to glean the requirements for messaging, content, protocol, etc. Relay message requirements as part of messaging team.

**Evaluation:** Message protocol standards will be identified by March 2003. Message distribution partners will be able to construct appropriate messages under the direction of local and state health partners.

## **E. SUPPORT OF EMERGENCY RESPONSE MANAGEMENT**

**ENHANCED CAPACITY:** To provide or participate in an emergency response management system to aid the deployment and support of response teams, the management of response resources, and the facilitation of inter-organizational communication and coordination.

**Description and Adequacy of Current Capacity:** Both State and Local public health have excellent working relationships with Emergency Response Teams and other first responders. Several key communications mechanisms are in place (e.g. EMS communications system) and potentially available for use.

**E.1. BENCHMARK:** Assess the existing capacity in your jurisdiction related to emergency response management systems. Identify existing systems and ascertain their relevance and suitability for public health participation, including disaster simulation, logistics management, threat tracking and management, geographic mapping for visualization of events, and emergency resource provision and management. If necessary, develop a proposal for improvements during this budget cycle.

**Objective 1:** Ensure capacity locally, regionally, and statewide of emergency response systems vis-à-vis use by public health systems during a disaster by April 2003.

**State Plan:** Work with local and regional partners to survey emergency communications systems. Identify communications scenarios to assess the appropriateness of each communications system.

**Local Plan:** Participate in the identification of emergency communications systems and in scenario development for assessment.

**Evaluation:** Ensure alternative communications systems are available thereby providing the potential for use by public health during a disaster by April 2003.

**Objective 2:** Initiate memoranda of understanding with various emergency response communications agencies enabling public health use during a disaster by June 2003.

**State Plan:** Negotiate with emergency response agencies to establish memoranda of understanding to enable use during an emergency.

**Local Plan:** Negotiate at a local level to achieve memoranda of understanding enabling local use of emergency response communications systems during a disaster.

**Evaluation:** Memoranda of understanding executed, on file, and tested by June 2003.

**E.2. BENCHMARK:** Ensure participation, training, and testing of public health personnel in the use of an emergency response management system.

**Objective 1:** Using available systems, enable training of public health personnel within the jurisdiction in the use of emergency response communication systems by June 2003.

**State Plan:** Train state level personnel on use of emergency response communication systems by October 2003.



**Local Plan:** Train local level personnel on use of emergency response communication systems by October 2003.

**Evaluation:** State and Local personnel trained in use of emergency response communication systems by October 2003.

**E.3. BENCHMARK: If an adequate system does not exist with emergency response partners, implement a commercial, off-the-shelf system for the support of these functions.**

**Objective 1:** Following assessment of existing capabilities, identify, acquire and implement off-the-shelf systems for emergency communications by August 2003.

**State Plan:** Assess and acquire only if necessary.

**Local Plan:** Assess and acquire only if necessary.

**Evaluation:** Emergency response communications capability is in place by August 2003, using either pre-existing capability or off-the-shelf systems.

## **F. FULL INFORMATION TECHNOLOGY SUPPORT AND SERVICES**

**ENHANCED CAPACITY: To ensure full information technology support and services.**

### **Description and Adequacy of Current Capacity:**

The State's current capacity is as follows:

- X.509 Digital Certificates in place but not in use
- Strong Authentication: Working towards. Target completion December 2003.
- Role Based Access: Done
- Security Policies: Work in progress. Target completion December 2002.
- Vulnerability Assessment: Completed at State level. Deficiencies being addressed. Assessment required at local level.
- Virus Scanning: Implemented at both State & local levels.
- Intrusion Detection: Evaluating options.
- Disaster Recovery Plan: Outline done. Plan being developed.
- Encryption: 56 bit encryption deployed now. Working towards 128 PKI.
- Firewall: In place for both State and Local Health
- Ratio of support personnel to PCs is currently about 200 P.C.s to 1 FTE.

### **Future Objectives:**

- Completion of minimum HIPAA compliance on EDI and systems by October 2003.
- Business continuation plan development for State and Local Health to continue.
- Vulnerability assessment at the local level.
- 128 Bit PKI Encryption implemented.
- Intrusion detection solutions implemented.
- Strong authentication incorporated.

See Benchmarks C1, C2, and D1 for detail description on how the above technical requirements will be met.

**FOCUS AREA E: HEALTH ALERT NETWORK & I.T.  
BUDGET**

<b>A. Key Personnel</b>		<b>\$110,000</b>
<b>B. Fringe Benefits</b>		<b>\$ 33,898</b>
010 Civil Service	\$ 230	
011 Social Security	\$ 8,415	
012 Employee Insurance	\$ 9,600	
014 Worker's Compensation	\$ 5,203	
016 Pension/Retirement	\$10,450	
<b>C. Travel</b>		<b>\$ 15,270</b>
In-State	\$11,560	
Out-of-State	\$ 3,710	
<b>D. Equipment &amp; Software</b>		<b>\$213,963</b>
Hardware (servers, network components, etc.)	\$128,378	
Software (e.g. notification system)	\$ 85,585	
<b>E. Supplies</b>		<b>\$ 3,940</b>
Office Supplies	\$ 3,940	
<b>F. Contracted Services</b>		<b>\$443,234</b>
Direct Assistance -Vulnerability	\$ 60,000	
LHD Implementation Subrecipient Agreements	\$290,000	
State Level	\$ 93,234	
<b>H. Other</b>		<b>\$53,695</b>
Maintenance of Equipment	\$ 41,545	
Postage	\$ 2,400	
Printing	\$ 2,250	
Training	\$ 7,500	
<b>I. Direct Costs</b>		<b>\$874,000</b>
<b>J. Indirect Costs</b>		<b>\$0</b>
<b>K. Total Direct and Indirect Costs</b>		<b>\$874,000</b>

## BUDGET

### KEY PERSONNEL

Name and Position Title	Annual Salary Rate	% Time	No. Months Budget	Total Requested
Regional Technicians	Actual time invoiced		12	\$45,000
Central I.S. Support	Actual time invoiced		12	\$55,000
HAN Administrative Coordination	Actual time invoiced		12	\$10,000

## Budget Justification

### A. Key Personnel \$110,000

No new permanent State level personnel required. However, funds are allocated to support existing key Department MIS personnel who provide support for the health alert network including support for local health departments.

The equivalent of two FTE is the current experience and it is anticipated to remain constant during this budget cycle.

Regional Technicians \$ 45,000

The MIS Department utilizes eight regional technicians to provide support service to local health departments as needed. Time and effort is recorded enabling reimbursement to MIS.

Central I.S. Support \$ 55,000

HAN Coordination to provide on-going technical support and advice for planning, engineering, design, etc.. efforts related to HAN and IT for local health departments. This effort covers security and other infrastructure related support. Time and effort is recorded enabling reimbursement to MIS.

HAN Administrative Coordination \$ 10,000

It is estimated that approximately 0.2 FTE will be needed to provide administrative coordination of this effort as described in the grant guidance.

### B. Fringe Benefits \$ 33,898

West Virginia fringe benefits requirements include the following based on the given calculations; Social Security (7.65%), Personnel Division and PEIA fees of \$205 per FTE, Public Employee Health Insurance (\$400/month/person), Workers' Compensation (4.73%), and Pension and Retirement (9.5%).

### C. Travel \$15,270

**In-State Travel \$11,560**

Regional Technicians

- 24 trips X 2 people X 200 miles r/t X \$.365/mile \$3,504
- 12 Days per diem X \$30/day X 2 people \$ 720
- 6 nights lodging X \$70/night X 2 people \$ 840

Central Staff

- 55 trips X 1 person X 200 miles r/t X \$.365/mile \$3,916

· 30 days per diem X \$30/day X 1 person	\$ 900
24 nights lodging X \$70 per night	\$1,680

Out of State Travel \$ 3,710

Central Staff

Funds requested for 2 people to attend one national meeting/conference each.

Airfare @ \$500 x 2 trips x 2 people=	\$2,000
2 people x 4 days @ \$50 per diem=	\$ 400
2 people lodging 3 nights @ \$110=	\$ 660
Registration @ \$50 x 2 people x 2 trips=	\$ 450
Ground Transportation @ \$50=	\$ 100
Miscellaneous @ \$50=	\$ 100
<b>Total</b>	<b>\$3,710</b>

**D. Equipment & Software \$213,963**

Anticipated Equipment or Software

- Hardware
- Intrusion Detection
- Notification software
- Virus Scanning Services
- Equipment upgrades

**E. Supplies \$3,940**

Office Supplies including pens, paper, ink, video tapes, CDs, etc.

**F. Contracted Services \$443,234**

<u>State Level</u>	\$93,234
- Design & implementation surge capacity	
- Programming & Web development	
- Security and HIPAA EDI Compliance	

LHD Implementation Subrecipient Agreements \$290,000

Funds for subrecipient agreements to 49 local health jurisdictions covering 55 counties are requested for LHD implementation of plans developed through the local health assessment and planning phase. These funds will be used to address Focus Area E critical capacities at the local level. These funds will be joined with LHD implementation dollars in other focus areas to form a single subrecipient agreement to each LHD to address the critical capacities of this cooperative agreement. Although provided under a single agreement, LHDs will track use of funds by focus area. Distribution of funds will be on a per capita basis.

Direct Assistance Request - Vulnerability Studies \$60,000

<b>H. Other</b>		<b>\$ 53,695</b>
053 Postage	\$ 2,400	
Needed to mail updates, correspondence, documentation, etc. \$200/month x 12		
021 Printing & copying	\$ 2,250	
Costs allocated based on actual usage.		
525 Training	\$ 7,500	
- Training for local health department personnel on use of communications technology, software, and systems.		
- Training for regional personnel as technology changes.		
- Maintenance of existing HAN Infrastructure	\$32,438	
<b>I. Direct Costs</b>		<b>\$874,000</b>
<b>J. Indirect Costs</b>		<b>\$ 0</b>
<b>K. Total Direct and Indirect Costs</b>		<b>\$874,000</b>

## Appendix E

### West Virginia Bureau for Public Health e-Health Functions and Specifications

This document accompanies the State's Supplemental Funding Plan for Emergency Preparedness and Bio-terrorism describing the envisioned future state of e-Health in West Virginia.

Focus Areas of the State's Plan will reference this appendix to address specific areas relating to technology.

The attached schematic depicts the envisioned e-Health configuration for the State of West Virginia.

#### **Function # 1: The automated exchange of Data Between Public Health Partners**

##### **Description of Current Capacity and Assessment of Adequacy:**

Currently the State of West Virginia is able to exchange near real-time data from Local Health Departments into the Bureau for Public Health (State Level) to capture Immunization data and limited patient encounter data. Data exchange does not comply with HL7, CIPHER, or ORU data format.

Forty Nine out of 54 Local Health Departments are connected with the State's health network using real-time, dedicated connections. This network supports the aforementioned data capture as well as distribution of information from the State to local health departments.

Both the State and local health departments sit behind a firewall protecting the assets of both entities.

Both State and local entities have dedicated access to the Internet.

Additionally, all users are authenticated to the network using a VPN solution or Radius Server. Windows NT 4.0 and Windows 2000 are the preferred server operating systems in use however, Novell serves as the operating system for Groupwise E-Mail at the State level and for application support at some local health departments.

The current capacity provides an excellent building block upon which the State intends to enhance the exchange of data.

##### **Future Vision and Objectives:**

Build upon the current capabilities of the State's immunization data capture capability to acquire patient encounter data from each local health department system and primary care provider.

Complete the implementation of dedicated network services to those counties not currently connected with dedicated circuits. Implementation has been delayed on this front due to the rural nature of these communities and the lack of a cost-effective solution.

Implementation of the NEDSS Base System. Implementation is dependent upon availability of the Base System from CDC.

Upgrades to the Laboratory Information Systems (LITS) including LITS Plus enabling NEDSS compatibility supporting the exchange of data between LITS and NEDSS. CDC dependent timeframe.



Expansion of data encryption capabilities to include 128 bit PKI encryption of all data exchanged using the existing and/or completed dedicated network.

Completion of HIPAA compliance for all public health partners including HL7 data format and/or data translation capability, encryption, user authentication, security capacity, and business continuity / disaster recovery for both State and Local public health systems.

## **Function # 2: The Use of Electronic Clinical Data for Event Detection**

### **Description of Current Capacity and Assessment of Adequacy:**

As noted above, the State captures limited data from local health departments in a near real-time fashion for Immunization tracking and other limited functions. Additionally, the State captures immunization data from a small but growing pool of private primary care providers (Pediatricians, Family Medicine, or Internal Medicine).

The State has no capacity to capture data from hospitals or Class A labs located throughout the State.

### **Future Vision and Objectives:**

To build upon the Immunization system currently reaching all local public health providers and a large majority of primary care providers to capture encounter data. Currently deployed immunization technology facilitates both Web based and batch capture of encounter data from Practice Management Systems.

Implement the NEDSS Base System to provide a platform to capture and organize incoming clinical data from practice management systems and lab systems.

Assess the communications and connectivity capabilities of the States ~80 Class A labs. Devise a strategy that enables capture of critical information in a seamless manner that reflects the workflow of these labs.

Assess the communications and connectivity capabilities of other private health care providers in the State. Devise a strategy to enable the capture of critical information from these entities. The expectation is that most data capture will be Web based using NEDSS and the Silverstream Web Server front end to NEDSS.

Design data capture models for both public and private providers that will enable geo-coding of data in a meaningful fashion to support future GIS based analysis and depiction of events.

Expand on current GIS capabilities at the State level to provide a closer link between Epidemiology data and available GIS services.

Investigate the resources required to develop real-time system interfaces with both State and Third Party claims processing entities to capture encounter data leading to the identification of disease trends based on diagnosis and subsequent claim information.

Continue implementation of palm based data capture and transfer into local health systems and emergency department systems. Current initiatives underway entail the capture of on-site inspection data from public health sanitarians and/ or EMT run data.

### **Function # 3: Manual Data Entry for Event Detection and Management**

#### **Description of Current Capacity and Assessment of Adequacy:**

The State currently has no Web based capacity for centralized, near real-time, event data capture.

Event detection generally follows a circuitous route including mail, Fax, E-Mail, and telephone.

#### **Future Vision and Objectives:**

1. The State is implementing the Base NEDSS system depending upon availability from the CDC.
2. Concomitant with the NEDSS system is the Silverstream Web server, which is to function as a means of data capture and information presentation from NEDSS.
3. The State will implement the requisite three tier and redundant architecture recommended by the CDC for NEDSS.
4. A full-time programmer is planned to build upon the NEDSS Base system to incorporate both future modules from the CDC and State implemented modules meeting local requirements.

### **Function # 4: Specimen and Lab Result Information Management and Exchange**

#### **Description of Current Capacity and Assessment of Adequacy:**

The State of West Virginia has one Class B Lab, the State Lab. The State Lab is the reference lab used by all local public health providers and most private health providers for analysis and reporting of suspected environmental toxins.

The State lab currently has no capacity to receive requests, submit electronic results, or receive electronic results from other labs.

#### **Future Vision and Objectives:**

Consolidation of existing lab systems (three) onto LITS (Laboratory Information System) to manage all lab data and information flow.

Completion of NEDSS enhancements to the LITS system. Construct LITS to NEDSS interface to enable real-time exchange of data and development of case tracking through NEDSS.

Development of Web front-end to LITS server to securely capture requests and post results.

Assign 1 FTE to LITS Web development.

Implement HL7 enhancements to LITS system. Timing is CDC dependent.

Development of system to system interface with local public health practice management systems to receive lab requests and to post test results. Use of XML for messaging. Build on LITS Plus to export results in electronic format and distribute electronically to labs and providers.

## **Function # 5: Management of Possible Case, Contacts, and Threat Data**

### **Description of Current Capacity and Assessment of Adequacy:**

Current case data is unrelated and stored in isolated, stove pipe systems. State has no “systems” ability for life cycle management other than through human effort.

### **Future Vision and Objectives:**

Implementation of the NEDSS Base System.

Implementation of LITS Plus (laboratory information system) with NEDSS enhancement as soon as available.

Extension of current immunization system de-duplication tools to create a single case record for encounters and lab results.

Creation of a master client index of all individuals receiving services at both the local and state level.

Use of NEDSS to link data to specific case information creating a consolidated record.

Use of NEDSS Silverstream Web server for data capture and presentation.

## **Function # 6: Analysis and Visualization**

### **Description of Current Capacity and Assessment of Adequacy:**

Statistical analysis is currently done using non-integrated data. No GIS capabilities exist within the State’s Epidemiology function or at the local health department level.

### **Future Vision and Objectives:**

Implementation of NEDSS Base System as one step towards building an integrated data repository containing disease information, programmatic data, and case data.

Continued analysis and design work leading to development of a disease data warehouse.

Implementation of a geo-coding tool integrated with local health department systems, private providers, third party labs, and hospitals to capture location specific information.

Consolidation of State Public Health level GIS capabilities including personnel to focus on disease surveillance and analysis.

Utilization of the reportable disease data warehouse for analysis and reporting.

## **Function # 7: Directories of Public Health and Clinical Personnel**

### **Description of Current Capacity and Assessment of Adequacy:**

The State currently maintains and uses a directory of local public health administrators, primary care clinics, and emergency response key personnel.

The directory does not contain information on health role, specialized skills, or knowledge.

The State is currently able to contact personnel in the directory by Fax, phone, cell phone, or E-Mail on a 8/5 basis.

The State does not have 24/7 access capability or a redundant process.

**Future Vision and Objectives:**

Improvement of the current directory to include all public health personnel including clinicians and administrators. Additionally, include essential information on individual skills and knowledge in order to pre-assign individuals to roles during an emergency.

Implement key word searching of the directory to locate individuals by name, location, skills, knowledge, or position.

Integrate required training and education data in the database allowing the State to track skills maintenance and to match individuals with upcoming training opportunities.

Incorporate personnel from surrounding states with specific skill or knowledge that may be useful during an emergency.

Incorporate non-health personnel (e.g. media, police, fire, and community leaders) in directory.

Build a redundant capability to the current contact system preferably located in a distant location for use during a wide spread incident.

Interface resource directory with systems of training partners to act as a clearing house of training opportunities as well as to capture completed training to keep competency and skill information current.

Incorporate alternative means of communication (e.g. two way radio, ham radio, etc.).

**Function # 8: Public Health Information Dissemination and Alerting**

**Description of Current Capacity and Assessment of Adequacy:** As noted above the State has developed a directory of health personnel. While somewhat inadequate, the current tools provide the basis for rapid expansion to include additional personnel as noted above and for use to distribute health alert information via many modalities (e.g. fax, phone, Web, etc.).

State currently has the ability to customize the message content and format to fit the intended recipient.

**Future Vision and Objectives:**

Complete directory enhancements noted in Function # 7 above.

Develop a Web site for information and health alerts to be used in conjunction with one to one communications channels (e.g. Fax or E-Mail). Incorporation of threaded discussion capabilities into Web site.

Develop message format that is consistent with expected protocol from CDC.

Develop multiple modes and channels of communication in multiple star configuration providing redundancy.

## Function # 9: IT Security and Critical Infrastructure Protection

### **Description of Current Capacity and Assessment of Adequacy:**

HIPAA Compliance: Effort currently underway at State and local levels.

X.509 Digital Certificates: Done

Strong Authentication: Done for network access. No single sign on for all systems.

Role Based Access : Application dependent.

Security Policies: In place.

Vulnerability Assessment: Completed at State level. Needs to be conducted at local health department level

Virus Scanning: Implemented at both State and local levels.

Intrusion Detection: Implemented across network.

Security Policy: In place.

Disaster Recovery Plan: In place and tested at State Level. Not at local health department level.

Encryption: 56 bit encryption in place for E-Mail. 128 bit PKI to be implemented.

Firewall: In place for all public health (local and state)

ebXML SOAP Receiver: Not in place.

### **Future Vision and Objectives:**

Completion of HIPAA compliance planning and implementation at both State and local level by October 2003.

Vulnerability assessment at local health department level.

Business continuation and disaster recovery planning for local health departments (incorporated into HIPAA compliance).

128 bit PKI implemented for all health related data communications.

ebXML SOAP implemented with NEDSS and Silverstreak Web Server

# FOCUS AREA F:

**RISK COMMUNICATION**

**AND**

**HEALTH INFORMATION**

**DISSEMINATION**

**FOCUS AREA F:  
RISK COMMUNICATION AND HEALTH INFORMATION DISSEMINATION :  
(PUBLIC INFORMATION AND PUBLIC COMMUNICATION)**

**I.A. CRITICAL CAPACITY:** To conduct a needs assessment for risk communication, especially at the community level, and to develop a Communication Plan, aimed at appropriate target audiences. Also to identify and prepare “key spokespersons” and to provide broad public access to information resources.

**Description and Adequacy of Current Capacity:** Planning for communication involves two broad areas: 1) communication to public health officials and other official channels, and 2) dissemination of accurate information to the general public. The second area, information to the public, will in many cases be relayed through local contacts rather than disseminated directly from the state level, especially in the case of events that are not statewide in their impact.

The Bureau for Public Health would, as much as possible, take advantage of already existing communications channels, rather than try to develop separate communications routes which would not only be a duplication of resources but also potentially confusing to the recipients. Channels (or communication portals) which currently exist include: phone (both land line and cellular), newspapers, the Internet (including the Health Alert Network), National Weather Service broadcasts, Fax (including “broadcast Fax” technology), word of mouth, television (including cable television), amateur radio clubs, satellite dishes (capable of downlinking), and commercial radio stations.

The Health Alert Network would be the principal portal through which the Bureau for Public Health would communicate with local health departments and others in the event of a crisis.

The Health Alert Network in West Virginia has four primary functions:

- (1) Connect all local health departments to the Internet.
- (2) Establish a comprehensive distance learning infrastructure available to enhance core workforce development among staff in all local health departments and use the infrastructure to assure skills and competencies in bioterrorism preparedness and public health informatics.
- (3) Assure the development and implementation of local and state systems for rapid receipt and broadcast of urgent health alerts.
- (4) Assure state and local health departments have the available trained personnel to rapidly and comprehensively communicate proactive and reactive health issues to prevent or minimize adverse health impact in the community from bioterrorism and other health threats.

It is assumed that the existing channels of communication between the Office of Emergency Services at the state capitol building and the county emergency services directors will also be available for health-related communications when appropriate and necessary, to serve as a parallel communications portal in addition to (or, in the event of HAN disruption in place of) the Health Alert Network.

Two types of communication are important for the plan: Proactive and Reactive. Some communications, such as “What your family should do in the event of an emergency”, are done proactively, not at the time of the event. Newspapers might be good channels of communication for this purpose, but not an ideal channel at the time of an event because of both lag time and possible disruption of distribution.

Because any communication channel can potentially be disrupted either intentionally or as an indirect result of damage caused by an event, redundancy must be built in, and multiple channels need to be employed.

There are large networks already in place, such as county school systems, which could be used as routes of disseminating information, both proactively (preparation) and reactively (at the time of an event). The Communications Plan needs to provide for identification of these existing networks and how to most effectively connect with them.

It is essential to prepare proactive messages of instruction to assure the readiness of human and physical capabilities within local health departments and to develop procedures for implementing adequate reactive communications.

**CRITICAL BENCHMARK #13:** Develop an Interim Plan for risk communication and information dissemination to educate the public regarding exposure risks and effective public response.

**Interim Plan:** For the Interim Plan, we will establish a Risk Communication Council (RCC), chaired by the DHHR Director of Communications. This RCC, which would include senior staff from the Bureau for Public Health and key representatives from local health, would be convened immediately upon notification of a crisis situation.

Components of an Interim Plan are in place, and would involve utilization of (and augmentation of) existing communication plans which have been in place for responding to disease outbreaks and other public health emergencies. Epidemiologists from the state and regional level would be dispatched to assess the situation and how widespread it is, or could become. At that point, communications would be directed to the public in affected areas. In addition to established public health communication channels, like the Health Alert Network, the Office of Emergency Services would be asked to help disseminate accurate information to the public. Recommendations could range from something as basic as a boil water advisory all the way up to communications involving information to the public on the location of sites for mass immunizations or sheltering.

**Other Objectives for This Critical Capacity:**

**Objective 1:** By September 30, 2002, the Bureau for Public Health will conduct a needs assessment for risk communications, with an emphasis on needs at the community level.

**State Plan:** By September 30, 2002 the Bureau for Public Health will survey all of its Offices and Divisions as well local health departments to determine the level of risk communications expertise which currently exists and also ascertain what those surveyed would need to bring their communications capacity up to the needed level.

**Local Plan:** By September 30, 2002, local health departments will complete a self-assessment with assistance from the Bureau for Public Health to determine what level of risk communications expertise exists in their communities and what they would need to bring their risk communications capacity up to the needed levels.

**Evaluation:** 100% of the local health departments and the Offices and Divisions at the state level should have completed the risk communications assessments and recommendations should be summarized.



**Objective 2:** As a key component of a Communication Plan, by July 1, 2002 the Bureau for Public Health should put into effect a Memorandum of Understanding with the Office of Emergency Services outlining the responsibilities of each party for risk communications with the public during a crisis situation.

**State Plan:** Working through the Communications Office of the Department of Health and Human Resources, the Bureau for Public Health should work with the Office of Emergency Services to develop and sign a Memorandum of Understanding outlining the responsibilities of each party.

**Local Plan:** Not applicable. The MOU would be between DHHR/WVBPH and OES.

**Evaluation:** By July 1, 2002, an MOU with OES will be in place.

**Objective 3:** By December 31, 2002, develop a stockpile of informational advisories with authoritative information (i.e. from sources like ATSDR, FEMA) in sufficient numbers for distribution across a wide area in the event of a biological, chemical or other crisis.

**State Plan:** By July 31, 2002 the Bureau for Public Health will have identified the materials to be stockpiled and made arrangements for their storage in a place which is quickly accessible and which allows easy additions or replacements of advisories as new information becomes available.

**Local Plan:** By July 31, 2002 someone will be identified in each local health department who will be the designated recipient of the public health informational advisories and who will make arrangements for their swift dissemination to the public.

**Evaluation:** By October 1, 2002 an initial mail-out will be made to all local health departments to test the effectiveness of the system. Usefulness and understandability of the material will be assessed locally and that information given as feedback to the Bureau for Public Health.

**Objective 4:** By October 1, 2002 Media Directories will be developed and distributed to all local health departments for use in case of a crisis or terrorist event. Each directory will include a section on how to most appropriately work with the media and with DHHR/WVBPH.

**State Plan:** By July 31, 2002 the Bureau for Public Health will have contacted key people in the areas of newspaper publishing, radio and television broadcasting, etc. to gather information for the completion of the directories.

**Local Plan:** By October 1, 2002 all local health departments will have received and distributed to appropriate staff copies of the media directories for use in crisis situations.

**Evaluation:** By October 31, 2002 checks will be made to insure that directories were received and distributed.

**Objective 5:** By July 1, 2002 the Bureau for Public Health and each local health department will designate an official spokesperson and one or more backup spokespersons to talk with the media in the case of a terrorist event.

**State Plan:** By July 1, 2002 the State Health Director will designate the official spokespersons for public health related statements to the media in the case of a terrorist event. Bureau for Public Health staff will be notified as to who has been named and how to refer media inquiries to them.

**Local Plan:** By July 1, 2002, each local health department will designate a key spokesperson and appropriate backups to deal with public health related matters with the media. Local health staff will be informed as to who this is, and the Bureau for Public Health will maintain a list of who has been designated from each local health department.

**Evaluation:** By July 2002, state and local spokespersons will have been identified.

**Objective 6:** By December 31, 2002, develop and train a state-local Risk Communication Advisory Group to further advance communications planning and implementation for the public health community.

**State and Local Plan:** By December 31, 2002 the Bureau for Public Health will insure that four key spokespersons (two from DHHR and two selected from local health department designees) have attended at least two national level trainings in Risk Communication and are prepared to transfer what is learned to the public health community in West Virginia. With this common knowledge framework, these four individuals will serve as an ongoing Risk Communications Advisory Group to help further advance risk communications planning and implementation for the public health community.

**Evaluation:** Four individuals will have attended these trainings by December 31, 2002 and regular meetings of the Risk Communication Advisory Group will be occurring.

**Objective 7:** By April 15, 2003 the identified key spokespersons from state Bureau for Public Health and the 49 local jurisdictions in West Virginia will receive specialized training in health risk communication, with an emphasis on working with the press and the general public.

**State Plan:** By April 15, 2003 a major three-day training session on Risk Communications will be made available to the public health community in West Virginia. This training session will include national experts (such as Vincent Covello or Peter Sandman and CDC Communications officials) and would involve both didactic methods and breakout sessions for practice and simulations. This training will address at a minimum, how to deal with the media in crisis situations, the importance of psychological preparedness to mitigate psychological morbidity from terrorist events, what the points of contact are for authoritative information, dealing with hoaxes and rumors from a communications perspective, and aspects of health literacy and cultural aspects when planning and implementing risk communications to the public.

**Local Plan:** By April 15, 2003 local health departments will commit to send their key spokespersons for training in health communications.

**Evaluation:** By April 15, 2003 one hundred percent of identified key spokespersons at the State and local level in West Virginia will have completed health communications training.

**BUDGET - FOCUS AREA F:  
RISK COMMUNICATION AND HEALTH INFORMATION  
WEST VIRGINIA - 2002-2003**

<b>A. KEY PERSONNEL</b>		<b>\$0</b>
No new positions projected		
<b>B. FRINGE BENEFITS</b>		<b>\$0</b>
N/A		
<b>C. TRAVEL</b>		<b>\$ 13,600</b>
261 In-State	\$4,000	
262 Out-of-State	\$9,600	
<b>D. EQUIPMENT:</b>		<b>\$ 4,000</b>
170 LCD projector	\$4,000	
<b>E. SUPPLIES:</b>		<b>\$ 20,000</b>
054 Supplies	\$20,000	
<b>F. CONTRACTUAL:</b>		<b>\$ 882,000</b>
Contracts for material adaptation	\$12,000	
LHD Implementation Subrecipient Agreements	\$870,000	
<b>H. OTHER</b>		<b>\$10,000</b>
<b>I. TOTAL DIRECT COST:</b>		<b>\$ 929,600</b>
<b>J. INDIRECT COST:</b>		<b>\$ 0</b>
(no personnel)		
<b>K. TOTAL</b>		<b>\$ 929,600</b>

## BUDGET JUSTIFICATION

**A. PERSONNEL** **\$0**  
No new personnel are projected at the state or local level for this section.

**B. FRINGE BENEFITS** **\$0**  
Not applicable.

**C. TRAVEL** **\$13,600**

In-State Travel (\$4000)

In-State travel funds would be used to reimburse state-level staff involved in the Risk Communications trainings, both for pre-training meetings and trainings.

Average estimated cost per trip

10 trips x 330 miles @ .365/mile	\$1,200
10 trips x 3 days @ \$30 per diem	\$ 900
10 trips x 2 nights lodging @ \$70/night	\$1,400
10 trips - Miscellaneous @ \$50	<u>\$ 500</u>
 Total	 \$4,000

Out-of-State Travel (\$9,600)

Out-of-State travel funds would be used to send two local and two state staff (4 people) to 2 national meetings related to risk communications. This would be in support of the Risk Communications Advisory Group in development of the 3 day statewide Risk Communications Training

Average estimated cost per conference

8 trips x Airfare @ \$500	\$4,000
8 trips x 3 days @ \$50 per diem	\$1,200
8 trips x 2 nights lodging @ \$110	\$1,760
8 trips x Registration fees @ \$50	\$ 1,840
8 trips x Ground Transportation @ \$230	\$ 400
8 trips x Miscellaneous @ \$50	<u>\$ 400</u>
 Total	 \$9,600

**D. EQUIPMENT** **\$4,000**

Equipment (\$4000) funds would be used to purchase an LCD projector (Proxima or equivalent) to be used in the training sessions on risk communication.

**E. SUPPLIES** **\$20,000**

The supplies budget would be used to acquire public information materials to be distributed to the general public.

**F. CONTRACTUAL**

**\$882,000**

Contracts would be used to have risk communication materials created specific to the needs of West Virginia.

Material Adaptation (\$12,000)

LHD Implementation Subrecipient Agreements (\$870,000)

Funds for subrecipient agreements to 49 local health jurisdictions covering 55 counties are requested for LHD implementation of plans developed through the local health assessment and planning phase. These funds will be used to address Focus Area F critical capacities at the local level. These funds will be joined with LHD implementation dollars in other focus areas to form a single subrecipient agreement to each LHD to address the critical capacities of this cooperative agreement. Although provided under a single agreement, LHDs will track use of funds by focus area. Distribution of funds will be on a per capita basis.

**H. OTHER**

**\$10,000**

Training

Funds for delivery of a 3-day Risk Communication Training, for approximately 100 people, include the following:

National Speakers' fees:	\$6,000
Room Rental (\$600/day X 3 days):	\$1,800
Hospitality (\$400/day X 3 days):	\$1,200
Developing and printing of training materials and resources	<u>\$1,000</u>
	<b>\$10,000</b>

**I. TOTAL DIRECT COSTS**

**\$929,600**

**J. TOTAL INDIRECT COSTS**

**\$0**

**K. TOTAL COSTS**

**\$929,600**

**FOCUS AREA G:  
EDUCATION  
AND  
TRAINING**

## **FOCUS AREA G: EDUCATION AND TRAINING**

**I.A. CRITICAL CAPACITY:** To ensure the delivery of appropriate education and training to key public health professionals, infectious disease specialists, emergency department personnel, and other healthcare providers in preparedness for and response to bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies, either directly or through the use (where possible) of existing curricula and other sources, including schools of public health and medicine, academic health centers, CDC training networks, and other providers.

**Description and Adequacy of Current Capacity:** In 1994, the WV Bureau for Public Health (WVBPH) created a vision for public health training in a reformed health system (*Public Health Advisory Committee on Education and Training*). This vision was to be guided by four factors: using competencies to match learners' needs with educational resources; nurturing and supporting a training infrastructure that helps each individual identify their own learning needs; creating incentives for learning; and integrating public health workforce development into all academic and public health activities. Eight years later, this vision remains in place within WVBPH and in the State Health Plan. We have achieved some significant milestones, for example, CEPH accreditation of the WVU Department of Community Medicine's MPH Program; WVBPH's partnership with the Southeast Public Health Leadership Institute which has provided leadership training for 45 senior public health workers at state and local levels; a partnership with Southeast Public Health Training Center; collaborations with the Schools of Public Health at Johns Hopkins and UNC-Chapel Hill related to the development of a certificate in core public health concepts; new training activities focused on training in basic public health services made possible through WVBPH's Transitions Project and Turning Point Initiative; a Medicine and Public Health grant (CAHP) that enabled us to conduct CME-approved health officer telephone seminars; and, in cooperation with the WV Public Health Association and WVU Department of Community Medicine, a survey to determine public health workforce continuing education needs. We have suffered some losses, including the retirement of our distance learning coordinator; a weak public health database from the WVDHHR Division of Personnel's automated system; inconsistent funding streams to local health departments, which have severely limited capacities to recruit, retain competent personnel and provide training opportunities and resources; and, limited capacity to implement the HAN/T education and training operational plan. We continue to address challenges, including an aging public health workforce; new and emerging public health threats requiring regular enhancement of skills, often inadequately training workers to perform the essential services of public health; and formidable barriers to receiving necessary training for adequate performance, such as money, time, convenience, relevant courses, course quality and access. Building upon this existing education and training infrastructure, within WVBPH, at the state and local health departments, and in conjunction with private and public partners, we are proposing to build a stronger public health workforce competent in bioterrorism preparedness and response.

**CRITICAL BENCHMARK #14 (Objective 1): Prepare a timeline to assess training needs - - with special emphasis on emergency department personnel, infectious disease specialists, public health staff and other healthcare providers.**

*(See Critical Benchmark #14 timeline attached.)*

By March 31, 2003, conduct a training needs assessment targeting the public health workforce at state and local levels, including an assessment of emergency department personnel, infectious disease specialists, and other healthcare providers.

**State Plan:** By July 30, 2002, (1) negotiate a contract with the North Carolina Center for Public Health Preparedness to create the project, including online space, form to collect data, and place to store data and access it; (2) negotiate a contract with the WVU Department of Community Medicine to analyze and report the data and maintain the system; (3) negotiate a contract with the WVU Center for Rural Emergency Medicine to conduct an evaluation of this objective; (4) coordinate with Focus Area E/e-Health Function # 7: Directories of Public Health and Clinical Personnel.

**Local Plan:** By October 30, 2002, identify a training coordinator in each of the local health departments to facilitate conducting the training needs assessment with WVBPH. .

**Evaluation:** By June 30, 2003, develop and implement a telephone, written, or a face-to-face survey to assess current levels of education pre-and post-distribution of monies. This assessment will include a means to measure what levels of preparation respondents feel is necessary and financially feasible over the long term.

**Objective 2:** By June 30, 2003, assess the existing capacity to conduct training needs assessment and planning for public health and private professionals, and to provide access to training in bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies (including psychological preparedness and support).

**State Plan:** By June 30, 2002, negotiate a contract with WVU Department of Community Medicine, in collaboration with WVU Extended Learning to (1) assess statewide technology resources, including but not limited to satellite, web, IviN (interactive video network), IPTV, and traditional classroom settings; (2) provide a statewide directory of statewide technology resources; (3) make recommendations for accessing training in bioterrorism (including psychological preparedness and support), other infectious disease outbreaks and other public health threats, for West Virginia's public health workforce, emergency department personnel, infectious disease specialists, and other health care providers.

**Local Plan:** By October 31, 2002, the Training Coordinator at each local health department will assist the contractor and WVBPH in assessing technology resources in their individual communities.

**Evaluation:** By January 31, 2003, completion of a statewide directory of technology resources.

**Objective 3:** By August 31, 2003, develop an ongoing plan for meeting training needs through multiple sources.

**State Plan:** By August 31, 2003, the WVBPH Workforce Development Coordinator will develop a statewide, ongoing plan for meeting training needs through multiple sources. This will be completed in coordination with training needs and resources identified in all other Focus Areas.

**Local Plan:** By June 30, 2003, the Training Coordinator at each local health department will develop an ongoing plan for meeting training needs through multiple sources.

**Evaluation:** By August 31, 2003, completion of an ongoing, statewide plan for meeting training needs through multiple sources.

**Objective 4:** By August 31, 2003, develop the capacity at state and local health department levels to facilitate and/or provide education and training sessions and services on bioterrorism, other infectious



disease outbreaks, and other public health threats and emergencies (including psychological preparedness and support).

**State Plan:** (1) By July 31, 2002; define the relationship of “distance learning coordination” among WVDHHR Office of Communication, WVBPB and the CDC Public Health Training Network, including defining the roles and responsibilities of the distance learning coordinator and redesignating the distance learning coordinator; (2) By October 31, 2002 hire an individual to provide distance learning logistics coordination to facilitate the provision of education and training sessions and services at the state and local health departments; (3) By March 31, 2003, provide appropriate training to all distance learning site facilitators; (4) By August 31, 2003, develop a plan for assuring that every West Virginia public health jurisdiction has access to distance learning capacities in the form of an identified location to receive satellite broadcasts and a higher level of Internet connectivity, video, and imaging capacity to receive live feeds.

**Local Plan:** By December 31, 2002, the Training Coordinator at each local health department will identify a distance learning site facilitator to facilitate the provision of education and training sessions and services.

**Evaluation:** By August 31, 2003, success will be measured by successful hiring of a distance learning logistics coordinator, identification and training of distance learning site facilitators, and a plan for assuring statewide access to satellite broadcasts and other distance learning modalities.

**Objective 5:** By August 31, 2002, convene an expert panel on workforce development to (1) develop formal partnerships with schools of public health and medicine, other academic institutions, and other organizations for the provision of education and training. (2) ensure educational expertise and review of training program content and curricula by: (a) developing/providing training for a speaker’s bureau; (b) providing training in core public health skills to program staff; and (c) supporting costs (travel and course fees) for training critical program staff using existing courses.

**State Plan:** By May 31, 2002, negotiate a contract to hire an individual knowledgeable in workforce development to convene a series of meetings with an expert panel to accomplish activities as described in Objective # 5.

**Local Plan:** By September 30, 2002, identify local health department representatives to participate in this expert panel on workforce development.

**Evaluation:** By August 31, 2003, success will be measured by completion of activities as described in Objective # 4.

## **CRITICAL BENCHMARK # 14**

### **Timeline for Assessment of Training Needs**

***Prepare a timeline to assess training needs with special emphasis on emergency department personnel, infectious disease specialists, public health staff, and other healthcare providers.***

<b>ACTIVITY</b>	<b>TIMEFRAME</b>
Objective # 1: Conduct a training needs assessment.	July 30, 2002 - March 31, 2003
Objective # 2: Assess the existing capacity to conduct training needs assessment and planning and provide access to training.	June 30, 2002 - June 30, 2003
Objective # 3: Develop an ongoing plan for meeting training needs through multiple sources.	June 2002 - August 31, 2003
Objective # 4: Develop the capacity at the state and local health department level to facilitate and/or provide education and training sessions and services.	July 31, 2002 - August 31, 2003
Objective # 5: Convene an expert panel on workforce development to (1) develop formal partnerships for the provision of education and training; (2) ensure educational expertise and review of training program content and curricula.	August 31, 2002 - August 31, 2003

**FOCUS AREA G: EDUCATION AND TRAINING  
BUDGET  
WEST VIRGINIA**

<b>A.</b>	<b>KEY PERSONNEL</b>		<b>\$ 25,000</b>
<b>B.</b>	<b>FRINGE BENEFITS</b>		<b>\$ 9,686</b>
	010	Civil Service Fee	\$ 215
	011	Social Security(7.65%)	\$1,913
	012	Employee Insurance	\$4,000
	014	Worker's Compensation(4.73%)	\$1,183
	016	Pensions and Retirement(9.5%)	\$2,375
<b>C.</b>	<b>TRAVEL</b>		<b>\$ 4,729</b>
	261	In-State	\$ 989
	262	Out-of-State	\$3,740
<b>D.</b>	<b>EQUIPMENT</b>		<b>\$2,500</b>
	170	Computer	\$2,500
<b>E.</b>	<b>SUPPLIES</b>		<b>\$2,750</b>
	020	Office Supplies	
<b>F.</b>	<b>CONTRACTUAL</b>		<b>\$396,000</b>
	025	Other	\$106,000
		LHD Implementation of Subrecipient Agreements	\$290,000
<b>H.</b>	<b>OTHER</b>		<b>\$6,324</b>
	022	Rent allocation	\$ 2,284
	023	Utilities	\$ 549
	025	General Janitorial and Security Service	\$ 391
	053	Postage	\$ 1,600
	077	Printing	\$ 1,500
<b>I.</b>	<b>TOTAL DIRECT COSTS</b>		<b>\$446,989</b>
<b>J.</b>	<b>INDIRECT COST (30% of Salary)</b>		<b>\$ 3,675</b>
<b>K.</b>	<b>TOTAL COSTS</b>		<b>\$450,664</b>

## BUDGET

### KEY PERSONNEL

Name and Position Title	Annual Salary Rate	% time	No. Months Budget	Total Requested
Distance Learning Coordinator (new)	30,000	100	10	<b>25,000</b>
<b>Fringe Benefits</b>				<b>9,686</b>
<b>TOTAL</b>				<b>\$34,686</b>

## BUDGET JUSTIFICATION

**A. PERSONNEL \$25,000**

**Distance Learning Logistics Coordinator \$25,000**

Technical assistance in securing satellite receiving sites and other technical support necessary for distance learning activities to be provided. It is estimated that this position will be in place for the last 10 months of the budget period.

It has not yet been determined where this position will be located; however the activities of this position will be coordinated with activities of the Workforce Development Coordinator, who is also the Interim State Distance Learning Coordinator and with WVDHHR Office of Communications.

**B. FRINGE BENEFITS \$9,686**

West Virginia fringe benefits requirements include the following based on the given calculations; Social Security (7.65%), Employee Health Insurance x 10 months (\$400/month), Worker's Compensation (4.73%), Civil Service Fee (\$215 per FTE), and Pension and Retirement (9.5%).

**C. TRAVEL \$ 4,729**

Instate Travel: \$989

Distance Learning Logistics Coordinator

- Personal Auto Expense  
2 trips/month x 8 months  
x 25 miles r/t x \$.345/mile \$288
  - 2 trips x 330 miles r/t x \$.345/mile) \$241
  - 2 nights lodging x \$70/night x 2 trips \$280
  - 2 days per diem x 2 trips (\$34/day) \$180
- \$989

**Distance Learning Logistics Coordinator**

The instate travel for the Distance Learning Logistics Coordinator will include:

(1) Two trips/month/8 months for travel to WV Education Network Studio, approximately 2 times per month for education and training program planning and production of bioterrorism and other public health related educational activities.

(2) Two trips/over 8 months to travel to West Virginia University in Morgantown, WV, to observe distance learning and other learning modalities, and to assist in the planning and coordination of training programs/systems in the LHD jurisdictions.

Out-of-State Travel: \$3,740

Workforce Development Coordinator and 1 Local Health Department Representative

• 1 trip x 2 persons x \$1,000 airfare	\$2,000
• 4 days per diem x \$50/day x 2 persons	\$ 400
• 3 nights lodging x \$110/night x 2 persons	\$ 660
• Meeting Registration \$240 x 2 persons	\$ 480
• Ground Transportation \$150 x 2 persons r/t	\$ 100
• Miscellaneous \$50 x 2 persons	<u>\$ 100</u>
	\$3,740

The Workforce Development Coordinator, (the Interim State Distance Learning Coordinator) and 1 local health department representative will travel to Atlanta, Georgia in the fall of 2002 to attend and participate in the Annual Public Health Distance Learning Conference.

**D. EQUIPMENT** **\$2,500**

- Desktop Computer Work Station for 1FTE - \$2,500

**E. SUPPLIES** **\$2,750**

- Office Supplies (\$600)  
Desk supplies are calculated at \$60/month for 10 months.
- Video Cassette Tapes x 300 @ \$3.00 = \$900.
- Tape Duplicating Costs @ 5 Teleconferences x 70 copies = \$1,250

General office supplies will be used by Distance Learning Logistics Coordinator to carry out daily activities of the program. Video cassette tapes will be used to tape five satellite broadcasts, duplicate seventy tapes and distribute to every local health department and others by request.

**F. CONTRACTUAL** **\$396,000**

LHD Implementation Subrecipient Agreements (\$290,000)

Funds for subrecipient agreements to 49 local health jurisdictions covering 55 counties are requested for LHD implementation of plans developed through the local health assessment and planning phase. These funds will be used to address Focus Area G critical capacities at the local level. These funds will be joined with LHD implementation dollars in other focus areas to form a single subrecipient agreement to each LHD to address the critical capacities of this cooperative agreement. Although provided under a single agreement, LHDs will track use of funds by focus area. Distribution of funds will be on a per capita basis.

Other:

1) North Carolina Center for Public Health Preparedness

\$25,000 to assist State and local health departments to develop and conduct a statewide training needs assessment.

2) West Virginia University Department of Community Medicine

\$25,000 to assist State and local health departments to analyze, report and maintain a statewide training needs assessment.

3) West Virginia University Center for Rural Emergency Medicine

\$25,000 to assist State and local health departments to develop an evaluation of a statewide training needs assessment.

4) West Virginia University Department of Community Medicine, in collaboration with the WVU Extended Learning Program

\$25,000 to assist State and local health departments to assess statewide technology resources; develop a directory of technology resources; and make recommendations for accessing training in bioterrorism, other infectious disease outbreaks and other public health threats.

5) Workforce Development Consultant

\$6,000 to convene a series of meetings with an expert panel of persons knowledgeable in the area of public health workforce development at the state, local, academic and community health care levels to guide the development, over time, and ensure the delivery of, appropriate education and training, as described in Focus Area G objectives.

**H. OTHER \$6,324**

**Rent Allocation: \$2,284**

Office space for the Distance Learning Logistics Coordinator:

**Utilities: \$549**

**General Janitorial and Security Service: \$391**

**Postage: \$1,600**

It will be necessary to mail a variety of correspondence, training announcements, and instructional support materials such as videotapes. \$200 month x 8months

**Printing/Copying: \$1,500**

- Reports and other education and training materials.

**I. TOTAL DIRECT COSTS \$446,989**

**J. TOTAL INDIRECT COSTS (14.7% OF DIRECT PERSONNEL EXPENDITURES \$3,675**

**K. TOTAL DIRECT AND INDIRECT COSTS \$450,664**

**COLLABORATION**

**AND**

**SUPPORT**



**INDIVIDUALS INVOLVED IN DEVELOPING CDC  
“PUBLIC HEALTH PREPAREDNESS AND RESPONSE FOR BIOTERRORISM”  
COOPERATIVE AGREEMENT APPLICATION**

**FOCUS AREA A**

Cathy Slemp, MD, MPH	Executive Director Threat Preparedness, WVBPH
Stanley Mills	President, WV Association of Local Health Departments
Members of the State-Local Public Health Threat Preparedness Oversight Committee	(See attached)

**NPS WORKGROUP**

Paul Howard	Office of Emergency Services
Jim Sowards	Office of Emergency Medical Services, WVBPH
Elizabeth Scharman, PharmD	Poison Control Center
Danae Bixler, MD, MPH	Division of Surveillance and Disease Control, WVBPH

**FOCUS AREA B**

Stan Mills	President, WV Association of Local Health Departments
Omayma Touma, MD	Cabell-Huntington Health Department
Carl Berryman, DVM, MPH	Region 3 Regional Epidemiologist
Melody Rickman	Mercer County Health Department
Steve Bayer	Mid-Ohio Valley Health Department
Loretta Haddy	Division of Surveillance and Disease Control, WVBPH
Danae Bixler, MD, MPH	Division of Surveillance and Disease Control, WVBPH
Harlan Amandus, PhD	Division of Surveillance and Disease Control, WVBPH
Jane Rooney, DVM	Division of Surveillance and Disease Control, WVBPH
Ram Nambier, MD	Division of Surveillance and Disease Control, WVBPH
Andrea Labik, ScD	Office of Lab Services, WVBPH
Ron Forren	Office of Environmental Health Services, WVBPH

**FOCUS AREA C**

Andrea Labik, ScD	Office of Lab Services, WVBPH
Jennifer Ross	Office of Lab Services, WVBPH
Doug McElfresh	Office of Lab Services, WVBPH
Christi Clark	Office of Lab Services, WVBPH
Sharon Cibrik	Office of Lab Services, WVBPH
Eloise Boggs	Office of Lab Services, WVBPH
Charlotte Billingsley	Office of Lab Services, WVBPH
Larry Duffield	Office of Lab Services, WVBPH
Helen Hutchinson	Office of Lab Services, WVBPH
Norman Moore	Mineral County Health Department
Jane Rooney, DVM	Division of Surveillance and Disease Control
Dee Bixler, MD, MPH	Division of Surveillance and Disease Control
Harlan Amandus, PhD	Division of Surveillance and Disease Control

**FOCUS AREA E**

Norman Moore	Mineral County Health Department
Jay Jack	Berkeley County Health Department
Bill Kearns	Morgan County Health Department
Loretta Haddy	Division of Surveillance and Disease Control, WVBPH
Susan Griffith Chapman	Office of Rural and Community Health Services, WVBPH
Mickey Plymale	Wayne County Health Department
Kay Shamblin	Public Health Nursing and Administration, WVBPH
Roy Gooding	Kanawha-Charleston Health Department
Ed Dolly	Management Information Services, DHHR
Gordon Garrett	Health Information Systems Coordinator, WVBPH
Kathy Moore	Management Information Systems, DHHR

**FOCUS AREA F**

Tom Sims	Office of Epidemiology and Health Promotion
Norman Moore	Mineral County Health Department
Joseph Thornton	Office of Communications, DHHR
Bob Hart	Office of Environmental Health Services
Keith Dalton	Office of Epidemiology and Health Promotion
Joyce Baisden	Wayne County Health Department
Cathy Taylor	Commissioner's Office, WV BPH

**FOCUS AREA G**

Mickey Plymale	Wayne County Health Department
Gary Hamilton	Mid-Ohio Valley Health Department
Norman Moore	Mineral County Health Department
Art Adams	Monongalia County Health Department
Terri Burton	Monongalia County Health Department
Sandria Glasscock	Grant County Health Department
Henry G. Taylor, MD, MPH	Commissioner, WV Bureau for Public Health
Nancy J. Tolliver	Tolliver Consulting
Alan Ducatman, MD, MSc, Chair,	WVU Department of Community Medicine
Janet Williams, MD	WVU Center for Rural Emergency Medicine
Janet Briscoe	Public Health Nursing and Administration, WVBPH
Jeffrey Smith	Office of Environmental Health Services, WVBPH
Michele Cochran	Office of Environmental Health Services, WVBPH
John Law	Office of Communications, WVDHHR
Joseph Thornton	Office of Communications, WVDHHR
Pam Cutright, D.Ed	Coordinator, WVU Extended Learning
	Kanawha Valley and Southern WV Regional Center
Ram Nambier	Division of Surveillance and Disease Control, WVBPH
Sharon Cibrik	Office of Laboratory Services, WVBPH
Mark King	Division of Emergency Medical Services, WVBPH
Eloise Boggs	Office of Laboratory Services, WVBPH
Harlan Amandus, PhD	Division of Surveillance and Disease Control, WVBPH
Gordon Garrett	Health Information Systems Coordinator, WVBPH
Susan Griffith-Chapman	Director, HAN, WVBPH
Tom Sims	Division of Health Promotion, WVBPH

## **STATE-LOCAL PUBLIC HEALTH THREAT PREPAREDNESS OVERSIGHT COMMITTEE**

Jim Felson, MD, MPH	Kanawha-Charleston Health Department
Omayma Touma, MD	Cabell Huntington Health Department
Art Adams	Monongalia County Health Department
Susan Bennett	Webster County Health Department
Gary Hamilton	Mid-Ohio Valley Health Department
Anita Ray	Putnam County Health Department
Karen Dawson	Clay County Health Department
Stan Mills	President, WV Association of Local Health Departments
Kay Shamblin	Public Health Nursing and Administration, WVBPH
Loretta Haddy	Division of Surveillance and Disease Control, WVBPH
Chris Curtis, MPH	Deputy Commissioner, WVBPH
Janet Richards	Financial Officer, WVBPH
Nancye Bazzle	Office of Rural and Community Health Services, WVBPH
Cathy Slemp, MD, MPH	Executive Director Threat Preparedness, WVBPH
Andrea Labik, ScD	Office of Lab Services, WVBPH
Ron Forren	Office of Environmental Health Services, WVBPH

## **LETTERS OF SUPPORT ATTACHED TO APPLICATION**

WV Association of Local Health Departments

Individual Local Health Departments

Joint Letter of Endorsement to the Governor from Secretaries of the Department of Health and Human Resources and the Department of Military Affairs and Public Safety

Governor Wise