

**Wyoming Department of Health
Public Health Laboratory
Bioterrorism Preparedness Program**

**BIOTERRORISM COMMUNITY LABORATORY CAPACITY BUILDING GRANT
YEAR FIVE**

Grant Guidance

I Key Dates (target dates):

Application Deadline – turn in at
Laboratory Manager Workshop, Saratoga,
Wyoming March 13, 2008

First progress report to be mailed the first week of June, 2008.

NOTE: APPLICATIONS SENT LATE WILL NOT BE FUNDED

First allotment funding distribution dependent on completing stipend paperwork supplied at the workshop.
Second allotment funding distribution dependent on completing first progress report and stipend paperwork supplied with the progress report mailing in June of 2008.

II WDH-PHL Grant Oversight Contact Information:

For paperwork, technical, and financial assistance:

Gale Stevens, MT (ASCP) – Grant Administrator
307-777-7431 gale.stevens@health.wyo.gov

III Funding Opportunity:

NOTE: This document has changed from last year and it is important that it be read completely prior to completion of an application.

Based on application and eligibility individual laboratories may be awarded funds. Eligibility requirements are based on compliance to Year Four Grant Requirements and interested applications are directed to review those requirements. Ineligible facilities that submit grant applications will be notified that their application can not be accepted.

Grant requests should address the building of capacity necessary to meet the specific goals of this project. Project goals are addressed under Section VII Funding Description.

Maximum award in 2 allotments:

Allotment 1 = \$4,500.00

Allotment 2 = \$1,800.00

IV Source of Funding

Funding for this project is from the 2007-2008 Centers for Disease Control and Prevention Bioterrorism Preparedness Grant and the Pandemic Influenza Preparedness Grant.

V Eligible Applicants

Laboratories that meet the following criteria are eligible to apply for and receive a grant under this program. Please pay particular attention to item 4 and contact the grant administrator listed above with any questions:

- 1 Located within the State of Wyoming
- 2 Operating as a clinical laboratory with CLIA certification
- 3 Perform basic microbiological culturing and organism testing on specimens and isolates recovered from humans, as associated with sentinel laboratory activities within the Laboratory Response Network
- 4 Facilities that were awarded funding in Year Four must have met all obligations under the grant contract and meet all deadlines for Progress Reporting to be eligible for funding during Year Five.

VI Award Process

Should requests exceed available funds, applications will be graded and awards directed by the Wyoming Public Health Laboratory Director, the Bioterrorism Laboratory Supervisor and Laboratory Program Advisor. Consider the limited funding when making your requests and concentrate on thoroughly justifying your requests. Requests will be awarded based on your justification and primary project goals will be given first priority in this process.

VII Funding Description

A Purpose: The purpose of the Bioterrorism Community Laboratory Capacity Building Grant, Allotment 1, is to assist eligible Wyoming state community clinical laboratories to improve capacity for and response to naturally occurring or event driven infectious disease occurrences, caused by microorganisms considered to be associated with bioterrorism. Allotment 2 specifically focuses on assisting laboratories to prepare to respond to disease outbreaks, specifically novel viruses capable of causing a pandemic event. This project is designed to enable laboratories in the state of Wyoming to build capacity and capability necessary to safely recognize, identify and respond to a natural disease outbreak or an unannounced bioterrorism event by providing the funding to build laboratory capacity in the following areas:

1 Safety for laboratories and personnel

- a A primary goal of this project in Year Five is to promote safety for laboratories and personnel.
 - i Allotment 1 - Primary safety goals address individual identified safety areas within the lab.
 - ii Allotment 2 – Primary safety goals to enable laboratories to enhance preparedness capabilities in the event of a pandemic by focusing on personal protection equipment and proper use of such.

2 Laboratory staff training and education

- a A Primary goal for Allotment 1 of the project is to reinforce training in handling, processing and presumptive identification of isolates that have

the potential to be bioterrorism agents. Emphasis will be placed on continuing education for laboratorians to assist staff to meet required continuing education units.

- b A primary goal of Allotment 2 is to seek educational avenues that promote utilization of BSLII using BSLIII practices, which will increase protection of laboratorians if ever a novel strain capable of causing a pandemic is encountered in their lab.
- c A secondary goal for Allotment 1 of the project continues to focus on training for all laboratorians who may package and ship infectious substances. **Laboratories should assess their current training program in this area and request funding based on need.** Shipment of infectious substances workshops will be offered again through the State of Wyoming in the late summer, which will address this need. Individual facilities may still require in-house reference and training materials to meet this need until workshops become available. The National Laboratory Training Network, at NLTN.org, has a “Shipping and Handling Workshop-In-a-Box”, which could meet these training needs. NLTN’s lending library is free of charge.

3 Laboratory equipment enhancement

- a Communication and Information Technologies (Allotment 1)
 - i A primary goal of this project continues to be that each and every laboratory in the state reviews their capability to receive and transmit critical information using email, web-based information technology, and facsimile and update as needed.
 - ii Awards for any IT updates must be justified to show the need for the update before funding will be awarded.
- b **Laboratory Instrumentation equipment**
 - i A primary goal of Allotment 1 of this project focuses on supportive equipment needs to enhance performance and testing in microbiology. Large equipment needs require justification and applicants must consider limited funds in this grant and adjust their requests accordingly.
 - ii A primary goal of Allotment 2 is identifying Influenza testing capability and needs in order to enhance these capabilities.

B Funding Mechanism: To request funding under this project qualified laboratories must submit a Grant Application (Attachment A). **Applications received after the deadline (Section I above) will not be considered for funding.** Laboratories that submit applications for funding associated with this project will be notified of their funding award once the grading and evaluation process has been completed. Awardees will be expected to meet the project responsibilities of this grant that will include participation in State sanctioned proficiency testing and periodical progress reports. Continuing communication with the Grant Administrator throughout the year will provide awardees information pertaining to these responsibilities.

C Grant Time Period:

- Applications returned to Grant Administrator by March 13, 2008 (Laboratory Manager Workshop).
- Application review the week of March 17, 2008
- Fund distribution the week of March 24, 2008
- First Progress Report and Allotment 2 paperwork distributed the first week of June, 2008
- Second fund distribution approximately the first week of July, 2008
- Final Progress Report distributed in November, 2008
- Grant process complete by December 30, 2008

D Reporting Requirements: Grant recipients will be expected to provide two progress reports. The first progress report will be distributed the first week of June, 2008, and will include the stipend paperwork required to move on to Allotment 2. Upon completion of the progress report and the stipend paperwork, the second allotment will be distributed. The final progress report will be distributed approximately 4 months after the 2nd allotment is distributed.

E Activities: Activities supported under this grant project include specific laboratory capacity building enhancements as described below (1-4). Applicants are encouraged to seek funding for all activities that would build laboratory response capacity but there is no requirement to address all areas. This project is not intended to support research involving human subjects; therefore no such research would be supported by this project. The listed items should act as a guide for evaluating the need and potential requests for an individual laboratory and is not considered all-inclusive. Requests for activities and items not specified in this listing will also be considered.

1 Safety for laboratories and laboratorians

Safety is considered of primary importance to the project. Applicants are encouraged to submit applications, which will improve overall microbiology laboratory facility safety, as well as enhancing safety measures offered to all laboratorians working in the microbiology sections of the laboratory. To aid in identification of minimum desired safety expectations applicants are referred to the *Biosafety in Microbiological and Biomedical Laboratories (BMBL) 5th Edition*, available at: <http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm>

Requests for funding in this area should be considered at the following three levels. Suggested activities and items to consider for funding include:

a Laboratory Facilities or Physical Plant

- Eyewash station modifications
- Foot pedal sink modifications
- Modification to transfer from gas Bunsen burners to electric incinerators
- Basic decontamination and disinfection equipment

b Personal Protective Equipment

- Respirators (N95 mask style respirators)
- PAPR (personal powered air purifying respirators)
- Face Shields
- Protective Eye Coverings
- Disposable laboratory coats, suits, gloves

c Adaptation of Existing Laboratory Equipment to Increase Safety

- Sealed Rotor heads for existing centrifuges
- Sealed Sample Cups for existing Centrifuges
- Pipeting devices
- Spill Kits
- Electric incinerators

2 Training and Education for Laboratorians

Training is foundational to building capacity and capability to respond to either naturally occurring or event driven infectious disease occurrences. Applicants are encouraged to maximize both 1) the number of individuals who can be trained with a specified request and 2) the variety of training topics addressed by proposed training activities. Request should address training areas that will support laboratorians' ability to work safely and effectively as well as the skills and knowledge to presumptively identify surrogate and infectious agents that could be isolated from human clinical specimens during an outbreak, event or sporadic occurrences. Training and education activities that would be considered for funding include:

a Topics for Training and Education

- Biosafety
- Packaging and Shipping Infectious Substances
- Respirator Fit-Testing
- Refresher Courses in Microbiology
- Isolation & Preliminary Identification of Agents of Bioterrorism
- Antimicrobial Susceptibility Testing
- CAP Laboratory Preparedness Survey

b Mechanisms for Training and Education Activities

- Purchase of topic specific CD-Rom or DVD
- Funding to facilitate on-line training and education
- Funding to facilitate on-site in-services of specific topics using local or regional experts
- Funding to facilitate a maximum of three (3) laboratorians attendance at in-state training opportunities during a one-year period.
 - State professional meetings
 - Regional training opportunities
 - Registrations
 - Travel
 - Lodging & Meals

- Funding to facilitate a maximum of one (1) laboratorian attendance at out of state training opportunities during a one-year period.
 - National training or profession society meeting
 - Registrations
 - Travel
 - Lodging & Meals
- Textbook and Reference manuals
 - Current edition of a clinical microbiology textbook
 - American Society for Microbiology's Clinical Microbiology Textbook
 - Koneman's Diagnostic Microbiology
 - Bailey & Scott's Diagnostic Microbiology
 - CD-Rom based reference materials
 - Harrison's Textbook of Infectious Diseases
- Institutional Membership in American Society for Microbiology or other professional laboratory organization
- State and Regional professional society memberships

3 Laboratory Equipment Enhancement

a Communication and Information Technology Capacity

Communication and information technology capability is essential for building capacity for timely, efficient receipt of critical information necessary to respond to natural and event driven occurrences associated with infectious diseases. Laboratories should evaluate their information technology and communication systems to determine how they could be upgraded or expanded to allow for emergency transmissions from public health officials at the state and county level. Applicants are encouraged to develop requests that will facilitate transfer of information using computer technology and fax. Specific communications and information technology requests that would be considered for funding are itemized below and include hardware, software and external devices to upgrade computer information systems so as to allow for high-speed Internet access, digital recording and transmissions, Read/WriteCD-Rom and DVD information capabilities and the ability to receive and transmit health alert transmissions using a dedicated fax. Requests for communication and information technology capacity building activities not listed here will be considered as well.

- Dedicated Lab Computer technology equipment with state-of-the-art specifications
 - CPU
 - Monitor
 - Printer/Fax/Scanner
 - CD-RW
 - DVD
 - External devices
 - High-speed Internet connection capabilities

- Software
- One time costs associated with hook-up to high speed internet
 - Wiring
 - Modem
 - Connection Installation Fees
- Dedicated laboratory FAX
 - Wiring
 - Fax machine
 - Connection installation fees

b Laboratory Instrumentation Equipment

Basic instrumentation is critical for efficient microbiological testing. Requests specifying a need for laboratory equipment that would enhance capacity to isolate and presumptively identify infectious agents that have the potential to be associated with outbreaks, events or sporadic occurrences will be considered based on individual laboratory need. Requests in this area should also address equipment that can enhance laboratory safety, increase efficiency, and enhance capacity both for existing testing volumes and to prepare for surge capacity associated with an outbreak or event. Items listed below are intended to promote such capacity and capability building, but should be considered as suggested. Requests for equipment and instrumentation not listed here will be considered based on individual laboratory need.

- Incinerator
- Vortex
- Water bath
- Heating Block
- Plate rotator/shaker
- Hanging drop slides for motility testing
- Gram Staining racks
- Culture plate magnifiers
- Micrometers
- Incubators

4. Pandemic Influenza Preparedness (Allotment 2)

a. In the event of a pandemic, biosafety will become the laboratorian's first line of defense to protect against laboratory exposure and infection with a novel viral strain. With that in mind, it is important for our laboratories to begin considering their biosafety practices, how they can be improved, and what can be done to enhance our response capabilities in the event of a novel viral strain appearing in the state.

It is noted that there is crossover from the first and second allotment goals. Consider this as you plan your requests, remembering that the second allotment must be used specifically for Pan Flu Preparedness. If there are articles you are considering requesting with Allotment 1, and feel that they also could be covered by Allotment 2, consider moving those purchases to this area so you can utilize the first allotment for other needs.

- Tabletop Hoods for influenza testing
- Rapid Test Kits
- Educational opportunities based on increased biosafety
- PAPR's
 - Extra battery pack and supplies
- Educational opportunities based on use of PAPR equipment