

DEPARTMENT OF HEALTH AND HUMAN SERVICES

**AGENCY:** U.S. Department of Health and Human Services (HHS), Assistant Secretary for Preparedness and Response (ASPR), Office of Preparedness and Emergency Operations (OPEO), Division of National Healthcare Preparedness Programs (DNHPP)

**FUNDING OPPORTUNITY TITLE:** Announcement of Availability of Funds for the Hospital Preparedness Program, Pandemic Influenza Supplement for Medical Surge Capacity and Capability

**ANNOUNCEMENT TYPE:** New Cooperative Agreement

**Funding Opportunity Number:** Not Applicable

**CFDA NUMBER:** 93.889

**Key Dates:** To receive consideration, applications **must be received** no later than 5:00 p.m. Eastern Standard Time on **October 9, 2007**, through one of the three application mechanisms specified in Section IV.

**LFUNDING OPPORTUNITY DESCRIPTION**

**1. Purpose**

The Hospital Preparedness Program (HPP) has provided funding to 62 awardees since fiscal year (FY) 2002 to increase the capacities and capabilities in hospitals and supporting healthcare entities (i.e., poison control centers, community health centers and Emergency Medical Services) to plan for, respond to and recover from mass casualty events. The focus of the funding to date has been on all hazards planning. In FY 2006 the HPP required all award recipients to address a Pandemic Influenza (PI) scenario in terms of the current capabilities associated with personnel, equipment and systems, planning, training and exercises. The results show a wide range of preparedness across the country specific to hospitals and healthcare systems. This funding is authorized under section 319C-2 of the Public Health Service (PHS) Act (42 U.S.C. 247d-3b).

The Centers for Disease Control and Prevention (CDC) has awarded two phases of supplemental funding specific to Pandemic Influenza preparedness. These funds have been used to address public health preparedness efforts at the State and local level, including activities regarding Medical Surge. HHS, in coordination with subject matter experts, and vetted through Federal, state, local and territorial partners, has developed the *HHS Guidance on Federal and State Stockpiles of Critical Medical Supplies for an Influenza Pandemic* which provides recommendations regarding critical medical material requirements for stockpiling by the SNS and States to respond to the diversity of needs presented by a pandemic. This document is used as a foundation in the development of this funding guidance.

The primary purpose of this supplemental funding is for establishing stockpiles of critical medical equipment and supplies, as well as developing plans for maintenance, distribution and sharing of those resources. For the purpose of this announcement the term stockpile is defined broadly to include “virtual” stockpiles such as increased base level quantities in hospitals or private sector distribution chains. Submissions that propose and fund creative solutions that meet the objectives of increased quantities of critical material while minimizing individual hospital storage and/or carrying costs are encouraged as part of this project.

Program activities should focus on the enhancement or establishment of stockpiles at the State and sub-State regional levels. These stockpiles should be accessible to hospitals and healthcare partners in the event of an influenza pandemic. In addition, this funding may also be used to support the planning and development of alternate care sites (ACS). The only mandatory activity under this supplement is that awardees must complete at least one exercise specifically related to medical surge and pandemic influenza. This requirement can be fulfilled by either conducting or participating in an exercise within the State that includes a medical surge component (Please refer to page 5 – **Exercises**).

## **2. Program Activities**

Award recipients should submit a comprehensive summary of the State’s ongoing medical surge activities regarding pandemic influenza, regardless of the funding source. In addition, applicants must provide a summary specific to the sub-capabilities listed below (i.e., Equipment/Supplies, Alternate Care Sites (ACS), and Mortuary Services/Supplies). Based on those summaries, the applicant shall identify needs, prioritize activities from the list below, develop goals and objectives and justify funding for one or all of the allowable sub-capabilities and activities.

States are encouraged to use models such as CDC’s FluSurge 2.0 to assist planners in estimating the surge demand for hospital-based services and the Agency for Healthcare Research and Quality (AHRQ) Emergency Preparedness Resource Inventory (EPRI) tool to allow local or regional planners to assemble an inventory of critical resources that would be useful during an event.

Award recipients should work with established Pandemic Influenza Preparedness Committees to coordinate ongoing activities. In addition, award recipients should work closely with hospitals, urgent care facilities, other ambulatory care facilities, public health, long term care facilities, nursing homes, home health care, community health centers, primary care offices, mental health and substance abuse treatment facilities, emergency management and other first responders when developing a work plan.

## **Sub-Capabilities and Allowable Activities:**

### **A. Equipment/Supplies**

#### 1) Ventilators, Ancillary Supplies and Oxygen

The Federal Government has identified the need for stockpiling ventilators and ancillary equipment that may be used during an influenza pandemic. Although CDC is working to acquire additional ventilators for the Strategic National Stockpile (SNS), it is recommended that States work to enhance local supplies through State and sub-State regional stockpiles. Applications submitted for the purchase of ventilators must address plans for storage, distribution, maintenance, and training.

Stockpiled ventilators should be able to operate without compressed gasses since oxygen supplies during a pandemic event may be limited. However, it is still recommended that States consider access and availability of oxygen during planning efforts.

**States are strongly encouraged to follow the recommendations from the *HHS Guidance on Federal and State Stockpiles of Critical Medical Supplies for an Influenza Pandemic* that are provided in Appendix A, when considering the purchase of ventilators and ancillary supplies.**

#### 2) Personal Protective Equipment (PPE) and Infection Control Supplies

Award recipients should ensure adequate amounts and types of PPE to protect current and additional healthcare personnel (e.g., volunteer providers) that would be utilized during an influenza pandemic. Allowable purchases of PPE include but are not limited to: surgical gowns, gloves, surgical masks, respirators, face shields, goggles, and alcohol hand hygiene gel.

Please refer to CDC's *Interim Guidance on Planning for the Use of Surgical Masks and Respirators in Health Care Settings during an Influenza Pandemic* at [www.pandemicflu.gov/plan/healthcare/maskguidancehc.html](http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html) for more detailed recommendations regarding masks and respirators. States should also address plans for storage and distribution of these resources.

**States are strongly encouraged to follow the recommendations provided in Appendix A when considering the purchase of PPE and Infection Control Supplies.**

## **B. Alternate Care Sites (ACS)**

Award recipients are encouraged to develop a comprehensive strategy for alternate care within their States to provide care to patients outside of the hospital setting. Establishment of alternate care sites – ACS (e.g., schools, hotels, airport hangars, gymnasiums, armories, stadiums, convention centers) is critical to providing supplemental surge capacity to the healthcare system, with the goal of providing care and allocating scarce equipment, supplies, and personnel. Planning should therefore include thresholds for altering triage algorithms and otherwise optimizing the allocation of scarce resources. Effective planning and implementation will depend on close collaboration among State and local health departments (e.g., State Public Health Agencies, State Medicaid Agencies, State Survey Agencies), provider associations, community partners, emergency management, mental health and substance abuse treatment facilities, and neighboring and regional healthcare facilities. States may use this supplemental funding to augment planning and implementation activities already underway using FY 2006 HPP funds and/or proposed for the FY 2007 HPP cooperative agreement project period. Activities that can be funded include but are not limited to:

- Purchase of equipment/supplies (i.e., IV bags, tubing and pumps);
- Development of staffing plans;
- Training/Exercises;
- Planning for supply/re-supply considerations; and
- Development of operational plans and how they coordinate with other State and Federal assets.

**States are strongly encouraged to follow the recommendations provided in Appendix A when considering the purchase of supplies.**

## **C. Mortuary Services/Supplies**

Award recipients should continue to develop fatality management plans working with healthcare entities, public health departments, and the State Chief Medical Examiners office and/or jurisdictional Medical Examiner/Coroners. States are encouraged to build plans based on the estimated number of fatalities expected during a pandemic. Planning should address the need for expanded refrigerated storage capacity and body bags, and delineate roles and responsibilities of all agencies involved in mass fatality management. Recipients should consider the cultural, religious, legal and regulatory issues involved with the respectful retrieval, tracking, transportation, identification, death certificate completion, and disposition of the deceased. Allowable activities under this sub-capability include:

- development or enhancement of mass fatality plans; and

- purchase of equipment and supplies (i.e., face shields, protective covering, gloves, and disaster body bags).

**States are strongly encouraged to follow the recommendations provided in Appendix A when considering the purchase of mortuary supplies.**

**Exercises:**

One of the objectives of the CDC Phase II Supplemental Guidance Pandemic Influenza Exercise Program was for States to develop and implement a pandemic influenza preparedness exercise program to include the following three priorities: non-pharmacological interventions, medical surge and seasonal flu vaccination clinics. HHS released the *Pandemic Flu Exercise Guidelines for Medical Surge* in February 2007 as a guide for developing Medical Surge exercises specific to pandemic influenza. Through this supplemental funding, award recipients should continue to follow the guidance provided in that document.

**States are required to participate in or conduct at least one Medical Surge exercise around pandemic influenza with this supplemental funding.** Wherever possible, exercises should be combined with exercises scheduled by homeland security, emergency management or other responders, to minimize burden on exercise planners and participants. The type and level of exercise chosen to fulfill this requirement should be based on a needs assessment and the levels of pandemic influenza exercises conducted to date. A Full-Scale exercise should only be considered once the State has conducted both a Tabletop and a functional exercise in order to obtain the most benefit from a Full-Scale exercise. The HPP recommends a State builds its exercise plans from the bottom up, by beginning with a basic tabletop exercise to identify needs and gaps, building up to a full scale exercise.

State planners should recognize that not all components of Medical Surge are expected to be exercised this year. The sub-capabilities and activities allowable for funding through this supplement (Equipment /Supplies, ACS and Mortuary Services/Supplies) should be the main focus of Medical Surge exercises with this funding. Lessons learned from previous exercises should be incorporated to develop more robust exercises.

**Please Note: In order to maximize coordination of exercise efforts, States are not required to submit a pandemic influenza exercise plan upon submission of this application.** States will be required to submit their exercise plan specific for pandemic influenza at the same time a State submits their exercise plan for the FY 2007 HPP guidance, either in a separate document or combined document, to include the following: proposed dates of pandemic influenza exercises, type/level of exercise, potential partners, and estimated cost. States must also:

- 1) Describe the role of healthcare facilities and partnerships in the exercise process, including: exercise development, participation, evaluation, after action reports, and the evaluation and improvement plan;
- 2) Describe how the awardee will ensure that lessons learned from after action reports are shared with the healthcare facilities and partnerships, and how the emergency operations plans of those facilities are then modified; and
- 3) Describe how plans for training are integrated with the exercise program.

In lieu of submitting an exercise plan, States should submit a statement regarding their intention to conduct this mandatory exercise, with a status of Medical Surge exercises conducted to date specifically around pandemic influenza. States should prioritize which of the sub-capabilities and activities they plan to focus on with this funding and at which level they plan to conduct the exercises. This decision should be based on both the ability to exercise certain components within other exercises not specific to pandemic influenza, and on the specific pandemic influenza preparedness needs of the healthcare system.

Award recipients are strongly encouraged to design, conduct, and evaluate exercises collaboratively and in accordance with the Homeland Security Exercise and Evaluation Program (HSEEP). This includes collaborating in the annual State Training and Exercise Plan Workshop to coordinate exercises that satisfy the requirements of DHS and HHS grants and cooperative agreements. In addition, After Action Reports must be reviewed for lessons learned and developed into an Improvement Plan (IP) to ensure lessons are used to enhance facility based emergency operations plans and local emergency operations plans that have healthcare entities and partnerships at the core.

Beginning in FY 2008 program and budget year, exercise programs funded all or in part by HHS HPP cooperative agreement funds will have to demonstrate full compliance with HSEEP. **In anticipation of this requirement HHS strongly encourages all awardees during this project period to begin developing an exercise program capable of being fully compliant with HSEEP in order to meet the requirements of the FY 2008 program year.**

HSEEP compliance is defined as adherence to specific HSEEP-mandated practices for exercise program management, design, development, conduct, evaluation and improvement planning. In order for an entity to be considered HSEEP compliant, the awardees will have to satisfy four distinct performance requirements:

- 1) Conduct an annual training and exercise workshop and develop and maintain a multi-year training and exercise plan.
- 2) Planning and conducting exercises in accordance with the guidelines set forth in HSEEP Volumes I-III.
- 3) Developing and submitting a properly formatted After-Action/Improvement Plan (AAR/IP). The format for the AAR/IP is found in HSEEP Volume III.
- 4) Tracking and implementing corrective actions identified in the AAR/IP.

The Department of Homeland Security (DHS) has developed a centralized, secure web-based scheduling system developed to give visibility on the variety of National, Federal, State, territorial, and local-level exercises. The National Exercise Schedule (NEXS) enables leadership, exercise planners and exercise schedulers to see opportunities for scheduling, de-conflicting, and synchronizing exercises with neighbors, and others. Exercise synchronization facilitates better allocation of resources and limits the potential for exercise fatigue. HPP program coordinators should contact their State Administrative Agent (SAA) about entering exercise information into the NEXS.

Additional information on HSEEP is available at <https://hseep.dhs.gov/>.

State exercise plans must demonstrate coordination with relevant local entities and programs such as local healthcare partnerships, Metropolitan Medical Response Systems (MMRS), and local Medical Reserve Corps (MRC).

## **II. AWARD INFORMATION**

Approximately \$75 million is expected to be available for the purpose of enhancing medical surge capacity and capability at the State and sub-State regional levels specific to an influenza pandemic. Supplemental funding will be awarded to the 62 entities that currently receive awards through the larger HPP cooperative agreement in the form of supplements to the FY 2007 HPP awards. Awards will be issued as cooperative agreements, a form of grant that allows for substantial federal involvement. Substantial federal involvement by the HHS may include but is not limited to the following functions and activities:

1. In accordance with applicable laws, regulations, and policies, the authority to take corrective action if detailed performance specifications (e.g. activities in this funding guidance; approved work plan activities; budgets; performance measures and reports) are not met.
2. Review and approval of work plans and budgets before work can begin on a project during the period covered by this assistance or when a change in scope of work is proposed.
3. Review of proposed contracts.

4. Involvement in the evaluation of the performance of key recipient personnel supported through this assistance.
5. HHS and recipient collaboration or joint participation in the performance of the activities supported through this assistance.
6. Monitor to permit specified kinds of direction or redirection of the work because of interrelationships with other projects.
7. Substantial and/or direct operational involvement or participation during the performance of the assisted activity prior to award of the cooperative agreement to ensure compliance with such generally applicable statutory requirements as civil rights, environmental protection, and provision for the disabled.

The supplemental funding levels have been derived through a formula comprised of a base allocation plus a population adjustment.

The project period and budget period will be October 31, 2007 – October 31, 2008. **(Note: For the purpose of this guidance, reference to “FY 2007” is the time period September 1, 2007 – August 8, 2008).**

### **III. ELIGIBILITY INFORMATION**

#### **1. Eligible Applicants**

Eligible applicants include the health departments of all fifty States; the District of Columbia; the three metropolitan areas of New York City, Los Angeles County and Chicago; the Commonwealths of Puerto Rico and the Northern Mariana Islands; the territories of American Samoa, Guam and the U.S. Virgin Islands; the Federated States of Micronesia; and the Republics of Palau and the Marshall Islands. Applicants are encouraged to reach out to a broad range of healthcare partners to participate in the program. Hospitals, outpatient facilities, health centers, poison control centers, tribal health facilities, mental health and substance abuse treatment facilities, and other healthcare partners should work directly with the appropriate State health departments regarding participation in the program. **(Note: For the purposes of this guidance, the use of the term “State” may include the State, municipality, or associated territory for which a grant is received).**

#### **2. Cost Sharing or Matching**

Cost sharing or matching is not required for this one-time supplemental award.

### **IV. APPLICATION AND SUBMISSION INFORMATION**

#### **1. Address to Request Application Package**



Application kits may be obtained by accessing the Grant Solutions System website at [www.GrantSolutions.gov](http://www.GrantSolutions.gov). To obtain a hard copy of the application kit, contact the Office of Public Health and Science, Office of Grants Management, at 240-453-8822. Applicants may fax a written request to OPHS/OGM at 240-453-8823. Applications must be prepared using Form OPHS-1, which can be obtained at the website noted above.

A Dun and Bradstreet Universal Numbering System (DUNS) number is required for all applications for Federal assistance. Organizations should verify that they have a DUNS number or take the steps necessary to obtain one. Instructions for obtaining a DUNS number are included in the application package, and may be downloaded from the OPA web site ([opa.osophs.dhhs.gov/duns.html](http://opa.osophs.dhhs.gov/duns.html)).

## **2. Content and Form of Application Submission**

### **A. Form**

In preparing the application, it is important to follow ALL instructions and public policy requirements provided in the application kit. Applications must be submitted on the forms supplied (OPHS-1, Revised 03/2006) and in the manner prescribed in the application kits provided by the OPHS. Applicants are required to submit an application signed by an individual authorized to act for the applicant agency or organization and to assume for the organization the obligations imposed by the terms and conditions of the grant award. The program narrative must be printed on 8½ by 11 inch white paper, with one-inch margins, **single-spaced** with an easily readable 12-point font. All pages must be numbered sequentially not including appendices and required forms. The program narrative should not exceed thirty (35) single-spaced pages, not including appendices and required forms. All pages, figures and tables must be numbered sequentially. Do not staple or bind the application package. Please use rubber bands or clips.

### **B. Content**

The narrative section should be able to stand alone in terms of depth of information. This section should be succinct, self-explanatory and well organized so that reviewers can understand the proposed project. It is strongly recommended that recipients follow the outline below when writing the narrative. The narrative should be written as if the reviewer knows nothing or very little about State pandemic influenza preparedness planning. The narrative description of the project must contain the following sections using the specified page limits:

*A. Summary (maximum of 5 pages):* Applicants should submit a comprehensive summary of the State's ongoing activities regarding pandemic influenza planning for medical surge, regardless of the funding source. In addition, applicants must provide a summary specific to the allowable sub-capabilities (i.e., Equipment/Supplies, Alternate Care Sites (ACS), and Mortuary

Services/Supplies). This section should be should be succinct, self-explanatory and well organized so that reviewers can understand the proposed project.

*B. Needs Statement (maximum of 5 pages):* Provide a needs statement specific to the allowable sub-capabilities (i.e., Equipment/Supplies, Alternate Care Sites (ACS), and Mortuary Services/Supplies).

*C. Program Outcome Objectives (maximum of 5 pages):* Describe the overall goal of the project based on the needs, outline the objectives to be accomplished and the prioritized activities that will be funded to achieve the objectives and ultimately support achievement of the goal. The goal(s), objectives and activities should describe the steps that will be taken to achieve the sub-capabilities to be addressed during this funding period. Describe the envisioned final product in terms of personnel, training, equipment or systems, organizational, or planning needs that will be addressed with this funding. Descriptions should be detailed enough to provide sufficient information to allow the reviewer to understand the depth and breadth of the activities. **Please note: States should submit a statement regarding their intention to conduct the mandatory pandemic influenza exercise, with a status of Medical Surge exercises conducted to date specifically around pandemic influenza. States are not required to submit an exercise plan for pandemic influenza at this time. That plan should be submitted with the FY 2007 HPP exercise plan.**

Award recipients are strongly encouraged to consider the following guidance when completing this section. When writing goals and objectives, goals should be expressed in terms of the desired long-term impact on the overall preparedness of the State as well as reflect the program goals contained in this program announcement. When writing the outcome objectives they should be written as a statement which defines measurable results that the project expects to accomplish. All outcome objectives should be described in terms that are specific, measurable, achievable, realistic, and time-framed (S.M.A.R.T.).

**Specific:** An objective should specify one major result directly related to the program goal, state who is going to be doing what, to whom, by how much, and in what time-frame. It should specify what will be accomplished and how the accomplishment will be measured.

**Measurable:** An objective should be able to describe in realistic terms the expected results and specify how such results will be measured.

**Achievable:** The accomplishment specified in the objective should be achievable within the proposed time line and as a direct result of program activities and services.

**Realistic:** The objective should be reasonable in nature. The specified outcomes, expected results, should be described in realistic terms.

**Time-framed:** An outcome objective should specify a target date or time for its accomplishments. It should state who is going to be doing what, by when, etc.

Applications will be reviewed and assessed using these criteria for review. Award recipients are strongly encouraged to follow these criteria when writing the application.

*D. Work plan and Timetable (maximum of 15 pages):* The applicant shall develop a work plan that addresses the sub-capabilities and activities that will be funded to accomplish the goal. The work plan should be written in terms of who, what, when, where, why and how much. Include a budget justification that specifically describes how each activity will support the achievement of the proposed objectives in an 12 month timeframe. Line item information must be provided to explain the costs entered on the OPHS-1. **The budget justification must clearly describe each cost element (i.e., personnel, equipment and systems, planning, training and exercises) and explain how each cost contributes to meeting the project's objectives/goals. Include a timeline that identifies each activity, responsible staff for the activity, deliverables and allocation of funds to the activity.**

Award recipients should work closely with CDC State coordinators, hospitals, urgent care facilities, other ambulatory care facilities, public health, long term care facilities, nursing homes, home health care, community health centers, primary care offices, mental health and substance abuse treatment facilities, emergency management and first responders when developing a work plan.

*E. Evaluation Plan (maximum of 5 pages):* Describe the systems and processes in place to track funding and gather data for this specific funding source. A plan should be in place to track expenditures, monitor progress and aggregate data in order to report progress in the mid-year and end-of-year reports and the performance measures and data elements in the end-of-year reports separately than that from the HPP FY 2007 cooperative agreement.

### **3. Submission Dates and Times**

To be considered for review, applications must be received by the Office of Public Health and Science, Office of Grants Management, by 5:00 p.m., Eastern Standard Time on October 9, 2007. Applications will be considered as meeting the deadline if they are received on or before the deadline date. The application due date requirement in this announcement supersedes the instructions in the OPHS-1 form.

The Office of Public Health and Science (OPHS) provides multiple mechanisms for the submission of applications, as described in the following sections. Applicants will receive notification via mail from the OPHS Office of Grants Management confirming

the receipt of applications submitted using any of these mechanisms. Applications submitted to the OPHS Office of Grants Management after the deadlines described below will not be accepted for review. Applications which do not conform to the requirements of the grant announcement will not be accepted for review and will be returned to the applicant.

While applications are accepted in hard copy, the use of the electronic application submission capabilities provided by the GrantSolutions system Website Portal is encouraged. Applications may only be submitted electronically via the electronic submission mechanisms specified below. Any applications submitted via any other means of electronic communication, including facsimile or electronic mail, will not be accepted for review. Electronic grant application submissions must be submitted no later than 5:00 p.m. Eastern Time on the deadline date specified in the DATES section of the announcement using one of the electronic submission mechanisms specified below. All required hardcopy original signatures and mail-in items must be received by the OPHS Office of Grants Management no later than 5:00 p.m. Eastern Time on the next business day after the deadline date specified in the DATES section of the announcement.

Applications will not be considered valid until all electronic application components, hardcopy original signatures, and mail-in items are received by the OPHS Office of Grants Management according to the deadlines specified above. Application submissions that do not adhere to the due date requirements will be considered late and will be deemed ineligible.

Applicants are encouraged to initiate electronic applications early in the application development process, and to submit early on the due date or before. This will aid in addressing any problems with submissions prior to the application deadline.

#### *Electronic Submissions via the GrantSolutions System*

The electronic grants management system, GrantSolutions.gov, provides for applications to be submitted electronically. When submitting applications via the GrantSolutions system, applicants are required to submit a hard copy of the application face page (Standard Form 424) with the original signature of an individual authorized to act for the applicant agency and assume the obligations imposed by the terms and conditions of the grant award. If required, applicants will also need to submit a hard copy of the Standard Form LLL and/or certain Program related forms (e.g., Program Certifications) with the original signature of an individual authorized to act for the applicant agency. When submitting the required forms, do not send the entire application. Complete hard copy applications submitted after the electronic submission will not be considered for review.

Electronic applications submitted via the GrantSolutions system must contain all completed online forms required by the application kit, the Program Narrative, Budget Narrative and any appendices or exhibits. The applicant may identify specific mail-in items to be sent to the Office of Grants Management separate from the electronic submission; however these mail-in items must be entered on the GrantSolutions

Application Checklist at the time of electronic submission, and must be received by the due date requirements specified above. Mail-In items may only include publications, resumes, or organizational documentation. When submitting the required forms, do not send the entire application. Complete hard copy applications submitted after the electronic submission will not be considered for review.

Upon completion of a successful electronic application submission, the GrantSolutions system will provide the applicant with a confirmation page indicating the date and time (Eastern Time) of the electronic application submission. This confirmation page will also provide a listing of all items that constitute the final application submission including all electronic application components, required hardcopy original signatures, and mail-in items, as well as the mailing address of the OPHS Office of Grants Management where all required hard copy materials must be submitted.

As items are received by the OPHS Office of Grants Management, the electronic application status will be updated to reflect the receipt of mail-in items. It is recommended that the applicant monitor the status of their application in the GrantSolutions system to ensure that all signatures and mail-in items are received.

#### *Mailed or Hand-Delivered Hard Copy Applications*

Applicants who submit applications in hard copy (via mail or hand-delivered) are required to submit an original and two copies of the application. The original application must be signed by an individual authorized to act for the applicant agency or organization and to assume for the organization the obligations imposed by the terms and conditions of the grant award.

Mailed or hand-delivered applications will be considered as meeting the deadline if they are received by the OPHS Office of Grant Management on or before 5:00 p.m. Eastern Time on the deadline date specified in the DATES section of the announcement. Applications that do not meet the deadline will be returned to the applicant unread. The following address should be used if submitting the application by hard copy:

Office of Grants Management, Office of Public Health and Science (OPHS)  
U.S. Department of Health and Human Services (HHS)  
1101 Wootton Parkway., Suite 550  
Rockville, MD 20852

**Attention:** Pandemic Influenza Supplement/Hospital Preparedness Program, Division of National Healthcare Preparedness Programs (DNHPP)

#### **4. Intergovernmental Review**

Applications under this announcement are subject to the review requirements of E.O. 12372, "Intergovernmental Review of Federal Programs," as implemented by 45 CFR part 100, "Intergovernmental Review of Department of Health and Human Services Programs and Activities." E.O. 12372 sets up a system for state and local government

review of proposed Federal assistance applications. As soon as possible, the applicant (other than Federally- recognized Indian tribal governments) should contact the State Single Point of Contact (SPOC) for each state in the area to be served. The application kit contains the currently available listing of the SPOCs which have elected to be informed of the submission of applications. For those states not represented on the listing, further inquiries should be made by the applicant regarding submission to the relevant SPOC. Information about the SPOC is located on the OMB website at <http://www.whitehouse.gov/omb/grants/spoc>. The SPOC's comment(s) should be forwarded to the OPHS Office of Grants Management, 1101 Wootton Parkway, Suite 550, Rockville, MD 20852. The SPOC has 60 days from the closing date of this announcement to submit any comments.

## 5. Funding Considerations

Administrative costs (personnel, supplies, and travel) - Administrative costs are allowable under this award, however awardees should keep in mind that this is one-time funding, and is a supplement to the larger HPP Cooperative Agreement. Awardees are encouraged to utilize personnel within their programs and all of their response partner agencies where pandemic influenza planning activities take place in order to limit the amount of additional funding for program administration. **If administrative costs are proposed, awardees must have a strong justification to do so.**

The following items are not allowable costs under this supplemental award:

- Antibiotics for treatment of secondary infections;
- Antivirals;
- Vehicles;
- Salaries for back filling of personnel; and
- Any additional items not allowable through the FY 2007 HPP cooperative agreement.

Guidance for completing the application can be found in the Program Guidelines, which are included with the complete application kits. Applicants for discretionary grants are expected to anticipate and justify their funding needs and the activities to be carried out with those funds in preparing the budget and accompanying narrative portions of their applications. The basis for determining the allowability and allocability of costs charged to Public Health Service (PHS) grants is set forth in 45 CFR parts 74 and 92. If applicants are uncertain whether a particular cost is allowable, they should contact the OPHS Office of Grants Management at (240) 453-8822 for further information.

## V. APPLICATION REVIEW INFORMATION

## 1. Criteria

Applications will be reviewed based on the following criteria listed in descending order of priority:

- Clarity of the needs in terms of personnel, organizational/leadership, equipment and systems, planning, and how well applications describe how training and exercises will support building the sub-capabilities;
- Clarity of how well the goals, objectives and activities outlined in the application address the needs;
- Extent to which goals, objectives and activities are written in SMART (specific, measurable, achievable, realistic and time-framed ) format;
- Extent to which the needs of pediatrics and other vulnerable populations are addressed in the plan; and
- Clarity of which the budget justification reflects the costs associated with the activities to be completed.

## 2. Review and Selection Process

As a formula award, these applications will be reviewed internally within ASPR using an objective review process. If the application fulfills the review criteria, awards will be made by October 31, 2007. If recommendations from these reviews result in conditions of award, the conditions shall be addressed as instructed in the Notice of Grant Award (NGA).

## 3. Anticipated Announcement and Award

The OPEO anticipates announcing and awarding grantees under this announcement by October 31, 2007 for a budget period ending October 31, 2008.

## **VI. AWARD ADMINISTRATION INFORMATION**

### 1. Award Notices

When these decisions have been made, the applicant's authorized representative will be notified of the outcome of their application by postal mail. **The official document notifying an applicant that the application has been approved for funding is the Notice of Grant Award, signed by the Grants Management Officer, which specifies to the grantee the amount of money awarded, the purposes of the grant, the length of the project period, terms and conditions of the grant award, and the amount of funding to be contributed by the grantee to project costs.**

## **2. Administrative and National Policy Requirements**

The regulations set out at 45 CFR parts 74 and 92 are the Department of Health and Human Services (HHS) rules and requirements that govern the administration of grants. Part 74 is applicable to all recipients except those covered by Part 92, which governs awards to State and local governments. Applicants funded under this announcement must be aware of and comply with these regulations. The CFR volume that includes parts 74 and 92 may be accessed at

[http://www.access.gpo.gov/nara/cfr/waisidx\\_03/45cfrv1\\_03.html](http://www.access.gpo.gov/nara/cfr/waisidx_03/45cfrv1_03.html)

When issuing statements, press releases, requests for proposals, bid solicitations, and other documents describing projects or programs funded in whole or in part with Federal money, all award recipients shall clearly state the percentage and dollar amount of the total costs of the program or project which will be financed with Federal money and the percentage and dollar amount of the total costs of the project or program that will be financed by non-governmental sources.

Grantees that fail to comply with the terms and conditions of this cooperative agreement, including responsiveness to program guidance, measured progress in meeting the performance measures outlined in the critical benchmarks, and adequate stewardship of these federal funds, may be subject to an administrative enforcement action. Administrative enforcement actions may include temporarily withholding cash payments or restricting a grantee's ability to draw down funds from the Payment Management System until the grantee has taken corrective action.

## **3. Reporting Requirements**

### **A. Audit Requirements**

An annual audit of expenditures from amounts received under this award shall be conducted by an entity independent of the agency administering the program. These audits shall be conducted in accordance with the Comptroller General's standards for auditing governmental organizations, programs, activities, and functions and generally accepted auditing standards. Within 30 days following the completion of each audit report, a copy of that audit report shall be submitted to the Secretary of Health and Human Services.

Audits must comply with audit requirements of Office of Management and Budget (OMB) Circular A-133. Information on the scope, frequency, and other aspects of the audits can be found on the Internet at

[www.whitehouse.gov/omb/circulars](http://www.whitehouse.gov/omb/circulars).



## **B. Progress Reports and Financial Reports**

Applicants funded under this announcement will be required to electronically submit a Mid-Year Report, as well as an End-of-Year Report, and Financial Status Report (FSR) SF-269, 90 days after the grant budget period ends. In light of the increased emphasis on performance measurement and accountability in the Pandemic and All-Hazards Preparedness Act (PAHPA), grantees are advised that project progress reports (midyear and end of year) are expected to be timely, consistent, and complete using a template to be provided by ASPR. Incomplete or inconsistent reports will be returned to the grantee for corrections.

## **C. Performance Measures and Data Elements**

As required by the Paperwork Reduction Act (PRA), HHS is awaiting OMB approval to request the following 3 performance measures and additional supporting data elements. Templates for data collection and submission will be released to awardees as soon as they are approved. These performance measures will be reported 90 days after the grant budget period ends as part of the End-of-the-Year progress report and are listed below. Calculation of results based on numerator and denominator information submitted by States will be conducted by staff in the Evaluation Section at HHS. **States shall maintain all documentation that substantiates the answers to these measures (site visits, surveys, exercises etc) and make those documents available to Federal staff as requested during site visits or through other requests.**

1. The Awardee has completed at least one pandemic influenza medical surge exercise during the grant period at the State or sub-State regional level.  
(yes/no)
2. The Awardee has identified the three most important exercise objectives, and how they were or were not met in the course of the exercise(s).
3. The Awardee has identified three priority areas for improvement based on a medical surge exercise After Action Report

Data elements will be requested for program monitoring purposes. They may be used to calculate percentages for the performance measures above, to enable other data analyses, and to respond to routine requests for information about the program. They will not be used to evaluate grantee performance. Data elements will only be reported in the end of year reports.

Once HHS receives approval from OMB, the specific data elements that will be collected and a template to support collection of these data will be released. The template will include definitions, response choices, due dates and instructions for completing the template.

## **VII. APPLICATION DUE DATE**

To receive consideration, applications **must be received** no later than 5:00 p.m. Eastern Standard Time on **October 9, 2007**, through one of the three application mechanisms specified in Section VI of this supplemental guidance.

## **VIII. AGENCY CONTACTS**

### **1. Administrative and Budgetary Contacts**

For application kits, submission of applications, and information on budget and business aspects of the application, please contact: Office of Public Health and Science, Office of Grants Management, 1101 Wootton Parkway, Suite 550, Rockville, MD 20852, 240-453-8822 or fax 240-453-8823.

### **2. Program Contacts**

#### *Program Requirements:*

Mollie Mahany  
Hospital Preparedness Program  
US Department of Health and Human Services (HHS)  
Office of the Assistant Secretary for Preparedness and Response (ASPR)  
Office of Preparedness and Emergency Operations (OPEO)  
330 C ST., SW, Rm 5625  
Washington DC 20201  
(Office) 202.205.8648  
[Mollie.mahany@hhs.gov](mailto:Mollie.mahany@hhs.gov)

#### *Data and Evaluation Requirements:*

Mrs. Janet Schiller, Ed.D.  
Section Chief for Evaluation  
State and Local Initiatives Team  
US Department of Health and Human Services (HHS)  
Assistant Secretary for Preparedness and Response (ASPR)  
Office of Preparedness and Emergency Operations (OPEO)  
330 C ST., SW, Rm 5615  
Washington DC 20201  
(Office) 202.205.8742  
[Janet.schiller@hhs.gov](mailto:Janet.schiller@hhs.gov)

## **IX. RESOURCES**

“Interim Guidance on Planning for the Use of Surgical Masks and Respirators in Health Care Settings during and Influenza Pandemic”

([www.pandemicflu.gov/plan/healthcare/maskguidancehc.html](http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html))

FY 2007 Hospital Preparedness Program Cooperative Agreement

Health Resources and Services Administration, National Bioterrorism Hospital Preparedness Program, the “Pandemic Flu Exercise Guidelines for Medical Surge,” February 2007.

Pandemic Influenza Guidance Supplement to the 2006 Public Health Emergency Preparedness Cooperative Agreement Phase II, July 10, 2006.

“HHS Guidance on Federal and State Stockpiles of Critical Medical Supplies for an Influenza Pandemic”

“Implementation Plan for the National Strategy for Pandemic Influenza”

<http://www.whitehouse.gov/homeland/pandemic-influenza-implementation.html>

The Public Management Institute, How to Get Grants (1981)

“Providing Mass Medical Care with Scarce Resources: A Community Planning Guide”

<http://www.ahrq.gov/research/mce> .

### **Further information:**

“HHS Hospital Pandemic Influenza Planning Checklist”

(<http://www.pandemicflu.gov/plan/healthcare/hospitalchecklist.pdf>)

“OSHA Pandemic Influenza Preparedness and Response Guidance for Healthcare Workers and Healthcare Employees”

([http://www.osha.gov/Publications/OSHA\\_pandemic\\_health.pdf](http://www.osha.gov/Publications/OSHA_pandemic_health.pdf))

## Appendix A

The following recommendations were developed by HHS in the *HHS Guidelines on Federal and State Stockpiles of Critical Medical Supplies for an Influenza Pandemic* and are divided into three sections: Ventilator and Ancillary Supply List, PPE and Infection Control Supplies for healthcare delivery sites and general work sites, and PPE and Infection Control Supplies for mortuary services. The ventilator section establishes qualitative criteria that are critical, and includes beneficial options. The list of ventilator characteristics does not include oxygen sources. The availability and necessity of supplemental oxygen should be considered in planning efforts. There are no quantitative recommendations for ventilator units in the recommendations. The supply section does include recommendations on supply types and quantities. States should also address plans for storage, maintenance and distribution of these resources.

Articles that are intended for use in the prevention, treatment, mitigation, or cure of disease, including the ventilators and personal protective equipment and infection control supplies described below, are subject to regulation under the Federal Food, Drug, and Cosmetic Act (FFDCA). We recommend that you procure products that have met applicable FDA premarket review requirements (e.g., approval or clearance). Distribution of devices or drugs that are not FDA-cleared or – approved, or are FDA-cleared or approved for a different use or population, requires obtaining an Emergency Use Authorization (EUA) or other action to comply with the FFDCA.

### **I. Ventilator and Ancillary Supply List**

VENTILATOR CRITERIA	IDEAL CHARACTERISTICS	BENEFICIAL, OPTIONAL CHARACTERISTICS	COMMENTS
<b>Operating Characteristics</b>			
1. Power source	1. AC with battery back-up and ability to run w/o gas source 2. Battery duration should be at least 4 hours duration	Pneumatic-operable (must also have a sustained battery option)	<ul style="list-style-type: none"> <li>▪ Must define standard operating settings for battery time</li> <li>▪ Ventilator with only Pneumatic-operability does not have sufficient power source, must also have battery option</li> </ul>

2. FDA-cleared or approved for use in pediatric populations	10 kg	5 kg	Availability of ventilators that would be used on neonate/infant population needs to be assessed on the local level
3. Modes of ventilation	Volume control (assist/control and SIMV)	Pressure control (only in addition to volume control) CPAP (for weaning)	Simplicity is key
4. Control of settings	Respiratory Rate PEEP $V_T$ Flow or Inspiratory:Expiratory ratio FiO <sub>2</sub> (on 50-55 PSI source O <sub>2</sub> )	Trigger sensitivity and mode of ventilation (if available)  Flow waveform	
5. Maximum flow	Minimum of $\leq 10$ L/min  Upper limit $>70$ L/min		
6. Positive End Expiratory Pressure (PEEP)	Internal PEEP PEEP compensation	PEEP upper limit $\geq 20$ cm H <sub>2</sub> O	
7. Oxygen titration	Room air to FiO <sub>2</sub> 1.0 on 50-55psi oxygen source		
8. Operate w/o 50-55 psi oxygen source	Yes	FiO <sub>2</sub> $\geq 0.7$ on low flow oxygen and V <sub>E</sub>	<ul style="list-style-type: none"> <li>▪ Must be able to operate on oxygen concentrator or low flow compressed oxygen source</li> <li>▪ Standard settings for testing oxygen delivery on low flow oxygen source</li> </ul>

9. Measurements	Measure and display inspiratory $V_T$	<ol style="list-style-type: none"> <li>Inspiratory plateau pressure</li> <li>Auto PEEP</li> <li>Expired <math>V_T</math></li> </ol>	
<b>Performance</b>			
1. Ease to set up/set ventilation settings/trouble shoot	<ol style="list-style-type: none"> <li>Ability to read screen at a distance</li> <li>Clear, easily understood, in plain language instructions in both hard copy and electronically (internet and stored within ventilator) is recommended. Expert users may not be available in sufficient numbers. Novice users will need to be able to work with the ventilators without additional help.</li> </ol>	<ol style="list-style-type: none"> <li>Color coding of connections</li> <li>Unique connections for equipment with specific functions</li> <li>Laminated quick reference/troubleshooting guide</li> </ol>	Must develop standard criteria for evaluating ease to read screen
2. Oxygen consumption		Minimization of oxygen consumption for standard settings	2 standard ventilator settings to empty a full E-cylinder
3. Sustained use	Reference contacts for $\geq 3$ clinical settings where equipment used $\geq 2$ weeks continuously	Reference contacts for $\geq 3$ clinical settings where equipment used $\geq 4$ weeks continuously	
<b>Safety</b>			

1. Alarms	Audible and visible alarms -disconnect, apnea, high pressure, low source gas pressure	1. Remote alarm interface 2. Visible alarm remains lit until reset by operator	Visual alarm must be easily visible at defined-distance and ambient lighting conditions
<b>Stockpiling Issues</b>			
1. Ventilator has FDA clearance (510(k)) or approval for use in desired population	<ol style="list-style-type: none"> <li>1. Fluid spill resistance</li> <li>2. Mechanical shock (similar to 4 foot drop, military standard)</li> <li>3. Mechanical vibration</li> <li>4. EMC and electrical safety testing</li> <li>5. Storage temperature and humidity: <ul style="list-style-type: none"> <li>• -20 C to 60 C, 0 - 95% RH</li> </ul> </li> <li>6. Operating temperature and humidity: <ul style="list-style-type: none"> <li>• 5 C to 40 C, 0 - 95% RH</li> </ul> </li> </ol>		

2. Vendor & support contract	<ol style="list-style-type: none"> <li>1. Company will continue to produce ventilator model until at least 2012</li> <li>2. Ability to produce all ordered vents within 6 months from order. If unable to meet this criterion, estimated time frame for delivery must be stated.</li> <li>3. 24 hours/7 days a week direct phone access to senior-level technician <ul style="list-style-type: none"> <li>▪ Vendor responsible for maintaining call coverage</li> </ul> </li> <li>4. Warranty</li> <li>5. Provide any storage life data if available</li> </ol>	<ol style="list-style-type: none"> <li>1. Warranty period starts at first beneficial contact with patient</li> <li>2. Components for additional purchased vents available in the United States at all times</li> </ol>	
3. Maintenance	$\geq 1$ year for battery and all equipment interval maintenance also include battery replacement if needed	<ol style="list-style-type: none"> <li>1. All usual maintenance activities can be performed with ventilator in kit</li> <li>2. All usual maintenance activities can be performed with kits in stockpiled configuration</li> </ol>	
4. Purchasing costs	$\leq$ \$10,000		Cost must include all necessary equipment to ventilate one patient on both 50-55 psi and low flow oxygen
5. End-user training program	<ol style="list-style-type: none"> <li>1. Internet based training</li> <li>2. DVD/CD</li> </ol>	Interactive training via internet or DVD	Must demonstrate educational format at time of RFI submission



VENTILATOR ANCILLARY EQUIPMENT	RECOMMENDED QUANTITIES	BENEFICIAL, OPTIONAL CHARACTERISTICS	COMMENTS
<b>Airway</b>			
Endotracheal tubes	None		Stockpile needs at the local level need to be assessed. Sufficient quantities may already be available
Manual ventilator	None		Stockpile needs at the local level need to be assessed. Sufficient quantities may already be available
Non-invasive ventilation patient interfaces (masks)	None		Non-invasive interfaces may have role in mass casualty respiratory failure, but recommend endotracheal intubation/tracheotomy for most patients
<b>Circuit-Related</b>			
Ventilator circuits	1 adult and pediatric circuit per <u>kitted</u> ventilator  Additional equipment for re-supply kits to be held in inventory: 4 adult circuits per ventilator 2 pediatric circuits per ventilator		1 Re-supply kit per 10 ventilator kits  Incorporate consideration for replacement parts when damage or contaminated.
Closed circuit suction catheters	1 per ventilator circuit		Adult 14Fr Pediatrics 8Fr & 12Fr

VENTILATOR ANCILLARY EQUIPMENT	RECOMMENDED QUANTITIES	BENEFICIAL, OPTIONAL CHARACTERISTICS	COMMENTS
			<p>May want to consider a higher ratio of catheters to ventilators if funding is available to address potential catheter malfunction etc</p>
Humidification and filtration	<p>HMEF: 3 per adult circuit 3 per pediatric circuit</p> <p>Re-supply: 3 per circuit (adult and pediatric)</p>		<ul style="list-style-type: none"> <li>▪ Recommend: Absolute humidity <math>\geq 30</math> mg/L at tidal volume of 500mL. dead space &lt; 75 mL</li> <li>▪ Dead space for peds &lt;20mL</li> <li>▪ Wanted inspiratory limb HME and expiratory filter, but concern may be incorrectly put in circuit, so recommend HMEF</li> <li>▪ Filtration recommended for staff safety but acknowledge no convincing effectiveness demonstrated</li> <li>▪ Active humidification may be necessary for some patients but will not be stockpiled. May impact duration of filter use.</li> </ul>
Medication delivery	<p>MDI adapter, 1 per circuit</p> <p>Re-supply: 1 per circuit</p>		

VENTILATOR ANCILLARY EQUIPMENT	RECOMMENDED QUANTITIES	BENEFICIAL, OPTIONAL CHARACTERISTICS	COMMENTS
<b>Kits</b>			
Kit	Rigid case  Weight of kit with ventilator and all equipment to ventilate one pt $\leq 30$ lbs	Weight ranges: Under 15 lbs Under 20 lbs Under 25 lbs  Wheels provided on kit	Lower ventilator weight facilitates portability in the event patient transport is needed.
<b>Oxygen</b>			
Oxygen: Concentrators	No	No	Oxygen supply is crucial issue, but concentrators are limited solution due to expense and would significantly reduce ventilator quantity States/local need alternative oxygen solution
<b>Respiratory Monitoring</b>			
End tidal CO <sub>2</sub>			Not essential except for calorimetric devices already in SNS for endotracheal tube anatomical confirmation
Point of care blood gas analysis			Not essential
Pulse Oximetry	1. All patient with at least one disposable probe; one probe per ventilator circuit 2. One portable oximeter for at most 6 patients	Inclusion within mechanical ventilator housing	Goal is continuous oxygen saturation monitoring

**Abbreviations**

- SIMV Synchronized Intermittent Mandatory Ventilation(S)
- CPAP Continuous Positive Airway Pressure
- O<sub>2</sub> Oxygen
- PEEP Positive End Expiratory Pressure
- V<sub>T</sub> Tidal Volume
- PSI Pounds per Square Inch
- FiO<sub>2</sub> Fraction of Inspired Oxygen
- H<sub>2</sub>O Water
- V<sub>E</sub> Minute Ventilation
- RH Relative Humidity
- RFI Request For Information
- HMEF Heat and Moisture Exchangers with Filter
- HME Heat and Moisture Exchangers
- MDI Meter Dose Inhaler
- CO<sub>2</sub> Carbon Dioxide

**II. Personal Protective Equipment and Infection Control Supplies for Healthcare Delivery and General Sites**

PRODUCT	QUANTITIES	COMMENTS
<b>Healthcare Delivery Sites</b>		
Alcohol hand hygiene gel	Calculate ~10ml per patient interaction.	<p>Quantities should be sufficient for all personnel engaged in healthcare delivery and for all individuals (e.g., patients, accompanying family members – consider children accompanied by parents) to use while receiving care. This is why the total amount per patient interaction is 10 ml, rather than 2 ml for just a single healthcare provider.</p> <p>Signage in appropriate languages directing personnel and patients to follow hand and respiratory hygiene practices, laminated hardcopies plus PDF files for reproduction on site should be considered.</p>

PRODUCT	QUANTITIES	COMMENTS
Disposable or reusable full-face shields for splash protection	Calculate for use by ~10% of clinical care staff who may perform splash-generating procedures.	
Surgical masks	Calculate for all patients with confirmed or suspected pandemic influenza to wear during patient care, if needed, plus 5/day for all personnel not engaged in face-to-face care of the above specified patients.	Please refer to the CDC's Interim Guidance on Planning for the Use of Surgical Masks and Respirators in Healthcare Settings during an Influenza Pandemic ( <a href="http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html">http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html</a> ) for specific guidance regarding the use of surgical masks and respirators by healthcare workers.
Filtering face-piece respirators (N-95 or equivalent respirators)	Calculate for 5/day* for all personnel engaged in face-to-face care of patients with confirmed or suspected pandemic influenza.	<p>It is recommended that face-piece respirators be FDA-cleared and NIOSH certified. Some products that meet NIOSH certification are not legally marketed for use as devices under the Federal Food, Drug, and Cosmetic Act (FFDCA) and thus, their distribution may require clearance or an Emergency Use Authorization (EUA) .</p> <p>*With respect to the estimation of quantities, consider that a healthcare worker will not be able to discard a respirator after each patient. Instead a "single use" will encompass a series of patient interactions, e.g., 3 or 4 patients evaluated while in the patient care area. Respirators should only be reused by a "single wearer."</p> <p>At least 3 or 4 different makes in a reasonable distribution of sizes should be procured to increase probability of providing an acceptable fit for most personnel. Respirators with high-quality elastic components and construction should be identified and selected.</p>

PRODUCT	QUANTITIES	COMMENTS
Non-sterile latex-free examination gloves, distributed among small, medium and large sizes	Calculate quantities to allow one pair to be used and discarded for each patient interaction, if needed.	Choice of size distribution should reflect local care provider needs, e.g., proportion of male or female staff members.
Surgical gowns	Calculate quantities to allow one pair to be used and discarded for each patient interaction, if needed.	<p>Gowns may be reasonable for pediatric care but likely not necessary for adult patient care. (Children are less likely to adhere to recommended infection control measures. Such patients, when held by care providers, are likely to smear potentially infectious substances on the care provider. In contrast, adults are rarely held when receiving care.)</p> <p>In addition to surgical gowns, FDA-cleared devices labeled as “patient isolation gowns” are available, some of which are also fluid-resistant. (Check labeling).</p>
Powered air-purifying respirators (battery packs, filters, and disposable headpieces)	Calculate battery packs and filters for ~5% of clinical care staff who are unable to wear a face-piece respirator; and disposable headpieces/shrouds to allow 2/day for those personnel.	See use instructions as listed in Infection Control Guidance for Healthcare Personnel. ( <a href="http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html">http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html</a> )
<b>Ancillary Supplies</b>		
Waste bags, normal and biological waste	Dependent on number of facilities stockpiles are supporting.	In calculating the quantity of biohazardous waste containers, it is suggested that the facilities consider not only what their stockpile is supporting but also take into consideration state regulations that govern biohazardous waste. Leak-resistant biohazard bags are usually adequate for containment of regulated medical wastes provided the bag is sturdy and the waste can be discarded without contaminating the bag’s exterior.

PRODUCT	QUANTITIES	COMMENTS
Disinfectants, bleach		<p>It is suggested that disinfectants for patient care facilities be included in the stockpile. It is recommended that only EPA hospital grade disinfectants be made available. EPA registered disinfectants are available in many dispensing sizes and containers, and have shelf life information included in the labeling. Bleach is a well accepted alternative for some spill clean-ups; however, long term storage of bleach may be difficult.</p> <p>It is also recommended that Material Safety Data Sheets (MSDS) be stored with the disinfectants as these will be needed for safety purposes, e.g., in cases of undue exposure or contamination to persons using, mixing or handling these products.</p>
<b>General Work Sites</b>		
Cleaning equipment (mops, buckets, heavy cleaning gloves, boots, vinyl aprons or coveralls)	Dependent on work stations.	
25-50 gallon barrels or similar reservoirs for storing water and disinfectants at temporary work sites	Dependent on work stations.	

PRODUCT	QUANTITIES	COMMENTS
Spray bottles and paper towels	Quantities to allow frequent (4x/hour) disinfection of work surfaces in clinical care sites; one bottle for each table/desk/room.	

### **III. Personal Protective Equipment and Infection Control Supplies for Mortuary Services**

PRODUCT	QUANTITIES	COMMENTS
<b>Mortuary Supplies</b>		
Disposable or reusable full-face shields for splash protection	Calculate for use by all mortuary staff.	
Protective covering (i.e., aprons, gowns)		Aprons (e.g., heavy vinyl) would be more appropriate than gowns for handling human remains.
Gloves		Heavy re-useable gloves should be considered in this particular context if local Disaster Mortuary Team (DMORT) colleagues indicate it is necessary. The numbers to stockpile should also reflect DMORT input.
Leak-proof body bags with additional sealing tape, labeling materials.	Calculate based on expected local readiness to handle as much as 0.6% of the regional population, per the current federal planning assumptions.	
Stretchers/Litters for carrying remains	Calculate based on expected local readiness to handle as much as 0.6% of the regional population, per the current federal planning assumptions.	



Tents for storing remains when other options are exhausted	Dependent on local facility capacity.	The primary option that needs to be considered should include some form of refrigerated storage (i.e., refrigerated trucks). As many communities may request these assets, alternative options should be considered.
Transparent containers for personal effects	Calculate based on expected local readiness to handle as much as 0.6% of the regional population, per the current federal planning assumptions.	Containers or bags should facilitate easy identification of any materials placed inside and also be easily labeled.
Disinfectants, (e.g., any household disinfectant such as lysol or pinesol) or bleach for cleaning mortuary surfaces	Dependent on local facility capacity.	<p>It is suggested that disinfectants for patient care facilities be included in the stockpile. It is recommended that only EPA hospital grade disinfectants be made available. EPA registered disinfectants are available in many dispensing sizes and containers, and have shelf life information included in the labeling. Bleach is a well accepted alternative for some spill clean-ups; however, long term storage of bleach may be difficult.</p> <p>It is also recommended that Material Safety Data Sheets (MSDS) be stored with the disinfectants as these will be needed for safety purposes, e.g., in cases of undue exposure or contamination to persons using, mixing or handling these products.</p>

## Appendix B

<b>State</b>	<b>Total funding</b>
Alabama	\$1,170,933
Alaska	\$382,562
Arizona	\$1,390,853
Arkansas	\$807,782
California	\$5,482,954
LA County	\$2,268,550
Colorado	\$1,179,911
Connecticut	\$963,022
Delaware	\$417,301
District of Columbia	\$364,024
Florida	\$3,726,035
Georgia	\$2,024,184
Hawaii	\$505,349
Idaho	\$529,535
Illinois	\$2,249,832
Chicago	\$836,685
Indiana	\$1,517,704
Iowa	\$851,583
Kansas	\$807,171
Kentucky	\$1,092,098
Louisiana	\$1,168,876
Maine	\$517,710
Maryland	\$1,377,171
Massachusetts	\$1,562,851
Michigan	\$2,311,667
Minnesota	\$1,285,535
Mississippi	\$839,440
Missouri	\$1,419,477
Montana	\$437,747
Nebraska	\$605,283
Nevada	\$708,492
New Hampshire	\$513,518
New Jersey	\$2,017,222
New Mexico	\$634,133
New York	\$2,525,212
New York City	\$1,903,393
North Carolina	\$1,971,986
North Dakota	\$379,519
Ohio	\$2,588,806
Oklahoma	\$967,012
Oregon	\$978,843
Pennsylvania	\$2,779,604
Rhode Island	\$470,040

South Carolina	\$1,098,346
South Dakota	\$406,410
Tennessee	\$1,445,243
Texas	\$4,769,753
Utah	\$730,967
Vermont	\$376,645
Virginia	\$1,756,072
Washington	\$1,503,743
West Virginia	\$620,408
Wisconsin	\$1,369,397
Wyoming	\$352,673
Puerto Rico	\$1,042,959
Guam	\$158,452
Virgin Islands (US)	\$147,251
Federated States of Micronesia	\$147,113
Northern Marianas Islands	\$140,567
American Samoa	\$136,828
Marshall Islands	\$136,539
Palau	\$129,032
<b>Grand Total</b>	<b>\$75,000,000</b>