

August 8, 2003

**STEPS REQUIRED TO ESTABLISH A PRACTICAL MEDICAL CENTER
EMERGENCY MASS-CASUALTY DECONTAMINATION CAPABILITY**

1. PURPOSE: This Veterans Health Administration (VHA) Directive provides policy to Department of Veterans Affairs (VA) medical centers on the key steps required to implement an appropriate medical center emergency mass-casualty decontamination capability; provides an assessment tool to determine medical center decontamination requirements based upon local and community needs; and provides an outline for converting those requirements to a medical center decontamination plan. *NOTE: This VHA Directive rescinds VHA Directive 2002-033, dated June 5, 2002.*

2. BACKGROUND

a. VHA must be prepared to respond to a terrorist attack involving weapons of mass destruction (WMD) that could occur in the community of any VA medical center. Such an attack may produce mass-casualties. Nearby VA medical centers must be prepared to protect medical center facilities, staff, and patients, and be prepared to provide care along with other community medical centers. This Directive addresses the appropriate response to a WMD attack occurring nearby, but not directly on, a VA medical center.

b. A 2-day meeting of the VHA VA Medical Center Decontamination Task Force was held January 29-30, 2002, at VA Central Office, Washington, DC. The meeting included technical experts with practical experience implementing mass-casualty decontamination programs from within VHA, from private medical centers, and from the Department of Defense. It also included VA medical center administrators to ensure that a realistic and practical approach to this issue was maintained throughout. *NOTE: The Task Force report is available at web site <http://vaww.va.gov/vironagents>.*

c. The Task Force concluded that by adopting some straightforward procedures as basic safety equipment, supplies, and training, medical centers can develop the self-confidence and competency to:

(1) Protect their facilities, staff, and patients, and

(2) Provide appropriate care to victims of such an attack who may present at their medical center within 24 hours following an incident.

d. To help VA medical centers develop an appropriate and site-specific medical center mass-casualty decontamination program, the VA Decontamination Task Force Report provides specifications for a temporary rapidly-deployable decontamination facility that will be purchasable through a contract. It also provides examples of semi-permanent facilities with small, medium and large patient capacity. Every VA medical center is currently required to develop procedures for specific emergencies identified through a hazards vulnerability analysis to be consistent with new Joint Commission on Accreditation of Healthcare Organizations (JCAHO) guidelines.

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e. The Task Force Report outlines a four-step approach for VA medical center administrators to implement an appropriate mass-casualty decontamination facility at their VA medical center. It provides details of medical center decontamination programs that are cost-effective, designed to be appropriate to a medical center's specific situation, simple in concept and practice, and relatively easy to implement. The four steps include:

(1) A site-specific, needs-assessment exercise that addresses VA medical center and community needs, and existing community capabilities for WMD casualty decontamination (see Att. A). The site-specific, needs-assessment exercise requires responses to the five questions in Attachment A. Some medical centers may be able to show that they presently have sufficient mass-casualty decontamination capabilities already located within their community, and require no additional capabilities.

(2) The development of an decontamination plan that is appropriate to medical center and community needs (see Att. B).

(3) An external review and certification of that plan by VHA experts. These include VHA field staff with direct experience implementing a medical center emergency decontamination program; VHA Central Office staff with appropriate backgrounds; VA law-enforcement personnel; VHA safety staff; and appropriate representatives from the Office for Policy, Planning, and Preparedness (OPPP) (008).

(4) Implementation of the plan, with assistance of VA large-scale purchases of standardized equipment. VA medical centers opting for a temporary decontamination facility need to adopt a commercially-available packaged system meeting the following minimum specifications:

(a) It must have a temporary, tent-based decontamination shower system capable of medium decontamination capacity or greater, based upon a rapidly deployable rigid frame tent structure equipped with a stand-alone hot-water generator, an air-heater for operation in cold weather, along with the materials required to assemble a complete decontamination system.

(b) A baseline temporary, commercially-available package must meet the following minimum parameters:

1. An outdoor mass-casualty decontamination system capable of decontaminating ambulatory and non-ambulatory casualties in a 24-hour period, with an approximately 16' x 16' rapidly deployable rigid framed tent (capable of withstanding adverse weather conditions).

2. Equipped with:

a. A self-contained powered water heater system capable of providing warm-water showers appropriate to needed decontamination capacity under all weather conditions,

b. A self-contained fresh air heater to maintain appropriate air temperatures for minimally clothed victims under all weather conditions,

- c. All necessary water supply hoses,
 - d. Spray wands,
 - e. Decontamination booms,
 - f. Decontamination litters for handling non-ambulatory victims,
 - g. Modesty curtains for providing appropriate privacy,
 - h. A full floor system and temporary waste-water containment berm with the capacity of handling waste-water from the decontamination shower system and corresponding waste-water containment bladder,
 - i. Self-contained interior lights, and
 - j. Four hours of hands-on, on-site training.
- (c) The entire temporary decontamination system must be deployable within 30 minutes and is to be placed in storage containers when not in use.

3. POLICY: It is VHA policy that each medical center Director is responsible for implementing an appropriate mass-casualty decontamination capability at the medical center that protects the medical center, staff, and patients in the event of an off-site incident. **NOTE:** *This capability must include provision of appropriate care for mass-casualties presenting at the facility following such an emergency.*

4. ACTIONS

- a. **Medical Center Directors.** Medical Center Directors are responsible for:
 - (1) Completing the Needs Assessment Tool (see Att. A).
 - (2) Developing a short narrative plan for the local medical center, including:
 - (a) The type of program selected,
 - (b) How it meets medical center decontamination needs, and
 - (c) A simple “floor diagram” illustrating the layout and location of the proposed decontamination facility (see Att. B).
 - (3) Forwarding these items (subpars. 4a(1) and 4a(2)) to their Veterans Integrated Service Network (VISN) Director.

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(4) Ensuring that the mass-casualty decontamination plan (including the Needs Assessment Tool, the narrative plan, and the diagram that was forwarded to reach the appropriate VISN Director in September 2002) is implemented as required.

(5) Ensuring a copy of this directive is forwarded to the Safety Officer and the local Area Emergency Manager.

b. **VISN Directors.** VISN Directors are responsible for assembling medical center data and forwarding it to:

The Office of Public Health and Environmental Hazards (131)
Room 864
VA Central Office
810 Vermont Ave., NW
Washington, DC 20420

c. **The Office of Public Health and Environmental Hazards (131).** The Office of Public Health and Environmental Hazards (131) is responsible for coordinating the review and certification of the actions described in subparagraphs 4a and 4b.

5. REFERENCE: VHA Decontamination Task Force Report. “Steps To Establishing A Practical Medical Center Emergency Mass Casualty Decontamination Capability,” dated March 27, 2002.

6. FOLLOW-UP RESPONSIBILITY: The Office of Public Health and Environmental Hazards (131) is responsible for the contents of this Directive. Questions need to be addressed to the Environmental Agents Service (131) at (202) 273-8579.

7. RECISSION: VHA Directive 2002-033, dated June 5, 2002, is rescinded. This VHA Directive expires August 31, 2008.

S/ Jonathan B. Perlin, M.D.
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Under Secretary for Health

Attachments

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ATTACHMENT A

SITE-SPECIFIC DECONTAMINATION NEEDS-ASSESSMENT TOOL

Responding to the following five paragraphs will assist in determining the local Department of Veterans Affairs (VA) medical center and community needs for mass-casualty decontamination capability.

1. To Determine the VA Medical Center Decontamination Capacity Need.

a. In a mass casualty event occurring near the medical center and/or in the local community, how many medical center staff and patients could be affected and require decontamination in a 24-hour period?

b. How many others in the immediate vicinity of the facility may present and require decontamination in a mass casualty emergency?

2. To Determine Local Community Expectations for Decontamination Capabilities for Ambulatory and Non-ambulatory Casualties at the VA Medical Center Following an Actual Mass-casualty Event.

a. What are the expectations of the local community emergency planners and others for decontamination capabilities at the VA medical center within the 24-hour period following an actual mass casualty emergency in the area?

b. If a weapons of mass destruction (WMD) mass casualty event took place in the community, estimate how many local residents, including both veterans and non-veterans, ambulatory and non-ambulatory, might present at the VA medical center for decontamination and treatment within a 24-hour period? *NOTE: This may require consultation with other community members.*

c. Is the facility expected to be capable of decontaminating and treating both ambulatory and non-ambulatory patients?

YES _____ NO _____

If no, is the facility capable of decontaminating and treating ambulatory patients only?

YES _____ NO _____

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d. Are there other factors that could impact potential mass-casualty numbers, such as nearby storage of hazardous materials, or the presence of a military facility?

3. To Evaluate Existing VA Medical Center and Local Community Decontamination Resources, and How They Compare with the Local Medical Center Decontamination Need.

a. What are the existing decontamination resources available to your community, including those at your VA medical center, other medical centers in your community, and at other nearby non-VA facilities (this may require consultation with other community members)?

b. How many staff, including emergency response, and critical security, protection, crowd-control and law-enforcement personnel, are currently trained or could be trained to meet Occupational Safety and Health Administration (OSHA) 1910.120(q) 1st Responder Operations Level, and relevant respiratory protection standard requirements found in 1910.134, that could conduct necessary decontamination activities.

(1) How many are available on-site during normal hours?

(2) How many are available on-site during the after hours period?

(3) Will a recall process be required?

YES _____ NO _____

For how many?

(4) What is your existing inventory of level B and level C Personal Protective Equipment (PPE) that would be useable in a mass-casualty decontamination event?

c. What is the capacity of existing resources in terms of casualties that can be decontaminated in a 24-hour period, following a WMD emergency?

Number of Casualties _____ Duration of Decontamination (in Hours) _____

d. How effectively are these resources integrated into a community emergency response program that can effectively meet overall community mass-casualty decontamination needs?

Very effectively _____ Semi-effectively _____ Not effectively _____

4. Given the Preceding Responses, Calculate and Circle the VA Medical Center Decontamination Capability Requirements for Ambulatory and Non-ambulatory Casualties.

a. **Large Capacity.** Large capacity capability is capable of handling more than 100 ambulatory casualties in 6 hours; e.g., for a medical center in a major metropolitan area or with few other decontamination resources, or near a hazardous materials storage site.

b. **Medium Capacity.** Medium capacity capability is capable of handling 20 to 100 ambulatory casualties in 6 hours; e.g., for a medical center in a medium-sized metropolitan area or with some existing community decontamination resources.

c. **Small Capacity.** Small capacity capability is capable of handling less than 10 ambulatory casualties in 6 hours; e.g., for a medical center in a low-population area or with significant community decontamination resources.

5. To Determine if the Calculated VA Medical Center Decontamination Capacity Requirements can be Best Served by Developing Fixed or Temporary Decontamination Facilities.

a. Given the specific physical layout of the medical center, is space available for installing a fixed, dedicated decontamination facility (such as an alley way or outside external corridor), or is a temporary decontamination facility (such as an inflatable tent set up in a parking lot) more appropriate? (It is important to note that decontamination must take place outside of the medical facility, and outside security will be required to ensure an effective and orderly process.)

Fixed Dedicated Decontamination Facility _____

Temporary Portable Decontamination Facility _____

b. If a temporary, portable decontamination facility is indicated, how many staff are available to set up that facility during normal and after hours? And, are they available on-site or would a recall process be required?

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(1) How many staff are available to set up that facility during normal hours? _____

(a) Are they available on-site? _____

(b) Will a recall process be required? _____

(2) How many staff are available to set up that facility during after-hours? _____

(a) Are they available on-site? _____

(b) Will a recall process be required? _____

Name of Facility _____

Contact and Telephone Number _____

Capacity: Large _____ Medium _____ Small _____

Fixed Decontamination Facility _____ Temporary Decontamination Facility _____

ATTACHMENT B

**DEVELOPING AN APPROPRIATE VA MEDICAL CENTER
DECONTAMINATION PLAN**

1. Many medical centers can take advantage of standardized, commercially-available decontamination packages designed to be rapidly set up in a parking lot or other available space outside of the medical center (see subpar. 2e(4) of the Directive). *NOTE: A standard, commercially- available, rapidly deployable, temporary decontamination package used by the Brooklyn, NY, Department of Veterans Affairs (VA) Medical Center is one example of a system that could be considered. These flexible packages supply the entire mass-casualty decontamination shower system, and are commercially available for about \$30,000. These have the advantages that they can be set up virtually anywhere, such as a parking lot, require a minimum of maintenance when not in use, and are relatively inexpensive. VA is currently evaluating such packages available from several vendors.*
2. Examples of large, medium, and small medical center mass-casualty decontamination programs that have been successfully implemented at VA medical centers and other medical centers, including the use of fixed facilities, are provided in the document “Medical Center Mass Casualty Decontamination Facility Examples,” available electronically at <http://vawww.va.gov/environagent>.
3. Some experts believe that permanent or semi-permanent shower emergency-decontamination facilities have several advantages over temporary tent type facilities. These include the speed of setting up the facility, lower manpower requirements for set up, and lower training requirements for the permanent or semi-fixed facilities. Permanent and semi-fixed facilities can be implemented in a wide variety of situations, such as: outdoor corridors, alleys, along an external wall, or in external smoking rooms. Such facilities may even be less expensive than temporary facilities. These examples (see par. 2) provide sufficient detail (photographs, numbers of showers, waste-water handling details, Personal Protective Equipment (PPE), contact information, etc.) to allow local medical center engineers to plan for an appropriate facility at their VA medical center.
4. After determining their appropriate decontamination capacity, each VA medical center must develop a decontamination program plan that fully meets the requirements mandated by the decontamination capacity.
5. Each VA medical center needs to be able to use the requirements mandated by the decontamination capacity to develop a short, narrative plan for their own medical center, including the type of program selected, how it meets medical center decontamination needs, and a simple “floor diagram” illustrating the layout and location of the proposed decontamination facility.
6. Proposed plans need to be no longer than a few pages in length and need to address the following issues:

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- a. Identification and rationale for the calculated 24-hour decontamination capacity (as large, medium, or small).
 - b. Size of the staff and facility that will be protected.
 - c. Role the facility plays in support to the community for mass-casualty care and mass-casualty decontamination.
 - d. Existing on-site decontamination capabilities.
 - e. Existing decontamination capabilities within the community, and how those may complement on-site capabilities.
 - f. Patient flow diagram (needs to be part of the facility diagram; however, it must be specific to ensure that all proper and required stations have been incorporated).
 - g. Identification of critical security, protection, crowd-control, patient flow control, and law-enforcement requirements for the medical center decontamination plan needs to be accomplished through discussions with medical center security staff.
 - h. Estimated set-up requirements to include staff and time.
 - i. Selection and rationale for a fixed versus temporary facility.
 - j. Sources of water for decontamination showers.
 - k. Ambulatory and non-ambulatory patient capabilities.
 - l. Cold weather decontamination considerations.
7. Ensure any changes in the Needs Assessment Tool, the narrative plan, and the diagram are forwarded to reach the appropriate Veterans Integrated Service Network (VISN) in a timely manner.