

In Reply Refer To: **FOIA Request 20-06087-F**

September 28, 2021

Austin Evers/Emma Lewis
American Oversight
1030 15th Street, NW
Washington, DC, 20005

Dear Mr. Evers/Ms. Lewis:

This letter is the initial agency decision to your April 10, 2020, request under the Freedom of Information Act (FOIA), 5 U.S.C. § 552, submitted to the Department of Veterans Affairs (VA), Veterans Health Administration (VHA) Central Office FOIA Office requesting the following records:

“Any directive, order, decision, protocols, or guidance created, adopted, or shared by your agency regarding the use of hospital resources to treat the corona virus, including, but not limited to, the use and/or rationing of ventilators for corona virus patients and the use of personal protective equipment (PPE), including masks, face shields, and gowns in VA hospitals. To be clear, directives or guidance regarding do-not-resuscitate (DNR) policies for corona virus patients should be considered responsive to this request.” (Date Range for Record Search: From 1/30/2020 To 4/10/2020).

Your FOIA request was received in the VHA FOIA Office on April 13, 2020.

The Operations Management Program Office (15) conducted a search for documents responsive to your request. The search was conducted by utilizing the search criteria of search terms provided in your request above in the COVID SharePoint site. At the conclusion of the search, 2 documents, totaling 224 pages, were determined to be responsive to your request.

Upon review of the responsive records, I have determined they contain information which is protected under FOIA Exemption 4, 5 U.S.C. § 552(b)(4) and FOIA Exemption 6, 5 U.S.C. § 552(b)(6). Therefore, I am withholding portions of the documents, under FOIA Exemption 4 and Exemption 6.

FOIA Exemption 4 permits VA to withhold from disclosure “trade secrets and commercial or financial information obtained from a person [that is] is privileged or confidential”. The documents contain commercial and financial information of Clothier Design Source as well as a fund citation code. Therefore, I am withholding the unit pricing/prices and fund citation code under the disclosure protections of FOIA Exemption 4, 5 U.S.C. § 552(b)(4).

My review of the documents also revealed that they contained information that falls within the disclosure protections of FOIA Exemption 6, 5 U.S.C. § 552(b)(6). FOIA Exemption 6 permits VA to withhold a document or information contained within a document if disclosure of the information would constitute a clearly unwarranted invasion of a living individual's personal privacy. Stated another way, VA may withhold information under FOIA Exemption 6 where disclosure of the information, either by itself or in conjunction with other information available to either the public or the FOIA requester, would result in an unwarranted invasion of an individual's personal privacy without contributing significantly to the public's understanding of the activities of the federal government.

Specifically, the information I am withholding, as indicated on the enclosed documents, under FOIA Exemption 6 consists of employee names, employee titles, employee email addresses, employee phone numbers, third party/vendor employee names and direct contact information (email address and direct phone numbers) as the individuals associated with this information have a personal privacy interest in it.

Courts have held that federal employees have a privacy interest in their names and contact information. See *Long v. ICE*, 279 F. Supp.3d at 243-44; *U.S. Dept. of Navy v. Federal Labor Relations Authority*, 975 F.2d 348, 352 (7th Cir. 1992) "As other circuits have reasoned, the privacy interest implicated here is in the release of an individual's name in association with his employment position in the federal government." Additionally, *Waterman*, 288 F. Supp.3d at 211 found that IRS employees had privacy interest in disclosure of phone numbers and email addresses, which could subject them to "embarrassment and harassment in the conduct of their official duties"; *Walston v. U.S. Department of Defense*, 238 F. Supp.3d 57, 67 (D.D.C. 2017) also found that DOD investigative employees had privacy interest in their names and business contact information. See *Milbrand v. U.S. Dep't of Labor (E.D. Mich., 2018)* Furthermore, in the *Milbrand* case the court next weighed the federal employees' privacy interest against the public interest in disclosure. "The only public interest cognizable under FOIA is the public 'understanding of the operations or activities of the government.'" In many contexts, federal courts have observed that disclosure of individual employee names and email addresses tells nothing about 'what the government is up to.'

The coverage of FOIA Exemption 6 is absolute unless the FOIA requester can demonstrate a countervailing public interest in the requested information by demonstrating that the individual is in a position to provide the requested information to members of the general public and that the information requested contributes significantly to the public's understanding of the activities of the Federal government. Additionally, the requester must demonstrate how the public's need to understand the information significantly outweighs the privacy interest of the person to whom the information pertains. Upon consideration of the materials provided, I have not been able to identify a countervailing public interest of sufficient magnitude to outweigh the privacy interest in this case. The individuals associated with this information have a personal privacy interest in information that outweighs any public interest served by disclosure of their identities under FOIA. Consequently, I am denying

your request for this information under FOIA Exemption 6, 5 U.S.C. § 552 (b)(6). No pages were withheld in their entirety.

If you disagree with my determination to withhold the information under FOIA Exemption 4 and Exemption 6, please be advised you may appeal to:

Office of the General Counsel (024)
Department of Veterans Affairs
810 Vermont Avenue, N.W.
Washington, D.C. 20420
Email: ogcfoiaappeals@va.gov

If you should choose to file an appeal, your appeal must be postmarked or electronically transmitted no later than ninety (90) calendar days from the date of this letter. Please include a copy of this letter with your written appeal and clearly state why you disagree with the determinations set forth in this response.

You may also seek assistance and/or dispute resolution services for any other aspect of your FOIA request, excluding the release determination, from VHA's FOIA Public Liaison and or Office of Government Information Services (OGIS) as provided below:

VHA FOIA Public Liaison:
Email Address: vhafoia2@va.gov
Phone Number: (877) 461-5038

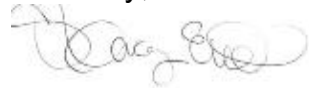
Office of Government Information Services (OGIS)
Email: ogis@nara.gov
Fax: (202) 741-5769

Mailing address:

Office of Government Information Services
National Archives and Records Administration
8601 Adelphi Road
College Park, MD 20740-6001

Thank you for your interest in VA. If you have any further questions, please feel free to contact me at (785) 230-8430 or via email at stacy.ekis@va.gov.

Sincerely,



Stacy Ekis
VHA FOIA Officer

Enclosure:

COMPOUNDED STERILE PREPARATION (CSP) RECOMMENDATIONS



U.S. Department of Veterans Affairs

Veterans Health Administration
Pharmacy Benefits Management – Continuous Readiness

Published March 13, 2020; Revised March 16, 2020

PERSONAL PROTECTIVE EQUIPMENT (PPE) CONSERVATION STRATEGIES FOR PHARMACY COMPOUNDING

- **Introduction:** As a result of the pandemic of COVID-19 the global supply of PPE may be insufficient, particularly for surgical masks and NIOSH-Approved respirators. There are currently no published authorized alternatives to USP standards regarding PPE, thus these recommendations are intended to assist VHA Pharmacies with conservation strategies and considerations if PPE supplies are exhausted.
- Please note that engaging in some of these recommendations is not commensurate with U.S. standards of care and may result in being out of compliance with VHA Directive 1108.12, Management of Compounded Sterile Preparations. If your pharmacy decides to implement any changes to practice during a shortage period, and implementation results in noncompliance, you must develop and maintain a policy demonstrating compliance with best practices (e.g., if reusing surgical masks or NIOSH-approved respirators, you must develop a policy and procedure for identification, storage, and handling of face masks subject to reuse).
- This guidance is intended to offer recommendations and strategies to conserve protective garb while maintaining the highest level of containment and limiting exposure of compounded sterile products to contaminants. These recommendations are based on current guidance and expert opinion for VHA internal use to promote enterprise-wide practice standards. The National Compounded Sterile Preparation Advisory Committee has approved this document. The document content is dynamic and will be revised as new information becomes available.
- For additional questions please email: [VHAPBM National Compounding Advisory Workgroup](#)
- **Recommendations**
 - **General**
 - Assess current inventory and monitor supplies.
 - Ensure all sterile compounding PPE needs and shortages are communicated to the facility Area Emergency Coordinator (AEC) to ensure accurate coordination with the VISN AEC and National Emergency Command Center (EMCC).
 - VISN VPE's and facilities must communicate with VISN Chief Logistics Officers to identify specific needs.
 - Procurement and Logistics Services often have an expanded list of procurement options.
 - Convert to premixed/Add-a-Vial products as much as possible.
 - Utilize bedside admixture with immediate administration when possible.
 - Consolidate workload to minimize the need for multiple staff to wear PPE.
 - Minimize trips into the Segregated Compounding Area (SCA) or Cleanroom Suite by staging supplies necessary for preparing CSPs (ensure United States Pharmacopeia [USP] <797> standards are followed prior to entering the ISO classified spaces or SCA).
 - Minimize the number of trips from the dirty to the clean side of the Anteroom or perimeter line for

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For additional questions please email: VHAPBM National Compounding Advisory Committee

Segregated Compounding Areas (SCA).

- If present, utilize pass-throughs to minimize trips into the compounding area.
- Consider using already garbed compounding staff for facility cleaning/disinfecting activities, rather than utilizing more garb for Environmental Management Services employees.
 - Please note that not all staff have performed these duties will need training and competencies
 - Discuss changes to process with EMS prior to making a change.
- Limit training of new staff during this time period if possible and only conduct the Glove Fingertip (GFT) tests as required for currently trained staff.
- For external surveys/reviews: Request discussion with surveyors to explore alternative approaches to survey activity during this time (e.g. observations and interviews from outside cleanroom area).
- Discuss and document changes to practice with the local Compounded Sterile Preparation (CSP) Advisory Committee and Infection Control.
- Train compounding staff on the policies and procedures developed for reusing PPE that will not compromise the microbial state of control in the compounding rooms. Document training and competency assessment.
- If the facility decides to employ any non-compliant conservation strategies, the CSP Committee must discuss and implement additional monitoring strategies such as increased local environmental sampling (if possible), direct observation, blue-light scanners, etc.
 - Enhance vigilance for excluding staff exhibiting signs of illness from entering the compounding area.
- Consider wearing facility daily laundered scrubs underneath gown. (Discuss with Labor Relations and ensure space and time within tour of duty are agreed prior to implementing.)
 - Consider evaluating Ultraviolet Germicidal Irradiation (UVGI) as a disinfection method.
- Notify VISN CSP Advisory Committee of any changes made to the garbing procedures.
- Submit an Issue Brief if you must change practice that results in non-compliance with VHA Directive 1108.12.
- VHA National Formulary for Supplies <https://www.va.gov/opal/sac/mspvNG.asp>

➤ **Surgical Masks and NIOSH-Approved Respirators (*Discuss any changes to alternative practices with Infection Control)**

- Do not use NIOSH-Approved N95 respirators when compounding Hazardous Drugs (HD) CSPs.
 - This is not required and the N95 protects against particles only, not vapors.
 - Discuss correct options with facility or VISN Industrial Hygienist.
 - If concerns for vapors or liquid during cleaning, utilize an elastomeric NIOSH approved respirator with an organic vapor cartridge (an appropriate full-facepiece-chemical cartridge) or NIOSH-approved R95 respirator.
- Consider limited reuse of surgical masks (2-3 days maximum).
 - Place in a paper bag (or other clean and breathable vessel), use a new bag after each new use.
 - Initial and date paper bag.
 - Surgical masks are removed on the dirty side of the anteroom or outside of the perimeter line of the segregated control area (SCA) without touching the inside of the mask.
 - Store in a designated spot where garbing normally occurs.
 - Compounding personnel must inspect the mask each time it is reused to ensure the mask provides adequate control (i.e. condition of the mask, whether it is visibly soiled, handling technique, etc.) in accordance with the facility's policies and procedures.
 - Discard all surgical masks if visibly soiled.

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- Don prior to hand washing and not touched after placement.
- Donning and doffing procedures must be defined to limit handling and avoid touching inside of the mask.
- In a shortage, consider omitting surgical masks when compounding in a CAI (Containment Aseptic Isolator) or CACI (Compounding Aseptic Containment Isolator).
- A surgical mask may only be used by one person (the same person). Surgical masks may not be shared between different individuals.
- Surgical masks used to compound HD CSPs may not be reused.
- **Gloves**
 - Do not reuse gloves.
 - HD gloves are required to be American Society for Testing and Material (ASTM) 6978.
- **Head Covers**
 - Consider re-using head covers if a shortage occurs.
 - If re-using, place in paper bag and initial bag.
 - Head covers may only be used by one person (the same person). Headcovers may not be shared between different individuals.
- **Shoes / Shoe Covers**
 - Consider using compounding area designated cleanable shoes (i.e. closed Crocs®).
 - Donning and Doffing must be reordered with this shoe process being the dirtiest element.
 - Those who are compounding CSPs must wear daily laundered clean socks if this process is implemented. Socks must be on feet prior to entering SCA or anteroom.
 - Dedicated shoes must remain in clean side of the anteroom or within the perimeter line of the SCA.
 - Dedicated shoes may only be used by one person (the same person). Shoes may not be shared between individuals.
 - Wear one pair of shoe covers over “dedicated shoes” in HD areas.
 - Source alternative shoe covers, such as those used on construction sites.
 - Shoe covers may not be reused.
- **Gowns**
 - For non-hazardous only use non-sterile, low shedding disposable gowns.
 - Gowns may be retained and reused for an entire day/shift; if gowns are reused for a longer period then do not exceed one week.
 - Compounding personnel must inspect the gown each time it is reused.
 - Store gowns on individual hooks away from sink.
 - Gown should be removed in a deliberate and careful manner and not be stored inside out.
 - Gowns must be discarded if visibly soiled
 - Gowns should remain on the clean side of the Ante Room (ISO Class 7 or 8) or SCA
 - Consider using disposable sleeves if reusing gowns.
 - Sleeve covers should be opened in the buffer room/SCA area after handwashing procedures and the gown is donned.
 - Sleeve covers should be placed over the donned gown sleeve and should close tightly at the wrist.
 - Sterile gloves should be donned last and cover the wrist of the sleeve cover.
 - For Hazardous Drugs (HD) CSPs use non-sterile, impermeable, disposable gowns.
 - Do not reuse HD gowns.

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- Consider workflows to consolidate HD compounding such as designating specific time for each day.
- Consider use of Coveralls or ‘Bunny Suits’ (ensure proper donning without touch on ground).
- Gowns may only be used by one person (the same person). Gowns may not be shared between different individuals.

➤ **Hand Sanitizer (*Discuss any changes to alternative practices with Infection Control)**

- Hand washing is still the #1 preventative measure
- Consider using UV light sanitizers.
- Consider using blue-light scanners to identify contamination.
- Consider limiting hand sanitizer use to glove change procedures only.
- Alcohol-based hand sanitizer not intended for clean room or surgical use may be utilized as a replacement.
- Be advised the use of sIPA as a hand sanitizer may break down skin and create additional bioburden.
- Pharmacy Service may prepare Hand Sanitizer under the following conditions:
 - Circumstances warrant preparation.
 - Other options have been exhausted. The CSP Advisory Committee has communicated with facility and VISN Logistics Officers to discuss shortages.
 - The National Procurement and Logistics Service continues ongoing efforts for restocking supplies.
 - Facilities must ensure the Nation Logistics and Procurement Service through communication with the VISN Chief Logistics Officers.
 - The Facility and VISN CSP Committees have discussed and agree (please document this)
 - Please note- Pharmacy Service must be willing and comfortable with preparing hand sanitizer.
 - Only the World Health Organization (WHO) recommended Hand Rub Formulations are used in the preparation (please see Attached documents).
 - All “ingredients” necessary for the preparation are available.
 - Consider checking with Laboratory Services for resources.
 - Consider discussing with Procurement and Logistics for assistance and resources.
 - Must review and have Safety Data Sheets available for items being compounded.
 - Must properly store all items used in preparation.
 - Discuss with facility Safety Office to ensure appropriate storage (i.e. flammable cabinets, etc.).

References:

- CDC: NIOSH <https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html>
- CDC: Strategies for Optimizing the Supply of N95 Respirators https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Frespirator-supply-strategies.html
-
- FDA: PPE <https://www.fda.gov/medical-devices/general-hospital-devices-and-supplies/personal-protective-equipment-infection-control>
- Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19) https://apps.who.int/iris/bitstream/handle/10665/331215/WHO-2019-nCov-IPCPPE_use-2020.1-eng.pdf
- Critical Point Peer Network: <https://peernetwork.criticalpoint.info>

These are recommendations are based on current guidance and expert opinion for VHA internal use to promote enterprise-wide practice standards. The document content is dynamic and will be revised as new information becomes available.

For additional questions please email: VHAPBM National Compounding Advisory Committee

- Iowa State Board of Pharmacy: <https://pharmacy.iowa.gov/press-release/2020-03-09/what-should-my-pharmacy-do-if-we-have-limited-supplies-compounding-garb>
- MSN: Blue-Light Scanners to detect dirty hands <http://www.nbcnews.com/id/4669827/ns/health-infectious-diseases/t/light-scanners-may-help-detect-dirty-hands/#.Xmlhiv2P6Uk>

These are recommendations are based on current guidance and expert opinion for VHA internal use to promote enterprise-wide practice standards. The document content is dynamic and will be revised as new information becomes available.

For additional questions please email: VHAPBM National Compounding Advisory Committee

Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency Immediately in Effect Guidance for Industry

FDA is issuing this guidance for immediate implementation in accordance with 21 CFR 10.115(g)(2). Comments may be submitted at any time for Agency consideration. Submit written comments to the Dockets Management Staff (HFA-305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852. Submit electronic comments to <https://www.regulations.gov>. All comments should be identified with the docket number listed in the notice of availability that publishes in the *Federal Register*.

For questions regarding this document, contact FDA's human drug compounding team (CDER) at compounding@fda.hhs.gov.

**U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)**

**March 2020
Compounding**

Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency Immediately in Effect Guidance for Industry

*Additional copies are available from:
Office of Communications, Division of Drug Information
Center for Drug Evaluation and Research
Food and Drug Administration
10001 New Hampshire Ave., Hillandale Bldg., 4th Floor
Silver Spring, MD 20993-0002
Phone: 855-543-3784 or 301-796-3400; Fax: 301-431-6353
Email: druginfo@fda.hhs.gov
<https://www.fda.gov/drugs/guidance-compliance-regulatory-information/guidances-drugs>*

**U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)**

**March 2020
Compounding**

Contains Nonbinding Recommendations

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Contains Nonbinding Recommendations

Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency Immediately in Effect Guidance for Industry¹

This guidance represents the current thinking of the Food and Drug Administration (FDA or Agency) on this topic. It does not establish any rights for any person and is not binding on FDA or the public. You can use an alternative approach if it satisfies the requirements of the applicable statutes and regulations. To discuss an alternative approach, contact the FDA office responsible for this guidance as listed on the title page.

I. INTRODUCTION

Due to the Coronavirus Disease 2019 (COVID-19) pandemic, the Food and Drug Administration (FDA or Agency) has received a number of queries concerning compounding of alcohol-based hand sanitizers. The Agency is issuing this guidance to communicate its policy for the temporary compounding of certain alcohol-based hand sanitizer products by pharmacists in State-licensed pharmacies or Federal facilities and registered outsourcing facilities (referred to collectively in this guidance as compounders) for the duration of the public health emergency declared by the Secretary of Health and Human Services (HHS) on January 31, 2020.²

In light of the public health emergency posed by COVID-19, this guidance is being implemented without prior public comment because the FDA has determined that prior public participation for this guidance is not feasible or appropriate (see section 701(h)(1)(C)(i) of the Federal Food, Drug, and Cosmetic Act (FD&C Act) (21 U.S.C. 371(h)(1)(C)(i)) and 21 CFR 10.115(g)(2)). This guidance document is immediately in effect, but it remains subject to comment in accordance with the Agency's good guidance practices.

In general, FDA's guidance documents do not establish legally enforceable responsibilities. Instead, guidances describe the Agency's current thinking on a topic and should be viewed only as recommendations, unless specific regulatory or statutory requirements are cited. The use of the word *should* in Agency guidances means that something is suggested or recommended, but not required.

¹ This guidance has been prepared by the Office of Compliance in the Center for Drug Evaluation and Research at the Food and Drug Administration.

² The HHS Public Health Emergency Declaration is available at <https://www.phe.gov/emergency/news/healthactions/phe/Pages/2019-nCoV.aspx>.

*Contains Nonbinding Recommendations***II. BACKGROUND**

There is currently an outbreak of respiratory disease caused by a novel coronavirus that was first detected in Wuhan City, Hubei Province, China, and that has now been detected in many locations internationally, including cases in the United States. The virus has been named “SARS-CoV-2” and the disease it causes has been named “Coronavirus Disease 2019” (COVID-19). SARS-CoV-2 has demonstrated the capability to rapidly spread, leading to significant impacts on healthcare systems and causing societal disruption. The potential public health threat posed by COVID-19 is high, both globally and to the United States. On January 31, 2020, the Secretary of HHS determined that a public health emergency exists.

Hand hygiene is an important part of the U.S. response to COVID-19. Washing hands often with soap and water for at least 20 seconds is essential, especially after going to the bathroom, before eating, and after coughing, sneezing or blowing one’s nose. If soap and water are not readily available, the Centers for Disease Control and Prevention (CDC) recommends an alcohol-based hand sanitizer that contains at least 60 percent alcohol.³

III. DISCUSSION

We understand that some consumers are currently experiencing difficulties accessing alcohol-based hand sanitizers containing at least 60 percent alcohol. We are also aware of reports that some consumers are producing hand sanitizers for personal use; the Agency lacks information on the methods being used to prepare such products and whether they are safe for use on human skin. We further recognize that compounders, relative to untrained consumers, are more familiar with standards and methods for producing drug products.

Because of the public health emergency posed by COVID-19, FDA does not intend to take action against compounders⁴ that prepare alcohol-based hand sanitizers for consumer use for the duration of the public health emergency declared by the Secretary of HHS on January 31, 2020, provided the following circumstances are present:

³ Isopropyl alcohol and ethyl alcohol are two of the active ingredients currently being evaluated by FDA as part of its review of over-the-counter (OTC) monographs for hand sanitizers for use in reducing bacteria on the skin that potentially can cause disease or decreasing bacteria on the skin. See “Safety and Effectiveness of Consumer Antiseptic Rubs; Topical Antimicrobial Drug Products for Over-the-Counter Human Use,” Final Rule, 84 FR 14847 (April 12, 2019); Safety and Effectiveness of Health Care Antiseptics; Topical Antimicrobial Drug Products for Over-the-Counter Human Use Final Rule, 82 FR 60474 (December 20, 2017); “Topical Antimicrobial Drug Products for Over-the-Counter Human Use; Tentative Final Monograph for Health-Care Antiseptic Drug Products,” Proposed Rule, 59 FR 31402 (June 17, 1994) (1994 TFM).

⁴ Specifically, FDA does not intend to take action against pharmacists in State-licensed pharmacies or Federal facilities, for the duration of the public health emergency declared by the Secretary of HHS on January 31, 2020, for violations of sections 501(a)(2)(B), 502(f)(1), and 505 of the FD&C Act (21 U.S.C. 351(a)(2)(B), 352(f)(1), and 355), or against outsourcing facilities for violations of sections 502(f)(1), 505, or 582 of the FD&C Act (21 U.S.C. 352(f)(1), 355, and 360eee-1).

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1. The hand sanitizer is compounded using only the following United States Pharmacopoeia (USP) grade ingredients in the preparation of the product (percentage in final product formulation) consistent with World Health Organization (WHO) recommendations:⁵
 - a. Alcohol (ethanol) (80%, volume/volume (v/v)) in an aqueous solution denatured according to Alcohol and Tobacco Tax and Trade Bureau regulations in 27 CFR part 20; **or** Isopropyl Alcohol (75%, v/v) in an aqueous solution.⁶
 - b. Glycerol (1.45% v/v).⁷
 - c. Hydrogen peroxide (0.125% v/v).
 - d. Sterile distilled water or boiled cold water.

The compounder does not add other active or inactive ingredients. Different or additional ingredients may reduce the safety and effectiveness of the product.

2. The compounder pays particular attention to ensure the ethanol or isopropyl alcohol active ingredient is correct and the correct amount of the active ingredient is used.
3. The hand sanitizer is prepared under conditions routinely used by your facility to compound similar nonsterile drugs.⁸
4. The hand sanitizer is labeled consistent with the attached labeling in Appendix A (Labeling for Ethyl Alcohol Formulation) or Appendix B (Labeling for Isopropyl Alcohol Formulation).

This policy does not extend to other types of products, such as products that use different active ingredients, whose potency falls above or below the formulation described above, that are marketed with claims that do not conform to the “Topical Antimicrobial Drug Products for Over-the-Counter Human Use; Tentative Final Monograph for Health-Care Antiseptic Drug Products,” Proposed Rule, 59 FR 31402 (June 17, 1994) (e.g., pathogen-specific disease claims), or whose advertising or promotion is false or misleading in any particular.

⁵The 1994 TFM is available at <https://www.gpo.gov/fdsys/pkg/FR-1994-06-17/html/94-14503.htm>. WHO’s recommendations, titled “Guide to Local Production: WHO-recommended Handrub Formulations,” are available at https://www.who.int/gpsc/5may/Guide_to_Local_Production.pdf.

⁶ Consistent with the 1994 TFM, alcohol should be used in a final product concentration between 60-95% (v/v) in an aqueous solution denatured according to Alcohol and Tobacco Tax and Trade Bureau regulations in 27 CFR part 20; isopropyl alcohol should be used in a concentration between 70-91.3% (v/v). This guidance is consistent with WHO’s recommended formulation specifications of 80% alcohol and 75% isopropyl alcohol.

⁷ Although WHO’s recommended formulation includes glycerol 1.45% (v/v), reports indicate that glycerol negatively impacts effectiveness of isopropyl alcohol (<https://www.ncbi.nlm.nih.gov/pubmed/28670452>), and reports studying the effectiveness of WHO’s formulation have suggested a reduction from 1.45% to 0.725% (<https://www.ncbi.nlm.nih.gov/pubmed/23388358/>).

⁸ In particular, outsourcing facilities compound drugs subject to current Good Manufacturing Practice requirements, and other pharmacy compounders generally prepare nonsterile drug products from bulk drug substances in compliance with United States Pharmacopoeia chapter 795. Both outsourcing facilities and other pharmacy compounders must also avoid insanitary conditions as set forth in section 501(a)(2)(A) of the FD&C Act (21 U.S.C. 351(a)(2)(A)).

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FDA encourages consumers and health care professionals to report adverse events experienced with the use of hand sanitizers to FDA's MedWatch Adverse Event Reporting program:

- Complete and submit the report online; or
- Download and complete the form, then submit it via fax at 1-800-FDA-0178.

Outsourcing facilities can see Adverse Event Reporting for Outsourcing Facilities Under Section 503B of the Federal Food, Drug, and Cosmetic Act for more information.

*Contains Nonbinding Recommendations***Appendix A. Labeling for Ethyl Alcohol Formulation****PRINCIPAL DISPLAY PANEL (FRONT OF PACKAGE):**

**Alcohol Antiseptic 80 %
Topical Solution**

**Hand Sanitizer
Non-sterile Solution**

[Insert Volume of Product in mL]

DRUG FACTS LABEL

Drug Facts	
Active ingredient[s]	Purpose
Alcohol 80% v/v.....	Antiseptic
Use[s]	
Hand sanitizer to help reduce bacteria that potentially can cause disease. For use when soap and water are not available.	
Warnings	
For external use only. Flammable. Keep away from heat or flame	
Do not use	
- in children less than 2 months of age - on open skin wounds	
When using this product keep out of eyes, ears, and mouth. In case of contact with eyes, rinse eyes thoroughly with water.	
Stop use and ask a doctor if irritation or rash occurs. These may be signs of a serious condition.	
Keep out of reach of children. If swallowed, get medical help or contact a Poison Control Center right away.	
Directions	
- Place enough product on hands to cover all surfaces. Rub hands together until dry. - Supervise children under 6 years of age when using this product to avoid swallowing.	
Other information	
- Store between 15-30C (59-86F) - Avoid freezing and excessive heat above 40C (104F)	
Inactive ingredients glycerin, hydrogen peroxide, purified water USP	

*Contains Nonbinding Recommendations***Appendix B. Labeling for Isopropyl Alcohol Formulation****PRINCIPAL DISPLAY PANEL (FRONT OF PACKAGE):****Isopropyl Alcohol Antiseptic 75%
Topical Solution****Hand Sanitizer
Non-sterile Solution****[Insert Volume of Product in mL]****DRUG FACTS LABEL**

Drug Facts	
Active ingredient[s]	Purpose
Isopropyl alcohol 75% v/v.....	Antiseptic
Use[s]	
Hand sanitizer to help reduce bacteria that potentially can cause disease. For use when soap and water are not available.	
Warnings	
For external use only. Flammable. Keep away from heat or flame	
Do not use	
• in children less than 2 months of age • on open skin wounds	
When using this product keep out of eyes, ears, and mouth. In case of contact with eyes, rinse eyes thoroughly with water.	
Stop use and ask a doctor if irritation or rash occurs. These may be signs of a serious condition.	
Keep out of reach of children. If swallowed, get medical help or contact a Poison Control Center right away.	
Directions	
• Place enough product on hands to cover all surfaces. Rub hands together until dry. • Supervise children under 6 years of age when using this product to avoid swallowing.	
Other information	
• Store between 15-30C (59-86F) • Avoid freezing and excessive heat above 40C (104F)	
Inactive ingredients glycerin, hydrogen peroxide, purified water USP	



Guide to Local Production: WHO-recommended Handrub Formulations

Introduction: This Guide to Local Production of WHO-recommended Handrub Formulations is separated into two discrete but interrelated sections:

Part A provides a practical guide for use at the pharmacy bench during the actual preparation of the formulation. Users may want to display the material on the wall of the production unit.

Part B summarizes some essential background technical information and is taken from WHO Guidelines on Hand Hygiene in Health Care (2009). Within Part B the user has access to important safety and cost information and supplementary material relating to dispensers and distribution.



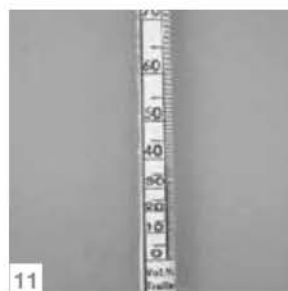
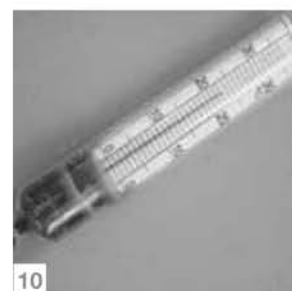
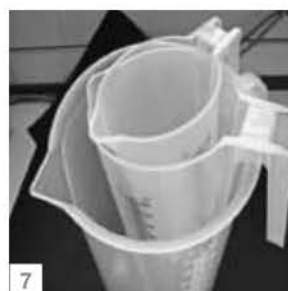
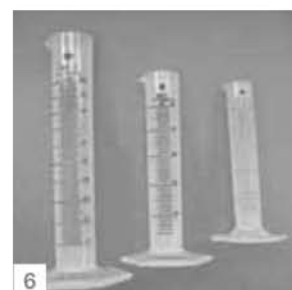
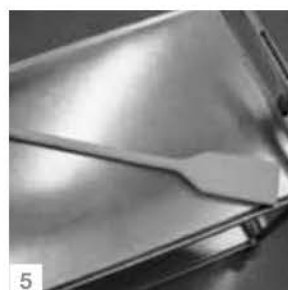
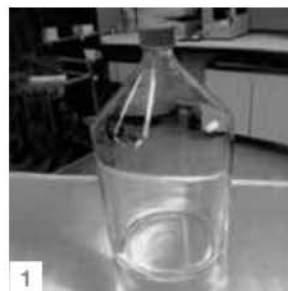
PART A: GUIDE TO LOCAL PRODUCTION

Part A is intended to guide a local producer in the actual preparation of the formulation.

Materials required (small volume production)

REAGENTS FOR FORMULATION 1:	REAGENTS FOR FORMULATION 2:
- Ethanol 96% - Hydrogen peroxide 3% - Glycerol 98% - Sterile distilled or boiled cold water	- Isopropyl alcohol 99.8% - Hydrogen peroxide 3% - Glycerol 98% - Sterile distilled or boiled cold water

- 10-litre glass or plastic bottles with screw-threaded stoppers (1), or
- 50-litre plastic tanks (preferably in polypropylene or high density polyethylene, translucent so as to see the liquid level) (2), or
- Stainless steel tanks with a capacity of 80–100 litres (for mixing without overflowing) (3 , 4)
- Wooden, plastic or metal paddles for mixing (5)
- Measuring cylinders and measuring jugs (6 , 7)
- Plastic or metal funnel
- 100 ml plastic bottles with leak-proof tops (8)
- 500 ml glass or plastic bottles with screw tops (8)
- An alcoholometer: the temperature scale is at the bottom and the ethanol concentration (percentage v/v) at the top (9 , 10 , 11)



NOTE

- Glycerol: used as humectant, but other emollients may be used for skin care, provided that they are cheap, widely available and miscible in water and alcohol and do not add to toxicity, or promote allergy.
- Hydrogen peroxide: used to inactivate contaminating bacterial spores in the solution and is not an active substance for hand antisepsis.
- Any further additive to both formulations should be clearly labelled and be non-toxic in case of accidental ingestion.
- A colorant may be added to allow differentiation from other fluids, but should not add to toxicity, promote allergy, or interfere with antimicrobial properties. The addition of perfumes or dyes is not recommended due to risk of allergic reactions.

METHOD: 10-LITRE PREPARATIONS

These can be prepared in 10-litre glass or plastic bottles with screw-threaded stoppers.

Recommended amounts of products:

FORMULATION 1	FORMULATION 2
- Ethanol 96%: 8333 ml - Hydrogen peroxide 3%: 417 ml - Glycerol 98%: 145 ml	- Isopropyl alcohol 99.8%: 7515 ml - Hydrogen peroxide 3%: 417 ml - Glycerol 98%: 145 ml

Step by step preparation:



1. The alcohol for the formula to be used is poured into the large bottle or tank up to the graduated mark.



4. The bottle/tank is then topped up to the 10-litre mark with sterile distilled or cold boiled water.



2. Hydrogen peroxide is added using the measuring cylinder.



5. The lid or the screw cap is placed on the tank/bottle as soon as possible after preparation, in order to prevent evaporation.

6. The solution is mixed by shaking gently where appropriate or by using a paddle.



3. Glycerol is added using a measuring cylinder. As glycerol is very viscous and sticks to the wall of the measuring cylinder, it should be rinsed with some sterile distilled or cold boiled water and then emptied into the bottle/tank.



7. Immediately divide up the solution into its final containers (e.g. 500 or 100 ml plastic bottles), and place the bottles in quarantine for 72 hours before use. This allows time for any spores present in the alcohol or the new/re-used bottles to be destroyed.

Final products

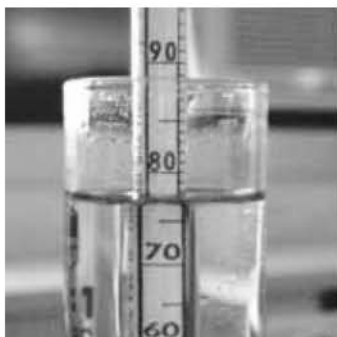
FORMULATION 1	FORMULATION 2
Final concentrations: - Ethanol 80% (v/v), - Glycerol 1.45% (v/v), - Hydrogen peroxide 0.125% (v/v)	Final concentrations: - Isopropyl alcohol 75% (v/v), - Glycerol 1.45% (v/v), - Hydrogen peroxide 0.125% (v/v)

Quality control

1. Pre-production analysis should be made every time an analysis certificate is not available to guarantee the titration of alcohol (i.e. local production). Verify the alcohol concentration with the alcoholmeter and make the necessary adjustments in volume in the preparation formulation to obtain the final recommended concentration.



2. Post-production analysis is mandatory if either ethanol or an isopropanol solution is used. Use the alcoholmeter to control the alcohol concentration of the final use solution. The accepted limits should be fixed to $\pm 5\%$ of the target concentration (75%–85% for ethanol).



3. The alcoholmeter shown in this information pamphlet is for use with ethanol; if used to control an isopropanol solution, a 75% solution will show 77% ($\pm 1\%$) on the scale at 25°C.

General information

Labelling should be in accordance with national guidelines and should include the following:

- Name of institution
- WHO-recommended handrub formulation
- For external use only
- Avoid contact with eyes
- Keep out of the reach of children
- Date of production and batch number
- Use: Apply a palmful of alcohol-based handrub and cover all surfaces of the hands. Rub hands until dry
- Composition: ethanol or isopropanol, glycerol and hydrogen peroxide
- Flammable: keep away from flame and heat

Production and storage facilities:

- Production and storage facilities should ideally be air conditioned or cool rooms. No naked flames or smoking should be permitted in these areas.
- WHO-recommended handrub formulations should not be produced in quantities exceeding 50-litres locally or in central pharmacies lacking specialised air conditioning and ventilation.
- Since undiluted ethanol is highly flammable and may ignite at temperatures as low as 10°C, production facilities should directly dilute it to the above-mentioned concentration. The flashpoints of ethanol 80% (v/v) and of isopropyl alcohol 75% (v/v) are 17.5°C and 19°C, respectively.
- National safety guidelines and local legal requirements must be adhered to the storage of ingredients and the final product.
- Additional safety information is presented in Part B of this Guide.

PART B: SUPPLEMENTARY TECHNICAL, SAFETY AND COST INFORMATION:

Part B contains important safety and cost information and incorporates information from the WHO Guidelines on Hand Hygiene in Health Care (2009).

The case for alcohol-based handrubs in health care

At present, alcohol-based handrubs are the only known means for rapidly and effectively inactivating a wide array of potentially harmful microorganisms on hands.

WHO recommends alcohol-based handrubs based on the following factors:

1. Evidence-based, intrinsic advantages of fast-acting and broad-spectrum microbicidal activity with a minimal risk of generating resistance to antimicrobial agents;
2. Suitability for use in resource-limited or remote areas with lack of accessibility to sinks or other facilities for hand hygiene (including clean water, towels, etc.);
3. Capacity to promote improved compliance with hand hygiene by making the process faster, more convenient and immediately accessible at the point of patient care;
4. Economic benefit by reducing annual costs for hand hygiene, representing approximately 1% of extra-costs generated by health care-associated infection
5. Minimization of risks from adverse events because of increased safety associated with better acceptability and tolerance than other products.

(Source: WHO Guidelines on Hand Hygiene in Health Care 2009)

Background to WHO alcohol-based handrub formulations

According to the available evidence on efficacy, tolerability and cost-effectiveness, WHO recommends using an alcohol-based handrub for routine hand antisepsis in most clinical situations. Health-care facilities currently using commercially-available handrubs, liquid soaps and skin care products sold in disposable containers should continue this practice, provided that the handrubs meet recognised standards for microbicidal efficacy (ASTM or EN standards) and are well accepted/tolerated by the health-care workers. It is obvious that these products should be regarded as acceptable, even if their contents differ from those of WHO-recommended formulations described within this document. WHO recommends the local production of the following formulations as an alternative when suitable commercial products are either unavailable or too costly.

To help countries and health-care facilities to achieve system change and adopt alcohol-based handrubs, WHO has identified formulations for their local preparation. Logistic, economic, safety, cultural and religious factors have all been carefully considered by WHO before recommending such formulations for use worldwide.

Efficacy

It is the consensus opinion of a WHO expert group that WHO-recommended handrub formulations can be used both for hygienic hand antisepsis and for presurgical hand preparation.

Hygienic handrub

The microbicidal activity of the two WHO-recommended formulations was tested by WHO reference laboratories according to EN standards (EN 1500). Their activity was found to be equivalent to the reference substance (isopropanol 60% v/v) for hygienic hand antisepsis.

Presurgical hand preparation

Both WHO-recommended handrub formulations were tested by two independent reference laboratories in different European countries to assess their suitability for use for pre-surgical hand preparation, according to the European Standard EN 12791. Although formulation I did not pass the test in both laboratories and formulation II in only one of them, the expert group is, nevertheless, of the opinion that the microbicidal activity of surgical antisepsis is still an ongoing issue for research as due to the lack of epidemiological data there is no indication that the efficacy of n-propanol (propan-1-ol) 60% v/v as a reference in EN 12791 finds a clinical correlate. It is the consensus opinion of a WHO expert group that the choice of n-propanol is inappropriate as the reference alcohol for the validation process because of its safety profile and the lack of evidence-based studies related to its potential harmfulness for humans. Indeed, only a few formulations worldwide have incorporated n-propanol for hand antisepsis.

Considering that other properties of WHO recommended formulations, such as their excellent tolerability, good acceptance by health-care workers and low cost are of high importance for a sustained clinical effect, the above results are considered acceptable and it is the consensus opinion of a WHO expert group that the two formulations can be used for surgical hand preparation. Institutions opting to use WHO-recommended formulations for surgical hand preparation should ensure that a minimum of three applications are used, if not more, for a period of 3–5 minutes. For surgical procedures of more than 2 hours duration, ideally surgeons should practise a second handrub of approximately 1 minute, even though more research is needed on this aspect.

Key lessons learned from around the world

Many settings around the world successfully undertook local production of the two WHO-recommended formulations. Throughout Part B, additional information is presented where relevant, in table form, based on feedback from 11 sites located in Bangladesh, Costa Rica, Egypt, Hong Kong SAR, Kenya, Mali, Mongolia, Pakistan (two sites), Saudi Arabia, and Spain. Further, detailed information is available within the WHO Guidelines on Hand Hygiene in Health Care (2009)

Composition of alcohol-based formulations for in-house/local production

The choice of components for WHO handrubs takes into account both cost constraints and microbiological efficacy. The procurement of raw ingredients will be influenced by the availability of sub-standard materials on the market and it is important to select local sources with care.

The following two alcohol-based handrub formulations are recommended for preparation in-house or in a local production facility, up to a maximum of 50 litres:

Formulation 1

To produce final concentrations of ethanol 80% v/v, glycerol 1.45% v/v, hydrogen peroxide (H_2O_2) 0.125% v/v.

Formulation 2

To produce final concentrations of isopropyl alcohol 75% v/v, glycerol 1.45% v/v, hydrogen peroxide (H_2O_2) 0.125% v/v:

Only pharmacopoeial quality reagents should be used (e.g. The International Pharmacopoeia) and not technical grade products.

Raw materials:

While alcohol is the active component in the formulations, certain aspects of other components should be respected. All raw materials used should be preferably free of viable bacterial spores. The raw materials for inclusion/consideration are listed in the table below:

H_2O_2	- The low concentration of H_2O_2 is intended to help eliminate contaminating spores in the bulk solutions and recipients and is not an active substance for hand antisepsis. H_2O_2 adds an important safety aspect, however the use of 3–6% for the production might be complicated by its corrosive nature and by difficult procurement in some countries. - Further investigation is needed to assess H_2O_2 availability in different countries as well as the possibility of using a stock solution with a lower concentration.
Glycerol and other humectants or emollients	- Glycerol is added as a humectant to increase the acceptability of the product. - Other humectants or emollients may be used for skin care, provided that they are affordable, available locally, miscible (mixable) in water and alcohol, non-toxic, and hypoallergenic. - Glycerol has been chosen because it is safe and relatively inexpensive. Lowering the percentage of glycerol may be considered to further reduce stickiness of the handrub.
Use of proper water	While sterile distilled water is preferred for making the formulations, boiled and cooled tap water may also be used as long as it is free of visible particulates.
Addition of other additives	- It is strongly recommended that no ingredients other than those specified here be added to the formulations. - In the case of any additions, full justification must be provided together with documented safety of the additive, its compatibility with the other ingredients, and all relevant details should be given on the product label.
Gelling agents	No data are available to assess the suitability of adding gelling agents to WHO-recommended liquid formulations, but this could increase potentially both production difficulties and costs, and may compromise antimicrobial efficacy.
Fragrances	The addition of fragrances is not recommended because of the risk of allergic reactions.

All handrub containers must be labelled in accordance with national and international guidelines.

Procurement of components: key learning from around the world (based on feedback from the field)

Ethanol	Easier to procure from local suppliers due to cost in some countries. • Can be derived from sugar cane or wheat. • Subject to licensing restrictions and strict record-keeping – an important consideration prior to embarking on production.
Isopropyl	Easier to procure in some countries.
Glycerol	Produced by local suppliers in most cases.
Hydrogen peroxide	Difficulties sourcing satisfactory H ₂ O ₂ resulted in the need to import in five sites.

Production and storage

Manufacture of WHO-recommended handrub formulations is feasible in central pharmacies or dispensaries. Whenever possible and according to local policies, governments should encourage local production, support the quality assessment process, and keep production costs as low as possible. Special requirements apply for the production and stock piling of the formulations, as well as for the storage of the raw materials.

Because undiluted ethanol is highly flammable and may ignite at temperatures as low as 10°C, production facilities should directly dilute it to the concentrations detailed within this guide. (Refer to *Summary table of risks and mitigation measures concerning the use of alcohol-based hand hygiene preparations*)

WHO is exploring the development of additional guidance on large-scale production to facilitate scale-up.

Production facilities and personnel: key learning from around the world (based on feedback from the field)

Who are the main producers?	• Qualified pharmacists.
How much is produced?	• 10 litres to 600,000 litres per month was produced in test-sites.
Where does production occur?	• Hospital pharmacy. • National drug companies.
Production equipment	• Plastic, stainless steel and glass containers were used for mixing.
Dispensers for final product	• Ranges used: – 100 ml pocket bottles – 385 ml bottles – 500 ml wall-mounted dispensers – 1 litre wall mounted bottles or bags
Sources of dispensers	• Local sourcing can prove problematic, some countries had success working with local private sector suppliers.

Storage volumes:

Special requirements are applicable for the production and storage of the formulations, as well as the storage of the primary products. The quantity of locally-produced WHO handrub should not exceed 50 litres, or possibly less if regulated by local and/or national guidelines and regulations.

Cleansing and disinfection process for reusable handrub bottles:

1. Bring empty bottles to a central point for reprocessing by standard operational protocols;
2. Wash bottles thoroughly with detergent and tap water to eliminate any residual liquid;
3. If heat-resistant, thermally disinfect bottles by boiling in water. Whenever possible, thermal disinfection should be chosen in preference to chemical disinfection. The latter may increase costs and introduces an extra step to flush out the remains of the disinfectant. Chemical disinfection should include soaking the bottles in a solution containing 1000 ppm of chlorine for a minimum of 15 minutes and then rinsing with sterile/cooled boiled water;
4. After thermal or chemical disinfection, leave bottles to dry completely upside-down in a bottle rack. Dry bottles should be closed with a lid and stored, protected from dust, until use.

Quality Control:

If concentrated alcohol is obtained from local production, verify the alcohol concentration and make the necessary adjustments in volume to obtain the final recommended concentration. An alcoholmeter can be used to control the alcohol concentration of the final use solution; H₂O₂ concentration can be measured by titrimetry (oxydo-reduction reaction by iodine in acidic conditions). A higher level quality control can be performed using gas chromatography and the titrimetric method to control the alcohol and the hydrogen peroxide content, respectively. Moreover, the absence of microbial contamination (including spores) can be checked by filtration, according to the European Pharmacopeia specifications.

Quality control: key learning from around the world (based on feedback from the field)

Method	• Local alcoholmeters used in majority of sites. • Seven sites sent samples to the University of Geneva Hospitals, Geneva, Switzerland, for quality checks by gas chromatography and the titrimetric method to control the alcohol and the hydrogen peroxide content.
Addition of fragrance	• Quality was optimal for three formulations in which either a fragrance or special humectants were added to WHO formulation I.
Extremes of climate	• Samples from Mali, which were kept in a tropical climate without air conditioning or special ventilation, were in accordance with the optimal quality parameters in all samples up to 19 months after production.

Distribution

To avoid contamination with spore-forming organisms, disposable bottles should preferably be used although reusable sterilizable bottles may reduce production costs and waste management. To prevent evaporation, containers should have a maximum capacity of 500 ml on ward and 1 litre in operating theatres, and ideally fit into a wall dispenser. Leakage-free pocket bottles with a capacity of no more than 100 ml should also be available and distributed individually to health-care workers, but it should be emphasized that the use of these products should be confined to health care only. The production or re-filling unit should follow norms on how to clean and disinfect the bottles (e.g. autoclaving, boiling, or chemical disinfection with chlorine). Autoclaving is considered the most suitable procedure. Reusable bottles should never be refilled until they have been completely emptied and then cleansed and disinfected.

Cleaning and recycling: key learning from around the world (based on feedback from the field)

Cleaning and recycling of dispensers

- The cleaning and recycling process outlined in this document was applied in six sites. Methods used for disinfection varied and included treatment with chlorine or alcohol.

Cost issues:

The costs of WHO handrub formulations may vary according to country, resources and labour costs; studies to evaluate costs and resource use are necessary. As a comparison, examples of actual prices of commercially available alcohol-based handrubs in different countries are detailed within the Guidelines.

Costs: Key learning from around the world (based on feedback from the field)

Production cost (including salaries but not the dispenser) per 100 ml

Formulation 1:

- US\$ 0.37 (Kenya)
- US\$ 0.30 (Mali)

Formulation 2:

- US\$ 0.30 (Bangladesh).

Production cost (including the pocket bottle) per 100 ml

Formulation 1:

- US\$ 0.50 (Hong Kong)

Formulation 2:

- US\$ 0.44 (Pakistan)

Range of cost of commercially available products per 100 ml

- US\$ 2.50–5.40 (liquid)
- US\$ 8 (gel)

Safety Standards

With regard to skin reactions, handrubbing with alcohol based solutions is better tolerated than handwashing with soap and water. In a recent study conducted among ICU health-care workers, the short-term skin tolerability and acceptability of WHO-recommended handrub formulations were significantly higher than those of a reference product. Any additive should be as non-toxic as possible in case of accidental or intentional ingestion.

General Safety Issues:

The main safety issues relate to the flammability of alcohol-based handrubs and the adverse effects associated with accidental or deliberate ingestion. These are summarised in the *Summary table of risks and mitigation measures concerning the use of alcohol-based hand hygiene preparations*.

Flammability – Flash-points:

The flash points of ethanol 80% (v/v) and isopropyl alcohol 75% (v/v) are 17.5°C and 19°C, respectively, and special attention should be given to proper storage in tropical climates. Production and storage facilities should be ideally air-conditioned or cool rooms. Open flames and smoking must be strictly prohibited in production and storage areas. Pharmacies and small-scale production centres supplying WHO-recommended handrub formulations are advised not to manufacture locally batches of more than 50 litres at a time.

Accidental ingestion:

In general, it is not recommended to add any bittering agents to reduce the risk of ingestion of the handrubs. Nevertheless, in exceptional cases where the risk of ingestion might be very high (paediatric or confused patients), substances such as methylethylketone and denatonium benzoate, added to some household products to make them less palatable, may be added to alcohol-based handrubs in order to reduce the risk of accidental or deliberate ingestion. However, there is no published information on the compatibility and deterrent potential of such chemicals when used in alcohol-based handrubs to discourage their abuse. It is important to note that such additives may make the products toxic and add to production costs. In addition, the bitter taste may be transferred from hands to food being handled by individuals using handrubs containing such agents. Therefore, compatibility and suitability, as well as cost, must be carefully considered before deciding on the use of such bittering agents.

A colorant may be incorporated to differentiate the handrub from other fluids as long as such an additive is safe and compatible with the essential components of the handrubs. However, the H₂O₂ in the handrubs may tend to fade any colouring agent used and prior testing is recommended.

Summary table of risks and mitigation measures concerning the use of alcohol-based hand hygiene preparations

Risk	Mitigation
Fire – general	- Do not produce in quantities exceeding 50 litres locally. If producing in excess of 50 litres, produce only in central pharmacies with specialized air conditioning and ventilation. - Since undiluted ethanol is highly flammable production facilities should directly dilute it to the concentrations outlined in this Guide. - Involve fire officers, fire safety advisers, risk managers, and health and safety and infection control professionals in risk assessments prior to embarking on system change - Risk assessment should take into account: - The location of dispensers - The storage of stock - The disposal of used containers/ dispensers and expired stock. - Store away from high temperatures or flames - Water or aqueous (water) film-forming foam (AFFF) should be used in case of fire; other types of extinguishers may be ineffective and may spread the fire over a larger area rather than put it out. - Health-care workers should be advised to rub hands until dry (once dry – hands are safe).
Fire – production and storage (central)	- Local and central (bulk) storage must comply with fire regulations regarding the type of cabinet and store, respectively. - Production and storage facilities should ideally be air-conditioned or cool rooms. - No naked flames or smoking should be permitted in these areas. - National safety guidelines and local legal requirements must be adhered to for the storage of ingredients and the final product. - Containers/dispensers should be stored in a cool place and care should be taken regarding the securing of tops/lids. - A designated 'highly flammables' store will be required for situations where it is necessary to store more than 50 litres. - Containers and dispenser cartridges containing handrub should be stored in a cool place away from sources of ignition. This applies also to used containers that have not been rinsed with water.

Risk	Mitigation
Fire – storage (local)	The quantity of handrub kept in a ward or department should be as small as is reasonably practicable for day-to-day purposes.
Fire – disposal	Rinse out used containers with copious amounts of cold water to reduce the risk of fire (the containers may then be recycled or disposed of in general waste).
Fire – location of dispensers	Handrub dispensers should not be placed above or close to potential sources of ignition, such as light switches and electrical outlets, or next to oxygen or other medical gas outlets (because of the increased risk of vapours igniting).
Fire – spillage	- Significant spillages should be dealt with immediately by removing all sources of ignition, ventilating the area, and diluting the spillage with water (to at least 10-times the volume). - The fluid should then be absorbed by an inert material such as dry sand (not a combustible material such as sawdust), which should be disposed of in a chemical waste container. - Vapours should be dispersed by ventilating the room (or vehicle), and the contaminated item should be put in a plastic bag until it can be washed and/or dried safely.
Ingestion	- In areas where there is thought to be a high risk of ingestion, a staff-carried product is advised. - If a wall-mounted product is used, consideration should be given to small bottles. - If bottles with a greater capacity than 500 ml are used, consideration should be given to providing them in secured containers. - Product containers may be labelled simply as "antimicrobial handrubs" with a warning of dangers associated with ingestion. - National and local toxicology specialists should be involved in developing and issuing national/ local guidance on how to deal with ingestion (based on products available within a country).
Other	- Consideration should be given to the risks associated with spillage onto floor coverings, including the risk of pedestrian slips – it is important to deal with spillages immediately. - The siting of handrub dispensers above carpets is not recommended, because of the risk of damage and lifting/warping of carpets.

COMPOUNDED STERILE PREPARATION (CSP) RECOMMENDATIONS



U.S. Department of Veterans Affairs

Veterans Health Administration

Pharmacy Benefits Management – Continuous Readiness

Published March 13, 2020; Revised April 30, 2020; REVISED July 24, 2020

PERSONAL PROTECTIVE EQUIPMENT (PPE) CONSERVATION AND CRISIS STRATEGIES RELATED TOPICS FOR PHARMACY COMPOUNDING

CONTINGENCY OR CRISIS MODE ADAPTATIONS ARE APPLICABLE FOR AND EXCLUSIVE TO PHARMACY STERILE COMPOUNDING ACTIVITIES

- **Bottom Line Up Front:** This guidance is divided into two parts, Conservation Strategies and Crisis Management. It is intended to offer recommendations and strategies to conserve PPE and address the absence of PPE, while limiting exposure of compounded sterile products to contaminants. As PPE availability returns to normal VA medical facility pharmacies should resume standard practices.
 - This information is changing very rapidly and should be considered as updated as of the current date of the document.
 - Pursuant to the Memorandum dated April 8, 2020, from the Executive in Charge, Office of the Under Secretary for Health (10), this information has been modified to include the establishment of crisis standards of care.
 - It is critical to increase surveillance activities for any process changes and alternative strategies that result in non-compliance with United States Pharmacopeia (USP) standards to monitor the facility's state of microbial control.
 - There is limited evidence on the impact of alternate PPE strategies on CSPs.
 - Facility and Veterans Integrated Service Network (VISN) Chief Logistics Officers must be made aware of supply shortages to ensure that the Area Emergency Coordinators (AEC) are notified of shortages.
 - Supplies could be available at the National Acquisition Center or Emergency Management Coordination Cell (EMCC) but these are not distributed unless requested.
- **Introduction:** As a result of the COVID-19 pandemic the global supply of PPE and other supplies may be insufficient. Recommendations contained herein are aligned with the COVID-19 Centers for Disease Control (CDC) guidelines, Occupational Safety and Health Administration (OSHA) enforcement guidance, and USP guidance and were reviewed by the United States Department of Health and Human Services (HHS) and the National Institute for Occupational Safety and health (NIOSH). This VHA National Advisory Committee guidance document is for VHA medical facility pharmacies internal use only and intended to be dynamic, describe our current thinking on a topic and should be viewed as recommendations, unless specific requirements are cited.
 - Please note that engaging in some of these National CSP Advisory Committee recommendations may compromise compliance with USP standards and VHA Directive 1108.12, *Management of Compounded Sterile Preparations*. If a VA pharmacy decides to implement any changes to practice during the COVID-19 pandemic, the VA Pharmacy must develop and maintain a policy that documents mitigation strategies and include an element for verification of compliance.
 - The VA National Compounded Sterile Preparation (CSP) Advisory Committee continually evaluates and communicates alternate PPE strategies to VA medical facilities pharmacies.
 - Each facility's multidisciplinary CSP Advisory Committee is best prepared to evaluate their facility circumstances and determine the best VHA endorsed alternative practices to meet their needs.
 - VA medical facilities must enhance vigilance for excluding staff exhibiting symptoms of illness from entering the compounding area.

For additional questions please email: [VHAPBM National Compounding Advisory Workgroup](#)

□ CONSERVATION STRATEGIES

○ General

- Assess current PPE inventory and monitor supplies.
- Sterile gowns are not a requirement for pharmacy compounding.
- Consolidate workload and limit compounding staff numbers to conserve PPE.
- Convert to premixed/Add-a-Vial products as much as possible.
- Minimize trips into the Segregated Compounding Area (SCA) or Cleanroom Suite by staging supplies necessary for preparing CSPs (ensure USP standards are followed prior to entering the ISO classified spaces or SCA).
- Minimize the number of trips from the dirty to the clean side of the Anteroom or perimeter line for the SCA.
- If present, utilize pass-throughs to minimize trips into the compounding area.
- Consider using compounding staff who were already wearing PPE to prepare CSPs for cleaning/disinfecting activities, rather than utilizing more PPE for Environmental Management Services employees.
 - Please note that not all staff have performed cleaning/disinfecting activities and will need training and competencies prior to undertaking these responsibilities.
 - Discuss changes to cleaning/disinfecting process with Environmental Management Services (EMS) prior to making a change.
- Limit training of new staff during this time period if possible and only conduct the Glove Fingertip (GFT) tests as required for currently trained staff.
- For external surveys/reviews: Request discussion with surveyors to explore alternative approaches to survey activity during this time (e.g. observations and interviews from outside cleanroom area).
- Train compounding staff on the policies and procedures developed for reusing PPE that will not compromise the microbial state of control in the compounding rooms. Document training and competency assessment.
- If the facility decides to implement any conservation or crisis strategies, the facility must consider initiating weekly dynamic microbial surface sampling inside the Primary Engineering Control (PEC) on the Direct Compounding Area (DCA).
 - If microbial surface sampling is not possible, other measures could include direct observation of practice; use a sterilizing and pharmaceutical grade syringe filter during compounding to remove microbial contamination; validation of cleaning/hand washing, or the use of blue-light scanners to verify effective processes.
 - Consider decreasing Beyond Use Dates (BUD) if unable to perform weekly surface sampling when using alternative PPE during crisis capacity strategies.
- Consider wearing facility provided laundered scrubs underneath gown. (Discuss with Labor Relations and ensure space and time within tour of duty are agreed prior to implementing).
- If shortages in cleaning and disinfecting solution occur, work with facility EMS to identify alternatives.
 - VHA National List for Supplies <https://www.va.gov/opal/sac/mspvNG.asp>
 - Alternatives for Peridox® commonly used by Pharmacy Service (see Attachments 1 and 2).
- All PPE may be used beyond the printed expiration date. Caution should be taken to inspect the PPE for signs of degradation. Discard if the PPE item has evidence of break down, holes, soil, etc.
- Eyewear is excluded from this guidance because it is not used in compounding situations. Facilities must continue to follow Patient Safety Notice regarding eyewear.
- Initiate Immediate Use option that includes preparation of the CSP within the Pharmacy with a 4-hour Beyond Use Date (BUD) (regardless of which version of USP <797> has been adopted). See specific requirements under Crisis section.
- Use your best judgement, critical thinking, and the collective judgement of your institutional colleagues to make decisions. Ensure all staff are aware of your current situation and the strategies you are employing to address this.
- Discuss changes to practice with the local CSP Advisory Committee and Infection Control Service; document decisions in Committee minutes.

- **Gloves**
 - Do not reuse gloves under any circumstance.
 - Gloves used for handling hazardous rugs (HD) must meet the American Society for Testing and Material (ASTM) 6978 standards.
- **Head Covers**
 - Consider re-using head covers if a shortage occurs.
 - Place in a paper bag, low-lint particle shedding fabric bag, stainless steel lattice containers or other clean and breathable vessel that allows for airflow and can promote drying. Do not use wire or mesh containers that cannot be easily cleaned. Store the bag/vessel in a controlled or classified area. Initial and date paper bag, or other storage vessel. Do not re-use paper bags or store extra quantities within the Cleanroom or SCA.
 - Head covers may only be used by one person (the same person). Headcovers may not be shared with other individuals.
 - Head covers used to compound Hazardous Drug (HD) CSPs may not be reused.
- **NIOSH-Approved Filtering Face Piece Respirators**
 - Do not use NIOSH-Approved N95 filtering face piece respirators when compounding HD CSPs within a PEC.
 - Discuss alternative respiratory protection options, for potential HD inhalation exposures, with facility or VISN Industrial Hygienist.
- **Shoes / Shoe Covers**
 - Source alternative shoe covers, such as those used on construction sites, or washable [facility laundered] and reusable options.
 - Consider using compounding area dedicated cleanable shoes (e.g. closed Crocs®, etc.).
 - Donning and Doffing must be reordered with this shoe process being the dirtiest element.
 - Those who are compounding CSPs must wear daily laundered clean socks if this process is implemented. Socks must be on feet prior to entering SCA or anteroom.
 - Dedicated shoes must remain in clean side of the anteroom or within the perimeter line of the SCA.
 - Dedicated shoes must be cleaned daily with an EPA one-step registered sporicidal disinfectant cleaner.
 - Dedicated shoes may only be used by one person (the same person). Shoes may not be shared with other individuals.
 - Wear one pair of shoe covers over “dedicated shoes” in HD areas.
 - Disposable shoe covers or those used for HD compounding may not be reused.
- **Gowns:**
 - For HD CSPs use non-sterile, impermeable, gowns, ANSI/AAMI Level 3 or Level 2 gowns are acceptable.
 - Do not reuse HD gowns.
 - Consider workflows to consolidate HD compounding such as designating specific time for each day.
 - Consider use of Coveralls or “Bunny Suits” (ensure proper donning and doffing without touching the ground).
 - Gowns may only be used by one person (the same person). Gowns may not be shared with other individuals.
- **Hand Sanitizer (*Discuss any changes to alternative practices with Infection Control Service)**
 - Hand washing is the most effective and #1 preventative measure.

- To encourage hand washing with soap and water for at least 30 seconds and, while in shortage, allow distribution of hand sanitizer to areas where soap and water washing isn't available (example: remove all hand sanitizer located next to a sink).
- If emergent situations present and the Pharmacy Service is requested to produce hand sanitizer the following conditions must be met:
 - All other options have been exhausted.
 - Facility Logistic staff must have communicated with local and VISN Chief Logistics Officers to confirm hand sanitizer is not available from a vendor (s) or the EMCC.
Please note: The National Procurement and Logistics Service continues ongoing efforts for restocking supplies and this group is responsible for tracking needs, communicating national purchases, and distribution.
 - A multidisciplinary analysis (including at a minimum, Safety, Infection Control, and Pharmacy) must be completed to determine if the facility can receive, produce and store hand sanitizer ingredients and finished product (see Attachment 3).
 - Pharmacy Service must be able to establish a compliant non-sterile compounding program based on USP <795>.
 - The World Health Organization (WHO) "Hand Rub" Formulations may be used in the preparation; hand sanitizer must be prepared consistent with the circumstances outlined in FDA's Temporary Policy for Preparation of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (COVID-19) Guidance for Industry March 2020 Updated June 1, 2020 (see Attachments 4 and 5).
 - Facility Logistics staff must confirm all supplies and "ingredients" necessary for preparation are available and be procured.
 - Must review and have Safety Data Sheets available for items being compounded.
 - Must identify proper storage for all items used in preparation.
- **Shortages of sterile Isopropyl Alcohol (sIPA)**
 - Limit sIPA use to:
 - Cleaning the compounding surface of the ISO 5 primary engineering control (PEC).
 - Sanitizing sterile gloves prior to and while compounding.
 - Wiping down critical sites such as vial tops within the ISO 5 area.
 - Use an EPA one-step registered sporicidal disinfectant cleaner as opposed to sIPA when wiping down other surfaces that require daily cleaning (e.g. staging cart).
- **Non-sterile compounding for shortages of Respiratory Fit Testing Solutions**
 - Follow specific Occupational Safety and Health instructions (see Attachment 6) as well as USP <795>.
- **Documentation**
 - Train compounding staff on the policies and procedures developed for reusing PPE that will not compromise the microbial state of control in the compounding rooms. Document training and competency assessment.
 - It is imperative that the use of alternative strategies for PPE (or other) practices are annotated on all compounding records. This will assist if any quality assurance or adverse event reviews are initiated.
 - Document when compounding is performed outside of USP standards.
 - Document when there are changes in the sterilization approach (e.g. from aseptic processing to terminal sterilization).
 - Document Conservation or Crisis Management strategies within a new or revised standard operating procedure.

❑ CRISIS MANAGEMENT

In the event the above alternative strategies have been exhausted; facilities may implement altered standards of practice when compounding sterile preparations.

○ Non- HD Gowns

- If reusable cloth gowns cannot be laundered daily (recommend using an enzymatic wash with irradiation if possible):
 - Dedicated daily laundered fabric gowns may be re-used.
 - Compounding “sleeves” are recommended when using cloth gowns.
 - Consider the use of an external vendor to launder and provide new gowns on a pre-designated schedule.
- Gowns may be retained and reused for an entire day/shift; if gowns are reused for a longer period then do not exceed one week.
 - Compounding personnel must inspect the gown each time it is reused.
 - Label gown and store on individual hook away from sink, do not allow gowns to touch each other or the floor.
 - Gowns should be removed in a deliberate and careful manner and not be stored inside out.
 - Gowns must be discarded if visibly soiled or torn.
 - Gowns should remain on the clean side of the Ante Room (ISO Class 7 or 8) or SCA.
 - Recommend using disposable sleeve covers if reusing gowns.
 - Sleeve covers should be opened in the clean side of the Ante Room/SCA area after handwashing procedures and the gown is donned.
 - Sleeve covers should be placed over the donned gown sleeve and should fit tightly at the wrist.
 - Sterile gloves should be donned last and cover the wrist of the sleeve cover.

○ HD Gowns

Reusing HD gowns is as much a microbial concern as it is an HD-containment issue.

*Note- Non-permeable, non-sterile, isolation gowns, ANSI/AAMI Level 3 or Level 2 gowns are acceptable for pharmacy HD compounding.

- Consider using the same gown (used for Table One NIOSH drugs) throughout an entire shift. This providing the cautions below are in place:
 - If you must reuse HD gowns, ensure you have a process for doffing that mitigates HD exposure to the staff and contaminate exposure to the gown.
 - Inspect the gown prior to reuse, throughout use, and discard if there are tears, visible soiling, or other defects.
 - Gowns should be re-donned and reused by the same employee during the same work shift in the HD compounding area only.
 - After compounding is complete, doff and hang the gown in the HD buffer room or inside the perimeter line of the C-SCA.
 - If possible, consider wearing a Non-HD gown under HD gown to minimize bioburden once HD gown is removed clean side of Ante Room or SCA.
 - Review donning and doffing procedures with staff. Refer proper doffing procedure with staff <https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html>
 - Don't share a hanging space with other gowns (non-HD or HD) that are planned for reuse; ensure the gowns do not touch.
 - Wear sleeve covers when reusing.
 - Consolidate workload and limit compounding staff numbers to conserve PPE.
 - Prioritize gowns and chemo gloves for preparing antineoplastic agents in Table 1 of the NIOSH list
 - Closed System Transfer Devices (CSTDs) must be used when possible.

○ **Surgical Masks**

Note- ANSI/AAMI Level 2 procedure masks are to be used for pharmacy compounding; Level 1 procedure masks are acceptable in crisis capacity circumstances*.

- Consider limited reuse of procedure masks (2-3 days maximum).
 - Fold procedure mask in half with the face side turned inward to minimize cross contamination.
 - Place in a paper bag, low-lint particle shedding fabric bag, stainless steel lattice containers or other clean and breathable vessel that allows for airflow and can promote drying. Do not use wire or mesh containers that cannot be easily cleaned. Store the bag/vessel in a controlled or classified area.
 - Initial and date paper bag, or other storage vessel. Do not re-use paper bags or store extra quantities within the Cleanroom or SCA.
 - Procedural masks are to be removed on the dirty side of the anteroom or outside of the perimeter line of the SCA without touching the inside of the mask.
 - Store in a designated spot where garbing (donning) normally occurs.
 - Compounding personnel must inspect the mask each time it is reused to ensure the mask provides adequate control (i.e. condition of the mask, whether it is visibly soiled, handling technique, etc.) in accordance with the facility's policies and procedures.
 - Discard all masks if visibly soiled, torn, etc..
 - Don the mask and then wash hands with soap and water for at least 30 seconds and do not touch after placement.
 - Donning and doffing procedures must be described in policy to limit handling and avoid touching inside of the mask.
- Because there is a physical barrier between the individual and the HD, consider omitting procedure masks when compounding in a CAI (Containment Aseptic Isolator), CACI (Compounding Aseptic Containment Isolator), Biological Safety Cabinet (BSC) and when compounding HDs with CSTDs.
- A procedure mask may only be used by one person (the same person); masks may not be shared between different individuals.

○ **Gloves**

- Non-sterile gloves that are disinfected with the appropriate agent (compatible with the glove material) may be used if sterile gloves are not available.

○ **CSP Preparation**

- Single dose vials of critically short (or back-ordered) medications may be retained in the ISO Class 5 PEC and reused for multiple preparations for up to 12 hours.
- When available, consider using a sterilizing and pharmaceutical grade syringe filter during compounding to remove microbial contamination that may have been inadvertently introduced by operating under conditions where standard PPE is unavailable.
- Consider anticipatory compounding for frequently used critical care medications used for ventilator management.
- Initiate Immediate Use option that includes preparation of the CSP within the Pharmacy with a 4-hour BUD (regardless of which version of USP <797> has been adopted).
- Pursuant to USP <797>, regardless of the version (2008/2019), Immediate Use compounding is an acceptable option where an emergency exists (such as an ICU, ED, OR, etc.), or a delay in preparation would cause a risk to therapy. Another circumstance where Immediate Use compounding may be implemented would be a contingency situation where the PEC, SCA, or compounding suite cannot be used for any reason (e.g. environmental contaminants/bioburden or systems failures).
- If moving to Immediate Use preparations during the COVID-19 pandemic, every attempt should be made for Pharmacy to prepare the Immediate Use CSP to avoid additional workload for the Nursing staff.
 - Ensure area where Immediate Use CSPs are prepared is a clean, uncluttered, low traffic,

functionally separate designated space to decrease the opportunity for contamination.

- Adequately clean and disinfect work surface; work surface may not be located near water sources, or open hallways.
- Aseptic processes are followed, and written procedures are in place to minimize the potential for contact with nonsterile surfaces, introduction of particulate matter or biological fluids, and mix-ups with other conventionally manufactured products or CSPs.
- The preparation involves not more than 3 different sterile products.
- CSP label must include BUD date and time period (remember, administration must begin within the 4-hour BUD period).

○ Documentation

- It is imperative that the use of non-standard conservation strategies or Crisis Management PPE (or other) practices are annotated on all compounding records. This will assist if any quality assurance and adverse event reviews that are initiated.
- Document when compounding is performed without standard PPE.
- Document when there are changes in the sterilization approach (e.g. from aseptic processing to terminal sterilization).
- Document Conservation or Crisis Management strategies within a new or revised standard operating procedure.

□ References:

- CDC: NIOSH <https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html>
- CDC: Strategies for Optimizing the Supply of N95 Respirators https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Frespirator-supply-strategies.html
- CDC: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>
- CDC: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html>
- *CDC definitions of Conventional, Contingency and Crisis Capacity <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>
- USP: <https://www.usp.org/compounding>
- USP Reference Standards: <https://www.usp.org/reference-standards>
- FDA: <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/temporary-policy-regarding-non-standard-ppe-practices-sterile-compounding-pharmacy-compounders-not>
- FDA: Facility Definition Under Section 503B of the Federal Food, Drug, and Cosmetic Act <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/facility-definition-under-section-503b-federal-food-drug-and-cosmetic-act>
- FDA Crisis or Alternate Strategies (may need to be considered if surgical mask or gown demand exceeds the supply) <https://www.fda.gov/medical-devices/letters-health-care-providers/surgical-mask-and-gown-conservation-strategies-letter-healthcare-providers>
- *FDA Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency <https://www.fda.gov/media/136118/download>
- Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19) https://apps.who.int/iris/bitstream/handle/10665/331215/WHO-2019-nCov-IPCPPE_use-2020.1-eng.pdf
- Critical Point Peer Network: <https://peernetwork.criticalpoint.info>
- MSN: Blue-Light Scanners to detect dirty hands http://www.nbcnews.com/id/4669827/ns/health-infectious_diseases/t/light-scanners-may-help-detect-dirty-hands/#.XmIhiv2P6Uk
- Virginia State Board of Pharmacy [Emergency Provisions for Pharmacists During the COVID-19 Declared Emergency - Updated 3/24/2020](#)
- 2020_03_18 North Carolina State Board of Pharmacy

http://www.ncbop.org/PDF/NCBOPRecommendationsforCompoundingGarbShortagesUpdated03_18_20.pdf

- 2020_04_14 North Carolina State Board of Pharmacy
http://www.ncbop.org/PDF/NCBOPRecommendationsforCompoundingGarbShortagesUpdated03_18_20.pdf
- Iowa State Board of Pharmacy: <https://pharmacy.iowa.gov/press-release/2020-03-09/what-should-my-pharmacy-do-if-we-have-limited-supplies-compounding-garb>
-
- CA State https://www.pharmacy.ca.gov/licensees/emergency_declaration.shtml
- JC <https://www.jointcommission.org/standards/standard-faqs/hospital-and-hospital-clinics/infection-prevention-and-control-ic/000002271/>
- Option available for Dedicated Shoes - example only not an endorsement by VHA
https://higherlogicdownload.s3-external-1.amazonaws.com/ASHP/Screenshot_20200328-151945_Gmail.jpg?AWSAccessKeyId=AKIAVRDO7IEREB57R7MT&Expires=1585671759&Signature=SM5t2oSRbUWzbJdhan74MH/JNhl%3D
- Option available for Dedicated Shoes example only not an endorsement by VHA - Crocs Donated for healthcare workers <https://www.crocs.com/COVID19-STATUS.html>

**Department of
Veterans Affairs**

Memorandum

Date: March 3, 2021

From: Assistant Under Secretary for Health for Operations (15)

Subj: COVID-19: Interim Guidance on Optimal Mask Wearing and N95/Surgical Mask Use

To: Veterans Integrated Service Network (VISN) Directors (10N1 – 23)
VISN Chief Medical Officers
VISN Chief Nurse Officers

Thru: Assistant Under Secretary for Health for Clinical Services (11) (b)(6)

1. The Center for Disease Control and Prevention (CDC) general mask use guidance has been updated to recommend masks that fit well to the face (snugly) and consist of multiple layers including the use of double masks. The goal of the new guidance is to minimize the leakage in and out along the edge of the mask. Information on this change can be found at: <https://www.cdc.gov/coronavirus/2019-ncov/your-health/effective-masks.html> .
2. The new CDC guidance does not change Veterans Health Administration policy as masks continue to be required at Department of Veterans Affairs (VA) facilities. Patients, visitors, and staff should be informed of the new CDC guidance and VA facilities should review the appropriateness of masks they provide to these individuals. VA staff can continue to wear their own masks that meet CDC guidelines in VA facilities unless they require personal protective equipment (PPE) for a high-risk exposure to COVID-19.
3. Current supply levels of masks and personal protective equipment are large enough to give VA facilities multiple options for well-fitting masks including surgical masks or N95 respirators. When such a mask is provided, VA staff will receive one well-fitting mask per 8 hours shift with soiled masks replaced as needed. Anyone who receives a N95 respirator should be medically cleared and fit tested.
4. Questions can be submitted to the COVID-19 Resource Room or send an email to (b)(6) @va.gov.

(b)(6)

for
Renee Oshinski

**Department of
Veterans Affairs**

Memorandum

Date: July 20, 2020

From: Assistant Under Secretary for Health for Operations (10N)

Subj: COVID-19: Updates for Eye Protection in Department of Veterans Affairs (VA)

To: Veterans Integrated Service Network Directors (10N1-23)

1. The Centers for Disease Control and Prevention (CDC) notes that health care personnel (HCP) working in facilities in areas with moderate to substantial community transmission are more likely to encounter asymptomatic or pre-symptomatic patients with SARS-CoV-2 infection. Based on evolving knowledge of how the virus spreads, CDC recommends eye protection, in addition to face mask, to ensure the eyes, nose, and mouth are all protected from splashes and sprays of infectious material from others. This recommendation is in addition to Standard Precautions (and Transmission-Based Precautions if required based on the suspected diagnosis).

2. HCP involved in patient care or who will be in close proximity to patients or visitors should wear eye protection in addition to wearing a face mask. At this time, CDC notes that those in areas with minimal to no transmission of SARS-CoV-2, the virus that causes COVID-19, are not required to wear eye protection. With rising spread of COVID-19 across the United States, eye protection is currently recommended at all sites within VHA if proximity to patients or visitors is expected. The decision to use eye protection should take into account regional rates of COVID-19 disease (i.e., State reports, McKinsey reports, Institute for Metrics and Evaluation (IHME), Worldometer), local work area enhancements (e.g., plexiglass used as a divider between staff and the Veteran/visitor), and be made by facility and Network leadership. Facilities should have plans for distributing face shields and goggles starting Monday, July 27, 2020.

3. Veterans Health Administration (VHA) continues to follow CDC's contingency strategy for PPE. Eye protection equipment should include re-usable devices (i.e., goggles and face shields). CDC recommends cleaning and disinfecting the devices with an EPA-registered hospital disinfectant solution. Additional information from CDC can be found at the following link: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>

4. VHA will be updating the PPE guidance in the Moving Forward Guidebook to reflect this change. Updates to Moving Forward guidance are available on the High Consequence Infection Sharepoint's Moving Forward Plan Folder:
<https://dvagov.sharepoint.com/sites/VACOVHAPublicHealth/HCI/Moving%20Forward/Forms/AllItems.aspx?RootFolder=%2Fsites%2FVACOVHAPublicHealth%2FHCI%2FMoving%20Forward%2FMoving%20Forward%20Plan&FolderCTID=0x012000501EB3156B5C1A40B386553834BF2E68>

5. Should you have questions regarding this memorandum, please contact the COVID-19 clinical cell by sending an email to **VHA COVID-19 Resource Room**.

(b)(6)

for
Renee Oshinski

Department of Veterans Affairs

Memorandum

Date: July 31, 2020

From: Assistant Under Secretary for Health for Operations (10N)

Subj: Clarification for COVID-19 Memorandum Addressing Requirements for Providing Personal Protective Equipment for Selected Home Care Services

To: Veterans Integrated Service Network (VISN) Directors (10N1-23)

1. This memorandum provides clarification to the field for the memorandum entitled COVID-19 Requirements for providing personal protective equipment (PPE) for selected home health care services: Medical Foster Home, Caregiver Support Program, and Spinal Cord Injuries and Disorders. VA-supplied PPE are for caregiver's use during an active epidemic or pandemic ONLY while providing direct, physical, hands-on care where there is potential risk for body fluid exposure. See attached algorithm for use of PPE which follows [CDC guidance](#) for caring for a person at home such as the Veteran receiving care in the aforementioned programs.
2. VA-supplied PPE requires a Veteran-specific prescription which will include the clinical indication, per current guidance on PPE use and should be used only for direct patient care.
3. The clinician will enter an order in the electronic health record, specifying the medically necessary PPE via the VistA pharmacy package. The order will be adjudicated by the Facility pharmacy and transmitted to the Centralized Mail Out Pharmacy (CMOP) for processing. The CMOP uses a third-party vendor to fill and ship medical/surgical supplies directly to patients. Until such time as the vendor can bring in additional inventory to meet these new requirements, facilities will be responsible for providing PPE to patients and caregivers. The status of COVID-19 per region of each facility may impact decisions regarding supply availability.
4. VA optimizes the use of PPE by following the CDC PPE Preservation Strategies including Conventional capacity, Contingency capacity and Crisis capacity. When a decision is made to implement Contingency or Crisis capacity strategy at the enterprise level, the same strategy would apply to home care. More information regarding the CDC PPE Preservation Strategies can be found [here](#).
5. For questions, please contact (b)(6) Director, VA Home and Community Care, at (b)(6)@va.gov or (b)(6) Program Manager, Caregiver Support Program, at (b)(6)@va.gov

(b)(6)

for
Renee Oshinski

Face Shields for Home Care

Why:

- VHA is following [CDC recommendations](#) that all health care personnel (HCP) in direct patient care OR those who will be in close proximity to patients or visitors should wear eye protection, in addition to wearing a face covering.
- Provides eye and face protection when in close contact to Veteran
- Extends use of medical face masks, N95 respirators, face coverings and cloth masks by blocking droplets, splashes, sprays, viral contamination and soiling
- Touching your face is a big risk-factor and face shields block this



When to use:

- All encounters in close contact with the Veteran (within 6 feet)
- Ideally, clean the face shield after each encounter whenever possible
 - o If you notice any visible soiling or splash after the care, you MUST clean the face shield

How to remove, clean and disinfect the face shield:

CDC recommends cleaning and disinfecting the devices with an EPA-registered hospital disinfectant solution. Additional information from CDC can be found here: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>

Adhere to recommended manufacturer instructions for cleaning and disinfection.

When manufacturer instructions for cleaning and disinfection are unavailable, such as for single use disposable face shields, consider:

1. While wearing gloves, carefully wipe the *inside*, followed by the *outside* of the face shield or goggles using a clean cloth saturated with neutral detergent solution or cleaner wipe.
2. Carefully wipe the *outside* of the face shield or goggles using a wipe or clean cloth saturated with EPA-registered hospital disinfectant solution.
3. Wipe the outside of face shield or goggles with clean water or alcohol to remove residue.
4. Fully dry (air dry or use clean absorbent towels).
5. Remove gloves and perform hand hygiene.

When you should use a face shield

The face shield should be used for any encounters whenever you are within 6 feet of the Veteran. In other words, we consider face shields are now part of routine precautions. The purpose is to protect your eyes, nose, and mouth from infectious droplets. The face shield provides better coverage of your face than facemask and has the added benefit of keeping you from touching your face. When combined with medical facemask or cloth face covering (e.g., homemade mask), the face shield also can protect masks from contamination.

Does it work?

Yes. The face shield is very effective to block infectious droplet for respiratory viruses including COVID-19. During testing of an influenza-laden cough aerosol with size of 8.5 μm , wearing a face shield reduced the inhalational exposure of the wearer by 96% in the period immediately after a cough at 18 inches distance (Lindsley WG, et al. *J Occup Environ Hyg.* 2014; 11(8): 509–518.).

Additional information

Additional information regarding care of face shields and other eye protection can be found on the following CDC website <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>

Personal Protective Equipment (PPE) Guidance for Providing Care to Veterans in the Home

Intended for skilled, unskilled, and lay caregivers who may be providing care to Veterans in the home environment and receiving PPE from VA

Does the person providing care live with the Veteran?

If the person providing care lives with the Veteran but may be exposed to the virus due to outside work-environment or has been exposed to high-risk person then follow the "NO" arrow for safety of Veteran.

YES

***No additional mask** for interactions with Veteran who is COVID-19 negative. While caring for a COVID-19 positive Veteran, caregiver should follow algorithm.

**If living with a Veteran, ongoing exposure is presumed, which negates the need for additional caregiver PPE beyond standard PPE used in a non-COVID-19 situation.*

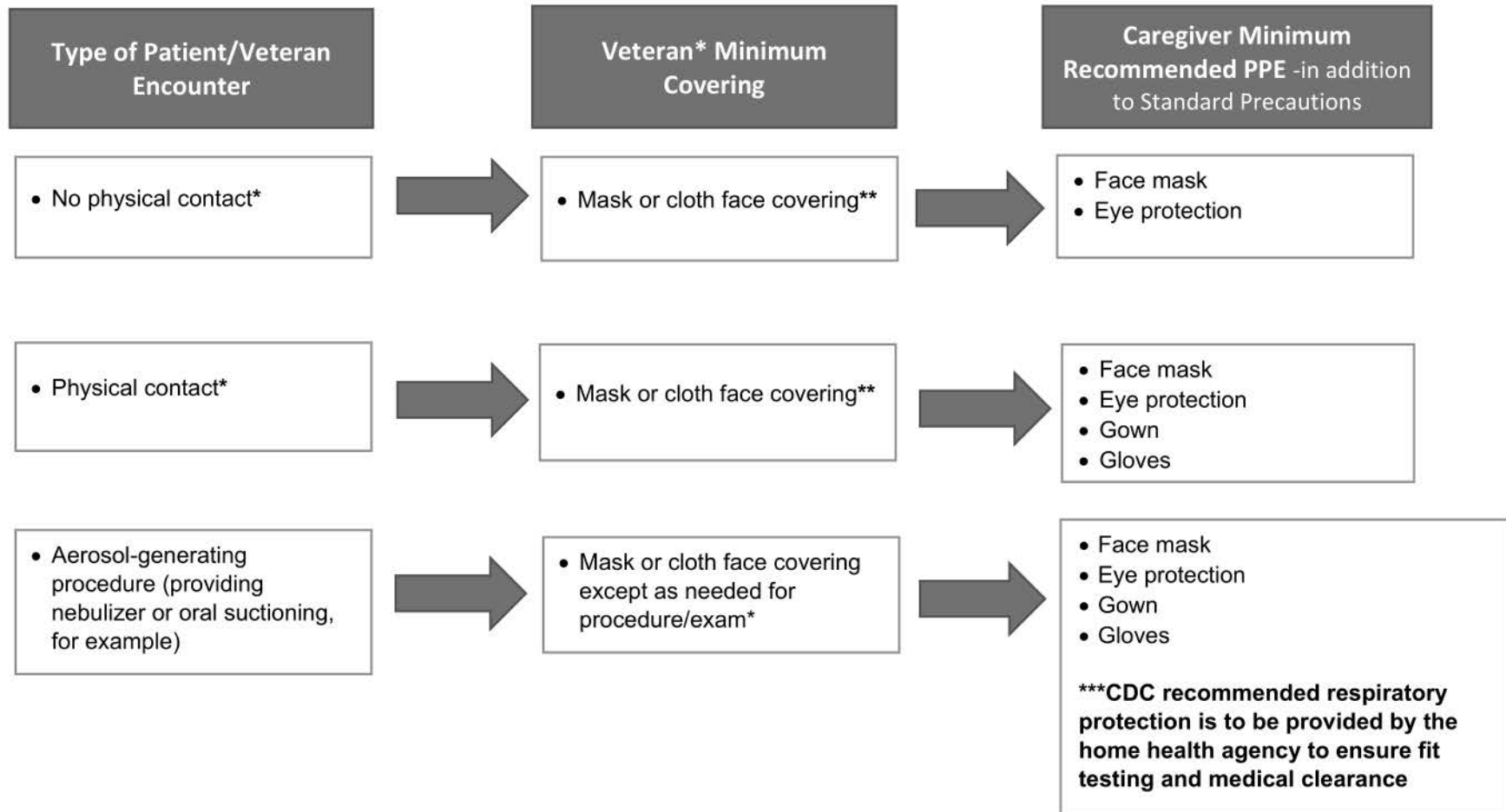
NO

At all times, caregiver or health care provider must wear facial covering, in addition to the appropriate PPE for care being provided, to protect the Veteran. (See high and low-risk algorithms below).

Note: VA-supplied PPE is for any caregiver's use **ONLY** while providing direct, physical, hands-on care where there is potential risk for body fluid exposure. Licensed skilled agencies are expected to provide respirator (N95) masks to their employees performing aerosol generating procedures (AGPs) after fit testing by the licensed skilled agency. **The guidelines below are intended ONLY for those persons who are to receive PPE from VA.** See below algorithm for use of PPE which follows CDC guidance for caring for persons at home. All guidance is also coordinated with VA's previously released: 'Moving Forward: Personal Protective Equipment (PPE) in the Ambulatory Setting'

High Risk:

COVID-19 signs or symptoms (screen=positive) or Veteran has a positive COVID-19 test, is a person under investigation (PUI) or is suspected of having COVID-19 infection despite a negative test.



* Physical contact includes contact with the person and/or the person's blood, stool or bodily fluids such as saliva, mucus, vomit, and urine

**For high-risk patients who cannot tolerate wearing a face mask, caregivers should consider wearing full PPE (facemask, gloves, gown, eye protection).

Low Risk:

No COVID-19 signs or symptoms (Screen=negative)
and no recent positive COVID-19 testing, not a person under investigation (PUI) and not suspected of having COVID-19 infection

Type of Patient/Veteran Encounter		Veteran*** Minimum Covering		Caregiver Minimum Recommended PPE -in addition to Standard Precautions
No physical contact*	➔	Mask or cloth face covering***	➔	Face mask
Physical contact*	➔	Mask or cloth face covering***	➔	- Face mask - Gloves - Eye protection (optional)**** - Gown (optional)
Aerosol-generating procedure (providing nebulizer, or oral suctioning for example)	➔	Mask or cloth face covering except as needed for procedure/exam**	➔	- Face mask - Eye protection - Gown - Gloves

* Physical contact includes contact with the person or the person's blood, stool or bodily fluids such as saliva, mucus, vomit, and urine

***For low-risk patients who cannot tolerate donning a face mask, caregivers should consider wearing facemask, gown, gloves, and eye protection (optional)

****Use of eye protection is recommended in areas with moderate to substantial community transmission. For areas with minimal to no community transmission, eye protection is considered optional, unless otherwise indicated as part of standard precautions

**Department of
Veterans Affairs**

Memorandum

Date: October 21, 2020

From: Acting Assistant Under Secretary for Health for Support (19)

Subj: Implementation of Contingency Capacity Strategies to Optimize Supply of Disposable Medical Gloves

To: Veterans Integrated Service Network (VISN) Directors (15/1-23)

Thru: Assistant Under Secretary for Health for Operations (15) *tlc*

1. The purpose of this memorandum is to request enterprise-wide implementation of additional strategies to optimize supplies of disposable medical gloves across the Veterans Health Administration (VHA).
2. The U.S. Food and Drug Administration (FDA) maintains a publicly-available, up-to-date list of the medical devices the FDA determined to be in shortage. The FDA webpage lists four types of disposable medical gloves with limited supply availability:
 - a. LZA (polymer, non-powdered patient examination glove, includes nitrile gloves)
 - b. LZC (specialty, non-powdered patient examination glove)
 - c. LYY (latex, non-powdered patient examination glove)
 - d. LYZ (vinyl patient examination glove).
3. Facility plans for disposable medical gloves should align with the Centers for Disease Control and Prevention Strategies for Optimizing the Supply of Disposable Medical Gloves, given the uncertainty of the adequacy of future supply.
4. Medical Center Directors should implement the following additional measures to optimize VHA supplies of disposable medical gloves:
 - a. Ensure your facility is ordering and accepting its full disposable medical glove allocation from your Medical Surgical Prime Vendor (MSPV). VHA can meet approximately 65-70% of its requirements by accepting full allocation from our multiple MSPVs.
 - b. Reserve all disposable medical gloves for direct patient care only.
 - c. Use non-health care gloves (e.g., food service or industrial chemical resistance gloves) for activities not involving direct patient care.
 - d. Reduce opportunity for pilferage by controlling access to gloves issued to secondary locations (e.g., ward, clinic).
 - e. Consider using gloves past their manufacturer-designated shelf life for situations where health care providers are not exposed to pathogens (e.g., training).
 - f. Cross-level within and between VISNs.

Page 2.

Implementation of Contingency Capacity Strategies to Optimize Supply of Disposable Medical Gloves

5. The global disposable medical glove market is volatile and more than 95% of disposable medical gloves are made overseas. The U.S. banned two subsidiaries of the world's largest glove manufacturer due to reasonable evidence of forced labor in the manufacturing process, limiting supply further, and U.S.-based manufacturing is extremely limited.

6. VHA has awarded multiple contracts with a range of vendors to acquire disposable medical gloves. All these sources are having trouble meeting our demands in a timely fashion.

7. Should you have questions regarding this memorandum, please contact (b)(6) (b)(6) Executive Director, VHA Procurement and Logistics, at (b)(6)@va.gov.

Deborah E.

Digitally signed by
Deborah E. Kramer 662649

Kramer 662649 Date: 2020.10.21 13:43:39

Deborah E. Kramer

**Department of
Veterans Affairs**

Memorandum

Date: March 15, 2020

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: Coronavirus (COVID-19) Personal Protective Equipment (PPE) Use

To: Network Directors (10N1-23)

1. Recent updates to PPE recommendations from the CDC for situations where supplies cannot meet demand recommend that respirators (e.g., N95, PAPR) be prioritized for high risk procedures that are likely to generate respiratory aerosols such as nasal/pharyngeal sample collection, nebulizer treatment, intubation and care for intubated patients. The CDC information can be found at:

https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Finfection-control.html.

2. Network Directors should plan for redistribution of supplies to meet individual facility demand. The Deputy Under Secretary for Health for Operations and Management will oversee redistribution supplies between VISN and prioritize replenishment as necessary. Emergency Management Coordination Cell (EMCC) coordinates supplemental bulk purchases and distribution to facilities with critical PPE supply levels.

3. For further questions about PPE guidance, contact your VISN industrial hygienist or (b)(6) Senior Industrial Hygienist for VHA at (b)(6)@va.gov

Renee Oshinski
174682

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Oshinski 174682
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Renee Oshinski

**DEPARTMENT OF
VETERANS AFFAIRS**

Memorandum

Date: March 15, 2021

From: Acting Assistant Under Secretary for Health for Support (19)

Subj: Updated Guidance on Authorized Sources for N95 Respirator Purchases

To: Veterans Integrated Service Network (VISN) Directors (10N1-23)

Thru: Assistant Under Secretary for Health for Operations (15)

1. This memorandum clarifies the direction contained in the November 25, 2020, "Authorized Source for N95 Respirator Purchases" memorandum. Specifically, there are two authorized sources for N95 respirators, our Medical Surgical Prime Vendor (MSPV) contracts and the Veterans Health Administration (VHA) Regional Readiness Centers (RRC). VA Medical Centers (VAMC), VISN, and VISN Consortia shall not purchase N95 respirators from any other sources. Limiting the sources of supply is the single best method VHA has protect our staff and manage the risk presented by counterfeit infiltration into the U.S. supply chain.

2. Facilities will continue to use MSPV as the first and primary source of supply for N95 respirators. Use of the VA MSPV contract assures the goods and services delivered to VA meet or exceed the VA and federal medical supplies and equipment guidelines, including National Institute for Occupational Safety and Health standards, essential to staff and patient health and safety. Facilities with immediate N95 respirator needs that they cannot fill using a MSPV contract should first cross-level their supplies within their VISN, then by Consortium, and lastly across Consortia.

3. If the facility cannot resolve the shortage in this way facilities should contact their assigned Field Support Representative and submit a request through the National COVID Request Tool. The VHA RRC have N95 respirators available to meet facility needs without delay. VHA established national contracts directly with U.S. N95 respirator manufacturers and is receiving regular shipments monthly to the RRC.

4. Use of Government Purchase Cards (GPC) to purchase N95s after the date of this memo will result in a six-month suspension of the GPC privileges. The VHA Procurement & Logistics Office will conduct monthly GPC purchase audits to ensure compliance and we will provide periodic updates during Healthcare Operations Center morning leadership briefings.

5. Questions concerning this guidance may be directed to the VHA Logistics Operations Center at (b)(6)@va.gov.

Deborah E.
Kramer 662649
Deborah E. Kramer

Digitally signed by Deborah E. Kramer 662649
DN: c=US, o=Department of Veterans Affairs, ou=Office of the Assistant Under Secretary for Health for Operations, email=Deborah.E.Kramer@va.gov

Department of Veterans Affairs

Memorandum

Date: April 7, 2020

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: Updated: Coronavirus (COVID-19) Facemask and N95 Respirator Use

To: Veterans Integrated Service Network (VISN) Directors (10N1-23)

1. COVID-19 activity in Department of Veterans Affairs facilities has increased significantly, leading to localized shortages in facemasks and N95 respirators. The United States is experiencing challenges procuring adequate supplies of these items to protect Veterans Health Administration (VHA) staff over the coming weeks. Recent COVID-19 transmissions in VHA Community Living Centers and a Spinal Cord Injury facility mean that VHA staff must take extra steps to protect patients from COVID-19. Effective today, VHA has implemented CDC crisis capacity strategies for mask and N95 respirator conservation until supply chains are optimized.

2. Facility facemask and N95 respirator management plans should adopt CDC conservation and crisis strategies that permit extended use and permit limited re-use by individuals under certain circumstances.

a. For non-COVID-19 zones – employees working in Community Living Centers, Spinal Cord Injury facilities, and inpatient Mental Health wards will receive one facemask per work week to protect high risk Veterans from COVID-19 exposure. Care should be taken to not touch the outer surface of the mask when removing the mask from a paper storage bag when used. Mask supply levels in VHA do not support providing masks to all other employees not working directly with COVID-19 infected Veterans.

b. For COVID-19 screening program activities other than patient sample collection receive one facemask a day.

c. For COVID-19 positive patients not undergoing high risk procedures – employees will receive one facemask a day. The patient should be encouraged to put on a facemask when someone enters their room. The facemask on the employee can be re-used between patients. Extended use is preferred to re-use when possible, given risk of self-inoculation when donning and doffing.

d. Performing high risk procedures or activities on suspect or confirmed COVID-19 patients – employee should wear an N95 respirator for extended use with multiple COVID-19 patients. For example, an employee conducting sample collection for COVID-19 testing should use the same mask between patients.

Page 2

Subj: Update: Coronavirus (COVID-19) Facemask and N95 Respirator Use

3. Masks should be routinely assessed for damage and blood or bioburden. Replacement masks can be provided by supervisors, but employees must take these conservation methods seriously. Additional information on implementing extended use and re-use of facemasks and N95 respirators from the CDC can be found at:

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html>

4. VHA facilities should use CDC guidance for contingency and crisis capacity management of PPE including facemasks and N95 respirators. VHA facilities should not wait for supplies to reach levels where a small shift in use results in a lack of N95 respirators for high risk procedures. Facilities should start collecting PPE that is amenable to re-use strategies now, and have a safe storage plan in place. PPE management plans should include extended use and limited reuse strategies for facemasks and N95 respirators. The Facility Director in consultation with the Network Director determines change in masking policy. Information for optimizing mask use can be found here: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>. The VHA National Patient Safety Center has additional guidance on personal protective equipment including facemasks and N95 respirators of PPE in the attached Patient Safety Notice.

5. Decontamination and reuse of N95 respirators is FDA approved under an emergency use approval (EUA) for the Battelle CCDS Critical Care Decontamination System™. Additional FDA EUAs may ensue. For example, Advanced Sterilization Products (ASP) recently announced the company has qualified a new reprocessing protocol that can extend the lifespan of single-use N95 masks (respirators) utilizing STERRAD Systems. This may soon be approved by the FDA. This is a rapidly changing environment with additional strategies and processes undergoing testing and approval processes. The Facility Director in consultation with the Network Director determines when and what decontamination and reuse methods will be deployed at a facility. Keep apprised by checking the FDA EUA status at: <https://www.fda.gov/medical-devices/emergency-situations-medical-devices/emergency-use-authorizations>

Facilities may consider decontamination strategies for N95 respirators as a crisis/last-resort strategy until additional supply is available. Staff should be advised that a reused decontaminated respirator might not perform at the same level as advertised by the manufacturer and NIOSH certification. CDC discussion of respirator decontamination is here: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html>.

6. Facilities must prioritize respirators/facemasks for employees with highest risk of exposure and those employees that work in areas with highly vulnerable patients when all employees cannot receive a mask. Priority health care delivery areas include those screening patients for COVID-19, staff in contact with persons under investigation for COVID-19, and those performing procedures on and those providing direct care to suspect or confirmed COVID-19 patients. Facemasks should be used by employees working in the Community Living Center, Spinal Cord Injury units, and inpatient Mental Health.

Page 3

Subj: Update: Coronavirus (COVID-19) Facemask and N95 Respirator Use

7. The Joint Commission (TJC) has released a statement for health care workers that supports allowing staff to bring their own masks or respirators to wear at work when their health care organization cannot provide them with adequate protection commensurate with the risk of infection. The TJC also strongly supports healthcare organizations' efforts to conserve PPE and to distribute scarce supplies. VHA supports this recommendation when supplies at the medical center are not immediately available and will adopt policies to conserve masks and respirators for employee use. Joint Commission announcement here:

https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/infection-prevention-and-hai/covid19/public_statement_on_masks_from_https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/infection-prevention-and-hai/covid19/public_statement_on_masks_from_home.pdf

8. The CDC lists several options in the event there are not facemasks available including; exclude healthcare providers (HCP) at higher risk for severe illness from COVID-19 from contact with known or suspect cases; designate convalescent HCP for provision of care to known or suspected COVID-19 patients; use a face shield that covers the entire front and sides of the face with no facemask; and use of homemade masks. Additional information on the options can be found at the CDC:

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html>

9. Should you have questions regarding this memorandum, please contact (b)(6) (b)(6) in Patient Care Services for Public Health, by sending an email to (b)(6)@va.gov. This guidance will be continually reviewed and updated to reflect shifts in supply levels including any impact of N95 respirator decontamination.

(b)(6)

for
Renee Oshinski

Department of
Veterans Affairs

Memorandum

Date: **APR 17 2020**

From: Assistant Under Secretary for Health for Operations (10N)

Subj: Reporting Personal Protective Equipment (PPE) Levels and Daily Consumption

To: Veterans Integrated Service Network (VISN) Directors (10N1-23)

1. The purpose of this memorandum is to provide updated guidance for reporting critical Personal Protective Equipment (PPE) levels and daily consumption in the COVID-19 Response Monitoring Tool. This guidance describes measures to reduce the variation in methods used to report and calculate PPE levels on hand within the Veterans Health Administration (VHA). By reducing variation in reporting, VHA Senior Leaders will have full visibility of our supply chain and be able to easily identify areas of need, thereby preventing PPE shortages and keeping every employee safe.
2. **VISNs and VA Medical Centers (VAMCs) will use the COVID-19 Response Monitoring Tool to report PPE on a daily basis (7 days a week), effective Monday, April 20, 2020.** The tool reflects a new standardized list of PPE, including sizes where applicable.
3. Sites will be responsible for entering two data points:
 - a. Quantity on hand
 - b. Usage.
4. VISNs are responsible for determining who will enter data at the VAMC. Additional details and instructions can be found in the attached Standard Operating Procedure.
5. For questions regarding this guidance, please contact (b)(6) VHA Procurement and Logistics Office, at (b)(6) @va.gov or (b)(6)

(b)(6)

Renee Oshinski

Attachment

Attachment

PERSONAL PROTECTIVE EQUIPMENT (PPE) LEVELS AND DAILY CONSUMPTION REPORTING STANDARD OPERATING PROCEDURE

1. **PURPOSE:** To reduce workload on the field and improve standardization and accuracy of data, the Veterans Health Administration (VHA) Procurement and Logistics Office has established a standard operating procedure (SOP) for reporting mission critical Personal Protective Equipment (PPE) levels and daily consumption. This guidance describes the standardized methods to calculate and report this data using the COVID-19 Response Monitoring Tool as the single reporting template. Reducing the variation in reporting will allow VHA Senior Leaders to have full visibility of our supply chain and be able to easily identify areas of need, preventing PPE shortages and keeping every employee safe.
2. **SCOPE:** These procedures apply to all VA medical centers (VAMCs) and Veterans Integrated Service Networks (VISNs) when reporting their daily PPE levels (7 days a week) and consumption rates.
3. **DEFINITIONS:**
 - a. **Mission Critical Personal Protective Equipment (PPE):** Equipment that is necessary to protect staff in the performance of their duties.
 - b. **Primary Inventory Point:** Main operational inventory point for expendable items.
 - c. **Contingency Inventory:** Inventory held to meet unexpected or unforeseen demand or requirements.
 - d. **Stock on Hand:** Quantity of on hand stock from both contingency and primary stock locations. This does not include quantities stored in secondary inventory points
 - e. **Daily Usage:** Daily usage of on hand stock from both contingency and primary stock locations. This does not include quantities issued from secondary inventory points
 - f. **Picking Ticket:** Document produced after you scan your secondaries documenting issues from primary to secondary supply locations.
 - g. **Inventory Sales Report:** A report generated in Generic Inventory Package (GIP) that documents sales from the primary inventory point.
 - h. **Serviceable:** Complete and functional, ready to use.
 - i. **Eaches:** Lowest unit of measure. (For Example: One case of gloves = 10 boxes; One box of gloves = 100 pair; 100 pair of gloves = 200 eaches of gloves)

Attachment

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 - g. **Inventory Sales Report:** A report generated in Generic Inventory Package (GIP) that documents sales from the primary inventory point.
 - h. **Serviceable:** Complete and functional, ready to use.
 - i. **Eaches:** Lowest unit of measure. (For Example: One case of gloves = 10 boxes; One box of gloves = 100 pair; 100 pair of gloves = 200 eaches of gloves)

- j. **VA approved automated supply chain management system:** The Veteran Health Information Systems and Technology (VISTA), Generic Inventory Package (GIP), Integrated Funds Distribution Control Point Activity Accounting and Procurement (IFCAP), and/or the Defense Medical Logistics Standard System (DMLSS).

PROCEDURE FOR PPE REPORTING:

- a. Supply chain management collect **daily on hand** mission critical PPE at the station level per the items listed in the COVID-19 Response Monitoring Tool (Reference Resources section for link to tool).

1. Count primary and contingency stock on hand quantities.

Please Note: Quantity on hand data should be pulled from VA approved automated supply chain management system

2. Convert unit of measure into eaches (Example: One case of gloves = 10 boxes; One box = 100 pair; 100 pair = 200 eaches. One case = 2000 eaches). Reference Resources section for a visual example.
3. Capture quantity of on hand mission critical PPE **in eaches**. Reference the Resources section for a checklist that can be used to assist you with the organization/conversion of data.

Please note: Power Air Purifying Respirators (PAPRs) and Controlled Air Purifying Respirators (CAPRs) are to be reported as one complete serviceable unit.

- b. Supply chain management collect **daily usage** of mission critical PPE at the station level per the items listed in the COVID-19 Response Monitoring Tool (Reference Resources section for link to tool).

1. Collect daily usage data using the following suggested methods:
 - i. Inventory Sales Report
 - ii. Manual counts
 - iii. Picking tickets
 - iv. Any other method approved by the VISN Chief Supply Chain Officer (CSCO)

Please Note: Usage is to be reported from primary. Issues from the contingency to the primary are not counted as part of usage.

2. Convert unit of measure into eaches (Example: One case of gloves = 10 boxes; One box = 100 pair; 100 pair = 200 eaches. One case = 2000 eaches). Reference Resources section for visual example.
3. Capture quantity of all daily usage of mission critical PPE **in eaches**. Reference the Resources section for a checklist can be used to assist you with the organization/conversion of data.

Please note: **Do not** report usage of Powered Air-Purifying Respirators (PAPRs) and Controlled Air Purifying Respirators (CAPRs).

- c. Supply chain management enter data into the COVID-19 Response Monitoring Tool.
 1. Open monitoring tool
 2. Click on appropriate facility
 3. Locate PPE report tool
 4. Enter usage and quantity on hand data in eaches
 5. Click on "Edit Personal Protective Equipment" button to submit

4. RESOURCES:

- a. EMCC PPE Memo
- b. Visual example for converting PPE to eaches



Gloves Visual.pptx

- c. Excel checklist to assist with organizing PPE data in eaches



PPE
Checklist_FINAL.xlsx

- d. Reference guide on Run Inventory Sale Report (PPT)



INVENTORY SALES
REPORT.pptx

- e. COVID-19 Response Monitoring Tool Form

5. REVIEW DATE: This SOP will remain in effect until rescinded.

(b)(6)

Deborah E. Kramer
Acting Assistant Under Secretary for Health
for Support Services

17 APR 2020
Date

**Department of
Veterans Affairs**

Memorandum

Date: May 11, 2020

From: Assistant Under Secretary for Health for Operations (10N)

Subj: Personal Protective Equipment (PPE) in the Magnetic Resonance Imaging (MRI) Environment

To: Veterans Integrated Service Network (VISN) Directors (10N1-23)
VISN Chief Medical Officers

Thru: Assistant Under Secretary for Health for Clinical Operations (10NC) *JTB*

1. The purpose of this memorandum is to provide guidance regarding safety of personal protective equipment (PPE), including respirators and facemasks, in the magnetic resonance imaging (MRI) environment.
2. The strong magnetic field utilized in MRI presents unique and potentially serious risks for patients and healthcare personnel. Stringent safety policies and procedures, consistently applied, are required to mitigate these risks. Ubiquitous and seemingly innocuous items used in healthcare, including respirators and facemasks, may have important safety ramifications if not understood and managed appropriately.
3. This issue is of acute importance due to use of personal protective equipment (PPE) when performing MRI scanning for known or suspected COVID-19 patients. In addition to other PPE, use of N95 respirators or facemasks are recommended for healthcare personnel providing direct patient care to COVID-19 patients (see Centers for Disease Control and Prevention guidance for specific PPE requirements: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html>). Follow CDC Guidelines and local VHA Facility risk assessment for prioritizing PPE.
4. If ferromagnetic metals are used in the construction of respirators or facemasks, the magnetic field may pull the respirator or facemask away from the wearer's face, potentially exposing staff to the viral pathogen. Additionally, if the mask is completely dislodged, it may be attracted into the magnet bore and can present a projectile risk to patients, staff and equipment. The staples used to secure the straps in many respirators or facemasks are ferromagnetic, and thus subject to potential dislodgement. While many nosepieces are aluminum and therefore not subject to magnetic pull or torque, this varies by manufacturer and model type; it should not automatically be assumed the nosepiece is MR safe. Many respirators and facemasks lack published safety documentation for use in an MRI suite and therefore require magnetic testing by Level 2 MRI personnel.

Page 2.

Personal Protective Equipment (PPE) in the Magnetic Resonance Imaging (MRI) Environment

5. A few N95 and other respirator types (such as some elastomeric respirators) use non-ferromagnetic components and therefore may safely be used in the MRI environment; facilities are advised to check with the manufacturer or distributor in this regard. If there is any question, the respirator should be checked for magnetic attraction with a strong hand-held magnet (>1,000 Gauss) before being allowed into the MRI scanner room. Facilities purchasing N95 (or higher level, such as N99, etc.) respirators for use in the MRI suite are advised to purchase a product known to be MRI safe.
6. While many surgical and other types of facemasks do not have ferromagnetic components, this cannot be assumed without verification by the manufacturer and/or testing by Level 2 MRI personnel with a strong hand-held magnet. Facilities are advised to purchase facemasks known to be MRI safe for use in the MRI environment.
7. Other recommended PPE such as eye protection/face shield must be evaluated in a similar manner to assure compatibility with the MRI environment.
8. Even if MRI personnel are supplied MRI safe PPE, it must not be assumed that other healthcare personnel accompanying the patient are using MRI safe PPE. These personnel must undergo standard screening procedures and safety training before entering the MRI suite. If there is a need for them to enter the MRI scan room, their PPE should be appropriately tested, or they should be supplied PPE known to be MRI safe.

9. For questions regarding this guidance, please direct questions to

(b)(6) [\[REDACTED\]@va.gov](mailto:[REDACTED]@va.gov).

(b)(6)

for
Renee Oshinski



N-95 Alternatives

HCI Infection Control Team

Scope: Alternatives to an air purifying N-95 filtering facepiece.

Key Issues What are the alternatives to N-95s? What are the gaps or shortfalls? What are the friction points if VHA transitions to alternatives? Surgical masks are not an alternative for respiratory protection. Surgical masks on patient is an excellent way for point source control.



Infection Control Team Members



(b)(6)



Particulate Filters

N Non-Oil	R Oil-Resistant	P Oil-Proof
% Filter Efficiency		
95	95	95
99	99	99
100	100	100

← Formerly
HEPA

Efficiency – Filters out the most penetrating aerosol size
(approximately 0.3 micrometer)



Which filter designation can be used in healthcare environment?



An N-95 is preferred by healthcare for its effectiveness and low cost, except for surgery and other invasive procedures areas. N-95s have the lowest efficiency rating. Oil rating in healthcare is NOT a concern. All other respirator efficiencies and oil proof designations are effective. CDC recommends all other NIOSH certified efficiencies and oil ratings in their guidance for Covid-19.



Normal v. Contingency RPP Considerations



- Limit who is enrolled in RPP by risk potential for occupational exposure. The more people enrolled the more medical clearances and fit testing are required; therefore, the more time it will take to complete. The more changes to different respirator models & sizes the more fit testing required for all classes of respirator.



Normal v. Contingency RPP Considerations (Cont.)



If switching to an alternative respirator, be sure to purchase enough to: Fit test + Maintain in stock for use Disposable respirators can be recommended for extended use or reused on a limited basis. Consult CDC Guidance.



Course of Action 1: Order Different Models of Filtering Facepieces

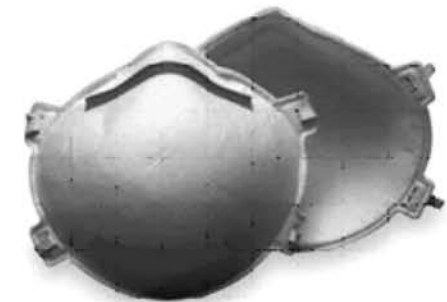
Unclassified / For Official Use Only



- PositivesAll efficiencies are relevantOil rating is NOT relevantHigher efficiencies are more protectiveDisposable Same training as N-95Negatives Higher the efficiency the higher the costHigher the efficiency the higher the resistance to breathingHigher the oil rating the higher the costAir could be more moist or hotter while breathing inside the maskHigher the efficiency and oil rating the more it's likely going available for purchase.

Particulate Filters

N Non-Oil	R Oil-Resistant	P Oil-Proof
% Filter Efficiency		
95	95	95
99	99	99
100	100	100





Course of Action 2: Order PAPRs



- Positives
 - If loose fitting hood – No fit testing required
 - Excellent protection
 - Reusable
 - Excellent to use as a buffer for fit testing
- Negatives
 - Should not use if sterile field is required or if HCW may be infectious to patient
 - Most expensive option >\$800 per unit
 - Requires more respirator and battery maintenance
 - If batteries stored for long time the potential for of a weak charge and capacity of battery life may be reduced.
 - Depending on model decontamination could be complex; therefore, higher potential for HCW getting infected
 - Bulky
 - Could intimidate the patient
 - If PAPR is used in one area and other areas a N-95, there could give the perception that one group is getting better protected than others, respectively





Course of Action 3: Order Elastomeric Respirators

- Positives
 - Better fitting than filtering facepieces
 - Better protection than N-95
 - Respirator is cleanable & reusable
 - In some cases the filter housing can be decontaminated
 - Therefore, reuse filter might be an option
 - Configurable
 - R & 95, 99, 100
 - Easier to exhale than N-95
- Negatives
 - Should not use if sterile field is required or if HCW may be infectious to patient
 - Requires some low intensive maintenance
 - More expensive than N-95 but less than PAPR
 - Requires more training than N-95
 - Depending on make and model it can be complex to clean – no standardized cleaning protocol from CDC
 - Harder to communicate with elastomeric respirators
 - Could intimidate the patient





Discussion or Questions

In the end it's the seal that matters.
All other filter efficiencies are an option.

**Department of
Veterans Affairs****Memorandum**

Date: November 25, 2020

From: Acting Assistant Under Secretary for Health for Support (19)

Subj: Authorized Source for N95 Respirator Purchases

To: Veterans Integrated Service Network Directors (10N1-23)

Thru: Assistant Under Secretary for Health for Operations (15) *TC*

1. The purpose of this memorandum is to provide guidance on the use of the VA category management Tier 1 enterprise-wide Medical Surgical Prime Vendors (MSPV) contract as the only authorized source of supply for N95 respirators. VA vetted these vendors and use of the MSPV will allow the purchase of required goods and services that eliminate redundancies, increase efficiency, deliver more value and savings, along with addressing the recent concerns related to counterfeit products in the commercial marketplace. Use of the VA MSPV contract assures that the goods and services delivered to VA meet or exceed the VA and federal guidelines related to medical supplies and equipment used for staff and patient health and safety.

2. In order to address the recent concerns related to counterfeit and fraudulent business practices, approval of a waiver is required if a facility chooses not to use the MSPV to acquire N95 respirators. If there is an immediate need that cannot be filled using the MSPV contract, a request for a waiver must be approved prior to considering any other source of supply. Due to the proliferation of counterfeit N95 respirators in the commercial marketplace we are taking this action to ensure the safety of VHA staff and patients and to secure the VHA internal N95 supply chain. Details on the waiver approval is forthcoming.

3. Facilities with existing or anticipated shortages of N95 respirators are encouraged to first cross-level their supplies within their VISN, then by Consortium, and lastly across Consortia. If the shortage cannot be resolved, facilities should submit an emergency waiver request through their VISN to the VHA Emergency Management Coordination Cell (EMCC). The EMCC will coordinate with the VHA Procurement and Logistics Office (P&LO) for access to N95 respirators provided under existing contracts with manufacturers.

4. Counterfeit respirators are products falsely marketed and sold as approved by the National Institute for Occupational Safety and Health (NIOSH), and may not be capable of providing appropriate respiratory protection to workers. The global demand for N95 respirators exceeds the existing manufacturing capacity in the

Page 2.

Authorized Source for N95 Respirator Purchases

United States and worldwide. The gap between supply and demand resulted in an increase in unscrupulous actors entering the marketplace.

5. Should you require additional information, please contact

(b)(6)

VHA P&LO, at

(b)(6)

@va.gov or

(b)(6)

Deborah E.

Kramer 662649

Digitally signed by Deborah
E. Kramer 662649
Date: 2020.11.25 14:25:10

Deborah E. Kramer

cc:

- VA Medical Center Directors
- VISN Chief Supply Chain Officers
- VHA Chief Supply Chain Officers
- VHA Government Purchase Card Holders and Approvers

VHA Suggested Strategies for PPE during COVID-19

Updated: March 23, 2020

Revision History Log

Revision Date	Description	Author or Reviewer
3/5/20	Document originated	NIDS/MRSA Prevention Program
3/11/20	pp. 2-3: MRSA Prevention Program- Clarification of suggested strategies for MRSA	NIDS/MRSA Prevention Program
3/11/20	pp. 1-2: Updated CDC Infection Prevention and Control Recommendations for COVID-19 Patients	NIDS
3/23/20	pp. 1-2: Updated CDC Guidance for Respirator Use and Conservation	NIDS
3/23/20	pp. 2-3: MRSA Prevention Program Clarification of suggested strategies for MRSA	NIDS/MRSA Prevention Program

During this COVID-19 pandemic, infections and deaths are increasing in the United States. As increasing numbers of Veterans are admitted as persons under investigation (PUI) or with documented known COVID-19 infection, there may be a shortage in masks, respirators, gowns and gloves (Personal Protective Equipment (PPE)) needed for their care and the protection of healthcare workers.

As a general and immediate effort to conserve resources and prevent PPE shortages, it is recommended that facilities evaluate current use practices to see if any economies can be achieved which do not place others at risk of transmission. This document provides strategies to follow in the event there is a need to allocate scarce PPE resources. The VA Emergency Management Coordination Cell will provide changes and/or updates as required.

- VHA continues to follow CDC guidance as it evolves. PPE recommendations for the care of patients with known or suspected COVID-19 that are based on situational analysis of PPE supplies at the facility were released March 10, 2020. This will vary, based on facility and VISN PPE resources.
 - According to CDC's most recent infection prevention and control recommendations, facemasks are an acceptable alternative to N95 respirators when the supply chain of respirators cannot meet the demand. During this time, available respirators should be prioritized for procedures that are likely to generate respiratory aerosols which would pose the highest exposure risk to healthcare providers.
 - When the supply chain is restored, facilities should return to use of respirators for patients with known or suspected COVID-19.
 - Eye protection, gown, and gloves continue to be recommended.
 - See CDC Guidance, "**Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings**":
https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC_AA_refVal=https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control.html
- As supplies of N95 respirators are becoming reduced/depleted during this COVID-19 pandemic, existing CDC guidelines recommend a combination of approaches to conserve supplies while safeguarding health care workers in such circumstances. These existing guidelines recommend that health care institutions consider:

VHA Suggested Strategies for PPE during COVID-19

Updated: March 23, 2020

- Minimize the number of individuals who need to use respiratory protection through the preferential use of engineering and administrative controls;
 - Use alternatives to N95 respirators (e.g., other classes of filtering facepiece respirators, elastomeric half-mask and full facepiece air purifying respirators, powered air purifying respirators) where feasible;
 - Implement practices allowing **extended use** and/or limited reuse of N95 respirators, when acceptable.
 - Prioritize the use of N95 respirators for those personnel at the highest risk of contracting or experiencing complications of infection.
 - **Extended use** refers to the practice of wearing the same N95 respirator for repeated close contact encounters with several patients, without removing the respirator between patient encounters. Extended use may be implemented when multiple patients are infected with the same respiratory pathogen and patients are placed together in dedicated waiting rooms or hospital wards. Extended use has been recommended as an option for conserving respirators during previous respiratory pathogen outbreaks and pandemics. CDC guidance: “Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings”:
<https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html>
 - Unlike guidance for tuberculosis patients, **re-use** of N95 respirators does not apply to COVID19 patients since these patients are also in Contact Precautions.
 - In general, guidance for use of N95 respirators is for aerosolizing procedures for persons with COVID-19 or suspect for COVID-19. Aerosolization likely needs to be determined by the local procedure. If there is mass community spread, more extensive measures may be appropriate which could include use of N95 for all patients undergoing aerosolizing procedures.
- For medical teaching teams with residents, students and fellows, refrain from the entire team entering the room of a patient in isolation precautions. Instead select 2-3 key members of the team to enter the patient room wearing the appropriate PPE. The remaining clinical team members can engage with the team outside the isolation room at the door without the need to wear PPE.
 - MRSA Prevention Program

The COVID-19 pandemic is requiring contingency measures to be implemented. Supplies of Personal Protective Equipment (PPE) are becoming scarce. In addition, a COVID-19 RT-PCR (laboratory molecular assay) will soon be available that may require VA laboratories to allocate a large part of their RT-PCR instrument capacity to test for COVID-19.

For these reasons, the MRSA/MDRO Program Office has evaluated its current policy related to MRSA screening and the use of isolation precautions. The following temporary steps may be taken to conserve PPE and to optimize laboratory resources during the COVID-19 pandemic:

1. Acute Care
 - a. Facilities have the option to temporarily discontinue MRSA nasal swabbing for new admissions including all admissions and transfers into ICUs and Spinal Cord Injury Units (SCIUs).
 - b. Facilities have the option to temporarily suspend the use of Contact Precautions for all new admissions and those with a history of MRSA colonization within the past 12 months.

VHA Suggested Strategies for PPE during COVID-19

Updated: March 23, 2020

- c. All patients currently in Contact Precautions for MRSA for a positive nasal swab may be released from Contact Precautions as a temporary measure to reduce PPE usage.
- d. All acute care, ICU, or SCIU patients who have a positive MRSA clinical culture (non-surveillance test/culture) must be maintained on Contact Precautions as recommended by the Centers for Disease Control and Prevention and VHA Directive 1131 (2), Appendix F.
- e. Patients with *Clostridioides difficile* and carbapenemase-producing carbapenem-resistant *Enterobacteriaceae* (CP-CRE) infections must still be managed in Contact Precautions.

2. CLCs

- a. Facilities have the option to discontinue MRSA nasal swabbing for new admissions.
- b. Facilities have the option to temporarily suspend the use of Contact Precautions/Enhanced Barrier Precautions for all new admissions and those with a history of MRSA colonization within the past 12 months.
- c. All residents currently in Contact Precautions/Enhanced Barrier Precautions for a MRSA positive nasal swab may have precautions discontinued. Personnel should attempt to provide education to residents on hand hygiene and respiratory hygiene as cognition allows. A resident's inability to comprehend how to use good hand hygiene or respiratory etiquette will not prevent him/her from being taken out of precautions.
- d. All residents who have a positive MRSA clinical culture (non-surveillance test/culture) must be maintained on Contact Precautions/Enhanced Barrier Precautions as determined by the severity of the infection in accordance with VHA Directive 1131 (2), Appendix G.
- e. Residents with *Clostridioides difficile* and carbapenemase-producing carbapenem-resistant *Enterobacteriaceae* (CP-CRE) infections must still be managed in Contact or Enhanced Barrier Precautions as appropriate.

A facility that decides to temporarily suspend Contact/Enhanced Barrier Precautions for MRSA nares positive patients/residents is still required to enter monthly data into all fields of the appropriate Acute Care or CLC IPEC MRSA modules.

If a facility decides to temporarily suspend the use of Contact Isolation/Enhanced Barrier Precautions for MRSA nares positive patients/residents, the MRSA/MDRO Program Office must be notified via email at (b)(6)@va.gov . This does not apply to the decision to discontinue admission nasal swabbing since this will be captured in IPEC.

The implementation of the strategy to conserve PPE that includes discontinuation of nasal screening for MRSA and Contact Precautions/Enhanced Barrier Precautions for MRSA colonization will end when the Public Health Emergency has abated or when the MRSA Prevention Program deems appropriate.

MESSAGE FROM THE VHA EXECUTIVE IN CHARGE**April 15, 2020****COVID-19: An Update on Personal Protective Equipment (PPE)**

Although there is no video due to technical difficulties, today's message is about our system's use of personal protective equipment, or PPE. We are working hard to ensure that each and every one of you has what you need to stay safe. There have been a lot of rumors about PPE, including our ability to have a sufficient supply of what is needed for our employees, so let me very clear: your safety is the most important thing I am responsible for – every employee needs to be safe. That is my commitment to you, and your facility leaders take this extremely seriously as well.

Prior to COVID-19, VA always had a contingency supply of PPE. However, when this crisis started to face every healthcare organization in the nation, it became more difficult to project our incoming supply chain. For this reason, and out of an abundance of caution, we implemented austerity measures to ensure that every person working with COVID-19 patients had the equipment they needed. Those employees not working directly with COVID-19 patients received a mask each week, per the CDC guidelines.

Today, we once again have full visibility of our supply chain, which enables us to see what we currently have as well as our contingency resources. So, all employees in a community living center, spinal cord injury unit or inpatient mental health unit will receive one mask a day to support their duties. We will continue providing N95 masks to those directly in contact with COVID-19-positive patients.

Your safety is the most important thing to us – we need to protect you. I give you my word that we are doing everything to help you continue to take care of our Veterans. Once again, I thank you for your commitment to our mission, and all you are doing for the nation.

Richard A. Stone, MD

Executive in Charge

Follow leadership updates [@USHVHA](https://twitter.com/USHVHA)

Veterans Health Administration COVID-19 PPE Message



Hello [Facility name],

We're all facing a lot of uncertainty and competing demands right now, both personally and professionally. **The one guarantee I can make to you is that you will have unwavering support from, and access to, me and your entire leadership team.**

I want to address the availability of Personal Protective Equipment (PPE) nationwide. Every hospital in the world right now is challenged with supply chain issues. VHA is a nation-wide healthcare system that has the advantage of being able to cross-level supplies based on need and exert major buying power. Many people are working hard to ensure VA can continue to be available for Veterans and the civilian healthcare system.

At the local level, one of the important things we can do collectively is to conserve PPE for our frontline clinical staff and for our highest risk situations. Currently, our supply is adequate to care for patients. This is reliant on judicious use of PPE according to VHA and CDC Infection Prevention and Control guidance.

As we face COVID-19 it's clear that we will have to ask too much of too few. One of the great honors of my position has been to see the rapid, resourceful, and selfless way you've all risen to the occasion – I see it, your entire leadership team sees it, your friends and colleagues see it, and most importantly, I know your patients see it too. We're staring down the biggest healthcare crisis in the last century, and there's no other group I'd rather lead. **Together, we will get through this.**

In closing, I want to remind you all to rest and take care of yourself. Pay attention to your own health. Monitor for symptoms. Our Veterans need you, and we need you. Stay safe. Thank you.

We all are facing a challenge like none of us has before. We are going to beat this. Because of you.

Veterans Health Administration COVID-19 PPE Message



VA is Ready and Able to Protect Its Workforce

Key Message: All VA facilities are equipped with essential items and supplies to handle coronavirus cases, and we are working 24/7 to continue providing the appropriate Personal Protective Equipment (PPE) for VA employees, as per CDC guidelines.

Supporting Message 1: This pandemic is challenging our nation and each of us individually, but VA is equipped and ready.

- We are monitoring the supply levels at every facility every day to make sure we have adequate PPE for the number and types of patients that we are seeing.
- Each facility and ward consume PPE and other supplies at different levels, as is always the case in healthcare, based on the number and acuity of patients.
- As the nation's largest integrated healthcare system, we can more rapidly reposition supplies to ensure that current and anticipated "hotspots" are receiving resupply at a faster rate than most hospital systems.

Supporting Message 2: CDC guidelines are clear: not every healthcare worker will need the same quantity and type of PPE. We adhere to the CDC guidance, which is updated frequently.

- We will continue to closely monitor PPE levels and consumption rates to ensure we have enough today and in the future.
- It is important for healthcare protocols to guide our actions.
- It is extremely important for the frontline medical personnel to understand that they are safe following the CDC guidelines, based on their role in the hospital.
- The current guidance is as follows:
 - Employees performing high risk procedures or activities on suspected or confirmed COVID-19 patients will receive N95 respirators as needed but are encouraged to reuse them.
 - Employees treating COVID-19 positive patients for low-risk procedures will receive one facemask a day.
 - Employees screening patients for COVID-19 receive one facemask a day.
 - Employees working in Community Living Centers, Spinal Cord Injury facilities, and inpatient Mental Health wards will receive one facemask per day to protect high risk Veterans from COVID-19 exposure.
- We have highly skilled and experienced supply chain and infectious disease teams working around the clock and making the right decisions to keep us safe and ensure we are effective. When we are able to purchase enough PPE to exceed the current guidelines, we will send out new guidance to allow a higher level of PPE use.
- Our supply levels are reliant on judicious use of personal protective equipment. When facilities need additional PPE/supplies, VHA moves supplies to locations that need them.
- VA has shifted a significant amount of outpatient care to telehealth and some elective and non-emergent procedures have been postponed. This enables Veterans to receive care through minimal contact with staff, and helps to conserve PPE for the staff and the situations where it is required.

Veterans Health Administration COVID-19 PPE Message



Supporting Message 3: VA Leadership's #1 priority is the health, safety, and protection of all Veterans and staff is available and wants to know immediately if there are concerns about supply or PPE levels.

- Facility, regional, and national leaders are closely monitoring the supply levels at every facility, especially those with high numbers of COVID-19 patients.
- VHA leaders, up to and including Dr. Stone and Secretary Wilkie, are doing everything they can to not only effectively position supplies for where they are needed most, but to procure more based on projections of what will be needed.
- If any healthcare worker feels that they do not have the equipment they need to do their job safely within the CDC guidelines for their role, they should immediately let their supervisor or facility leadership know.

Potential leadership quotes:

"VA is ready to care for our nation's Veterans during the COVID-19 pandemic, and the incredible frontline medical staff caring for them are properly equipped to do so. We are constantly monitoring our PPE supply levels and are actively repositioning them as needed based on consumption."

"Every facility currently has enough PPE to safely conduct operations during these unprecedented times, and if anyone on the frontlines feels they do not have what they need, I need to know about it."

"We are working closely with FEMA and the CDC on the nation's response to COVID-19, and are closely following the CDC guidelines on healthcare worker protection. That guidance is clear and we are equipped to appropriately consume PPE based on each healthcare worker's role in the facility."

Gown Guidance – 02/28/2020

Safety of VA healthcare workers and Veteran patients is the utmost priority.

The following information is provided as guidance for gown use in care of persons suspected/known to have COVID-19:

- **Standard isolation** gowns are to be worn.
- Please see the references below concerning use of **standard isolation** gowns.
- What is a standard isolation gown? **Standard isolation** gowns are typically Level 2 or 3 gowns, based on the Levels of gowns as determined by standards of the American National Standards Institute (ANSI) and the Association of the Advancement of Medical Instrumentation (AAMI): ANSI/AAMI PB70:2003 & the Food and Drug Administration (FDA) .
- Sterile gowns, surgical gowns, and chemo gowns are **not indicated** as PPE of persons suspected/known to have COVID-19. **Isolation gowns are not the same as surgical gowns.**
- **Should you have an urgent need for gowns, please provide your needs through your VISN Office and they will coordinate with the EMCC.**
- Please closely monitor gown use to assure appropriate use, based on this guidance. It may be appropriate to secure gowns and issue for use, in order to avoid inappropriate use.

According to the **CDC's Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Setting 2007**, pg. 52

II.E.2. Isolation gowns. **Isolation gowns** are used as specified by Standard and Transmission-Based Precautions, to protect the HCW's arms and exposed body areas and prevent contamination of clothing with blood, body fluids, and other potentially infectious material. The need for and type of isolation gown selected is based on the nature of the patient interaction, including the anticipated degree of contact with infectious material and potential for blood and body fluid penetration of the barrier. The wearing of **isolation gowns** and other protective apparel is mandated by the OSHA Bloodborne Pathogens Standard 739. Clinical and laboratory coats or jackets worn over personal clothing for comfort and/or purposes of identity are not considered PPE."

Here is the link to the CDC Guideline for Isolation Precautions:

<https://www.cdc.gov/infectioncontrol/guidelines/isolation/>

The CDC published guidance for Personal Protective Equipment (PPE) for the previous outbreak of SARS-CoV. This document indicates the following: "Gown and gloves – ***Wear a standard isolation gown*** and pair of nonsterile patient-care gloves for all patient contacts. The gown should fully cover the front torso and arms and should tie in the back. Gloves should cover the cuffs of the gown."

Here are the links to the CDC SARS guidance documents concerning PPE/gowns:

<https://www.cdc.gov/sars/guidance/i-infection/healthcare.html> <https://www.cdc.gov/sars/guidance/i-infection/app2.html>

Additional information:

Gowns

Gowns are identified as the second-most-used piece of PPE, following gloves, in the healthcare setting.

Isolation gowns are defined by Association for the Advancement of Medical Instrumentation (AAMI) as the protective apparel used to protect HCWs and patients from the transfer of microorganisms and body fluids in patient isolation situations. The Food and Drug Administration (FDA) also defines **isolation gowns** similarly: “a gown intended to protect healthcare patients and personnel from the transfer of microorganisms, body fluids, and particulate material”.

CDC’s current isolation precautions recommendations for suspected or confirmed COVID-19 patient include:

- Contact Precautions AND Airborne Precautions AND eye protection or face shield (e.g., goggles or disposable face shield that covers the front and sides of the face).
- The required PPE includes: an **isolation gown**, gloves, n-95 respirator mask, and protective eyewear or face shield (e.g., goggles or disposable face shield that covers the front and sides of the face).

It is very important to don and doff PPE in the correct order, to prevent contamination. The CDC ppt (below)* provides guidance concerning PPE, including doffing and donning. We encourage this to be shared widely.

*The following link, Guidance for the Selection and Use of PPE in Healthcare Settings may be helpful for staff review for PPE:

<https://www.cdc.gov/HAI/pdfs/ppe/PPEslides6-29-04.pdf>

Kinot Lab Personal Protective Equipment



AMERICAN
OVERSIGHT
A Clothier Design Source Brand
Manufacturing Medical Since 2008

VA-VHA-20-0880-B-000074

CAPABILITIES STATEMENT

Clothier Design Source is a certified women owned factory located in Minneapolis/St. Paul MN USA.

We are a semi-automated cut and sew textile factory that has been manufacturing soft-goods for the medical industry for over 10 years. We can produce up to 100,000 garments per week and are willing to ramp up to more units per week with the right contracts. We are ready to help.

HISTORY AND PAST WORK

Manufacturing medical garments since 2008.

Companies we have worked for: MN Department of Health, Department of Emergency Preparedness, 3M, Medtronic, RS Medical, Light Run, Cocoon Inc, Lena Foundation, Vios Medical, and many more.

CONTACTS

(b)(6) .com Cell:

(b)(6)
(b)(6) Operations Lead (b)(6) .com

Main Phone (b)(6)



VA-VHA-20-0880-B-000075 COVID-19

OVERVIEW OF PRODUCTS

All Made in USA



Masks

All Masks are authorized by the FDA under the EAU for use as a source control in general public or healthcare settings in accordance with CDC recommendations.



Gowns

All Gown fabrics meet AAMI PB70 testing standards featuring disposable and reusable options.



Sheilds

All Shields are wipeable and adjustable.



New Development

Have an idea? Or need private labeling? Contact us for a consult.

(b)(6)

@clothierdesignsource.com

VA-VHA-20-0880-B-000076 COVID-19

STYLE G214

Level 1 Disposable Gown

AAMI Isolation Gown

- Meets AAMI PB70 Level 1 Testing of AATCC 42.
- Resistant to water spray and some resistance to water.
- Made from polypropylene light weight non-woven.
- Medium weight of 35 GSM
- Easy Donning by pulling overhead and then overlap back and tie.
- Back overlaps to close opening when neck is tied.

Sleeve opening has thumbhook



- Price: (b)(4)
Pending QTY

VA-VHA-20-0880-B-000077 COVID-19

made
in USA

STYLE G211

Level 1 Disposable Gown

AAMI Isolation Gown

- Made with Level 1-3 non-woven fabric with moderate fluid protection. Fabric Rating: AAMI Level 3 rating. AATCC 127 AATCC42
- Resistant to water spray and some resistance to water.
- Made from polypropylene light weight non-woven.
- Medium weight of 35 GSM
- Easy Donning by pulling overhead and then overlap back and tie.
- Back overlaps to close opening when tied. Sleeve opening has thumbhook



• Price (b)(4) **made in USA**
QTY

VA-VHA-20-0880-B-000078 COVID-19

STYLE G205/G206 Reusable Gown

- Fabric meets AAMI PB70 Level 1-3 Testing.
- Woven & Washable 100% Polyester 85 GSM
- Washable up to 75X
- For environments where there are concerns of bacteria filtration & fluid resistance.
- Fabric is EN13795 certified.
- Closures at back neck and waist.
- Back overlaps to close opening when neck is tied.
- Option of thumb-hook or elastic cuff



made
in USA

- STYLE G205 w/ thumbhook
- STYLE G206 w/ cuff
- Price: (b)(4)

Pending QTY
VA-VIA-20-0880-B-000079 COVID-19

STYLE A102/ A102L

Cotton Masks

Double Layer w/ Nose Bridge



A102 - Cotton Mask

- Washable up to 75X
- Double layer woven cotton filtration
- Contour nose bridge
- Thin soft elastic ear loops
- Used by Department of Health & Veterans Affairs
- Great for non-surgical admin use and other staffing



A102L - Mask w/ Logo

- Same features as A102
- Add your company logo for staff or branding.
- Price: (b)(4)
pending QTY

STYLE A116/ A116L

Anti-Microbial Mask

Double Layer w/ Silvadur™

- Washable mask made with double layer fabric -
- featuring Dupont SILVADUR.
- Independent microbiological laboratories have confirmed that fabric made with the SILVADUR™ antimicrobial technology will easily demonstrate greater than 90% bacterial reduction.
- Durability of masks will hold up to 75 home



Custom colors and labeling are available for all mask styles upon request.

Price: (b)(4) pc pending QTY

AMERICAN
OVERSIGHT

STYLE A107

Patron Mask

3 Layer Hydrophobic

- Disposable 3 layer mask
- Non-Woven PP
- Fabric meets AAMI PB70 Level 1 Testing of AATCC 42.
- Resistant to water spray and some resistance to water.
- Adjustable to sizes S,M,L



- Price (b)(4) per unit
Pending QTY
- Sold in dispensing box of 130 packs.

STYLE A117NB

Form Fit Mask

Class 1 Mask

- Disposable mask
- Fabric Meets Fabric is Level 1-3 non-woven fabric with moderate fluid protection
- Form Fit under chin and at nose bridge for no gapping.
- Adjustable to sizes S,M,L
- authorized by the FDA under the EAU for use as a source control in general public or healthcare settings in accordance with CDC recommendations.

Price: (b)(4)



VA-VHA-20-0880-B-000083



STYLE A118

No Harm Mask

Class 1 No Harm Mask

- Disposable no harm mask.
- Made with Level 3 non-woven fabric with moderate fluid protection. Fabric Rating: AAMI Level 3 rating. AATCC 127 AATCC42
- Soft, comfortable, easy break earloops to reduce harmful use.
- No metal nose bridge included to reduce harmful use.
- authorized by the FDA under the EAU for use as a source control in general public or healthcare settings in accordance with CDC recommendations.
- Price: (b)(4) Pending QTY



VA-VHA-20-0880-B-000084

STYLE FS301 Face Shield w/ Foam

- Shield is adjustable to slide forward or backward for comfort.
- Can be worn without without goggles.
- Equipped with foam band and headband.
- Latex Free
- One Size Fits Most
- Wash with mild antibacterial hand soap and air dry.
- Price: Pending QTY



STYLE FS302 Face Shield

Ships Flat

- Shield is adjustable to slide forward or backward for comfort.
- Can be worn without without goggles.
- Soft elastic strap opens at back for increased adjustability.
- Latex Free
- One Size Fits Most
- Wash with mild antibacterial hand soap and air dry.
- Price: \$ - \$ Pending QTY





Veterans Health
Administration

Patient Safety Notice

Issued by VHA National Center for Patient Safety

N20-11

June 4, 2020

ITEM:

Safety concerns regarding use of powered air-purifying respirators (PAPRs) and PAPR variants during the COVID-19 pandemic

AFFECTED PRODUCT:

Powered air-purifying respirators (PAPRs) from various manufacturers

GENERAL INFORMATION:

During the COVID-19 pandemic, it is vital for staff to keep themselves and non-infected Veterans from being exposed to the virus. PAPRs and PAPR variants such as controlled air-purifying respirators (CAPRs) are being used to prevent transmission of the virus that causes COVID-19 to the wearer. A PAPR is an air-purifying respirator that uses a blower to force air through filter cartridges or canisters and into the breathing zone of the wearer. A PAPR has either a tight-fitting facepiece or loose-fitting hood or helmet. A medical evaluation must be performed on every employee required to use a respirator, regardless of the duration and frequency of respirator use.

The VHA National Center for Patient Safety (NCPS) has received an increased number of patient safety reports related to PAPR use. Based on collaboration with VHA Central Office (VHACO) subject matter experts (SMEs) and review of existing guidance, NCPS provides the following information regarding safe use of PAPRs during the COVID-19 pandemic.

It is important that users of PAPRs:

- Be familiar with the equipment.
 - Complete training on how to use, inspect, and maintain the device.
 - Review the instructions for use (IFU) for any device you are using.
 - Be familiar with all parts of the PAPR system.
 - Inspect your equipment before and after use for damage or soilage.
 - Replace parts as needed.
 - Check the battery charge prior to use. Indicators for battery charge will be different between models.
 - Remove the PAPR battery when fully charged so the battery does not overcharge; PAPR batteries may have diminished battery life if left plugged in.

N20-11

- Understand equipment maintenance that should be completed by the end user. (Note: Facility leadership should assign active oversight and responsibility for PAPR maintenance and ensure the infrastructure is in place for ongoing maintenance of PAPRs.)
 - Know how to decontaminate the respirator and prepare the unit for subsequent service.
 - Be familiar with removal and replacement of disposable items such as filters, hoses, hoods, and cuffs.
 - Understand how PAPR devices are maintained in your facility and who is responsible for different actions (e.g., cleaning, repair, filter replacement, etc.).
 - Understand the process of requesting assistance for maintenance and procurement of disposable items when necessary.
- Be aware that facilities may receive items from the National Stockpile or other sources that may be different than the products normally used at the facility. If new personal protective equipment (PPE) items appear physically different from what is stocked during normal times, seek training and information from your supervisor(s) to ensure proper use.

Common questions regarding PAPR use and maintenance:

1. *When should a health care provider use a PAPR?*

Health care providers should use a PAPR in situations where they would normally use an N95 mask when treating COVID-19 patients if they are unable to use an N95 mask due to lack of N95 fit testing or failure of N95 fit testing. Some advantages of PAPRs over tight-fitting non-powered approved air-purifying respirators include:

- A fit test is not required for PAPRs with loose-fitting headgear such as hoods and helmets.
- PAPRs with loose-fitting headgear can be worn with a limited amount of facial hair.
- Some models offer cartridges for particulate and/or gas/vapor protection.
- Hooded PAPRs and PAPRs with helmets may offer splash protection for the face and eyes.
- Most PAPR components can be cleaned, disinfected, re-used, and shared.
- PAPRs use only High-Efficiency (HE) filters, which have a greater filtration efficiency against the smallest pathogen particles compared to N95 Filtering Facepiece Respirators (FFR).
- A PAPR may be less taxing from a physiological/breathing resistance perspective than other respirators.

2. *When should a health care provider NOT use a PAPR?*

A PAPR should not be used if the health care provider has not been medically cleared by the appropriate department as designated by their facility or has not completed the necessary training as designated by facility.

A PAPR should not be used when it is physically damaged, missing parts, or if the battery is low. Ensure any damaged PAPR or battery not holding a charge is tagged and taken out of service until the battery is replaced. If a PAPR is damaged follow local processes to ensure the PAPR can be repaired and placed back into service.

PAPR devices offer protection only to the wearer. Consult National Surgery Office guidance before using a PAPR in environments where it is necessary to maintain a sterile field (e.g., in surgery or

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sterile procedure). A health care provider who is using a PAPR may be an asymptomatic carrier of COVID-19. Therefore, health care providers should only use a PAPR when caring for patients who have tested positive for COVID-19 and when other staff members in the room are wearing appropriate PPE; otherwise, the PAPR wearer could potentially transmit the virus that causes COVID-19 to the patient and other staff in the room.

3. Can PAPRs be worn in the Operating Room?

Common PAPR devices are not approved for use in operating rooms because they create a positive nonsterile/non-filtered airflow stream away from the wearer that may compromise the sterility of the operative field and instrumentation. If PAPRs are used, strategies to minimize contamination of sterile instrumentation and drapes must be ensured for scrubbed surgical personnel as well as for anesthesia and nursing/technical staff in the room. Risk assessment for surgical site infection should be performed, and generally, PAPRs should not be used for procedures requiring insertion of surgical implants. For additional guidance, see VHA memorandum “Coronavirus (COVID-19)—Guidance for Urgent/Emergent Operating Room Procedures for COVID-19 Patients,” Association of periOperative Registered Nurses (AORN) guidance (<https://www.aorn.org/about-aorn/aorn-newsroom/periop-today-newsletter/2019/2019-articles/powered-air-purifying-respirator>), and CDC “Clinical Questions about COVID-19: Questions and Answers” (<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-faq.html>).

4. What trainings are available for PAPR?

It is important for users to receive the appropriate training on proper wear and use, including donning and doffing of PAPRs. In addition to local training programs, VHA offers TMS training courses for respirators, including “TMS 9484: OSHA Respiratory Protection for Healthcare Workers” and “TMS 41343: PPE and Respiratory Protection while caring for COVID19 Patients Video Training.” PAPR manufacturers also have training videos specific to their devices that may be found on their websites.

5. What maintenance and cleaning are required for a PAPR?

Refer to the owner’s manual and follow all steps in the use, maintenance, and cleaning guidance provided by the manufacturer of the PAPR device. If the owner’s manual cannot be located, look for the information on the manufacturer’s website, which may also have videos with instructions. There is variability in PAPR components between manufacturers. Using the wrong cleaning/disinfection solutions and procedures may result in ineffective cleaning, which may lead to contact transmission. Additionally, incorrect cleaning procedures may cause damage to the PAPR components, rendering them less effective at protecting the user.

Viruses and bacteria can survive on respirator components for variable periods of time, so contaminated respirators must be handled, cleaned, and disinfected properly to reduce the

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possibility of the device contributing to disease transmission. Occupational Safety and Health Administration (OSHA) and PAPR manufacturer instructions for cleaning and disinfection lack specific details for implementing standardized procedures during health care use. Therefore, health care facilities need to establish procedures that will be effective to render targeted pathogens inviable and not damage PAPR components intended to be re-used. Refer to Centers for Disease Control and Prevention (CDC) guidance for cleaning and disinfecting information for PAPR use in health care (<https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/powerd-air-purifying-respirators-strategy.html>), which includes information on specific cleaners to use and to avoid, when establishing local procedures. Check the CDC guidance periodically for any updates.

PAPR HE filters can be re-used until they are soiled, damaged, or PAPR air flow drops below a level specified in the IFU. When using the PAPR HE filter for a live virus, the facility should use caution and implement a practical replacement cycle until more is known. Consult with local groups assigned responsibility for PAPR maintenance. While manufacturers generally recommend against cleaning or disinfecting PAPR HE filters and filter cartridges, the hard-outer case of the filter cartridge may be cleaned and decontaminated. For changeout schedule, consult your local Occupational Safety and Health Office and/or Industrial Hygiene Specialist.

It is important for facilities to have a PAPR maintenance program that facilitates centralized procedures for repair and replacement of damaged components. Routine maintenance is also required for battery charging and replacement.

6. *What failures may occur with a PAPR?*

In the current COVID-19 pandemic, older devices are being used more. Check all components, as the integrity of parts may have degraded during storage. For example, older PAPR face shield mounting clips have been breaking during use. In addition, the battery life of older devices may be shorter than expected, and a device may rapidly go from fully charged to zero charge. The PAPR may also be inadvertently deactivated by bumping the power button/switch during use.

It is possible to run a PAPR with no filter in place, in which case *the user will not be protected from contaminants*. The air supply hose may become disconnected during use if not properly seated or there is force applied to it. Parts may be damaged leading to loss of protection. It is important to carefully inspect the PAPR before every use to make sure all components are in place.

Cleaning chemicals or mishandling during the cleaning process may result in damage to PAPR components, which may cause these components to separate or fail later during use. Follow all manufacturer guidance for cleaning.

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Parts may not be available due to shortages, recall, or obsolescence, which may lead to facilities mixing PAPR parts from different manufacturers. To be considered NIOSH-approved, the PAPR assembly cannot be modified from its approved configuration, and only those replacement parts specified and provided by the manufacturer must be used. Mixing of PAPR parts could also occur inadvertently if multiple PAPR models are used in a facility. Combining parts from different PAPRs may result in hazards if the parts do not fit together well, which may cause loss of protection to the user and/or damage to the PAPR. The facility may also be less likely to identify a recalled part that is being used with the PAPR if they do not realize they have parts from multiple manufacturers in use.

7. *What other concerns should facilities be aware of when using PAPRs?*

Use of a PAPR may introduce unanticipated hazards. For example:

- A PAPR may interfere with the wearer's visual field because of the limited downward vertical field of view.
- The wearer's ability to hear sounds—including alarms—may be reduced because of the blower noise and noise caused by the movement of a loose head covering.
- The wearer's ability to use a stethoscope and other instruments/devices may be limited.
- A PAPR may restrict the user's mobility, thus affecting the ability to respond to patient needs.
- PAPR batteries must be recharged or replaced, which may impede or interrupt patient care.
- Battery charging stations may not be readily available.
- PAPRs require a significant amount of storage space in between shifts.
- The facility must train staff to maintain and properly disinfect and clean the PAPRs.
- Staff may not have ready access to the correct supplies needed to clean the PAPRs.

Using a PAPR requires the user to make time for donning, doffing, and cleaning. It is important for facilities to consider staffing needs, workflow, and possible interventions to help bedside staff manage tasks given these additional requirements and their current workload.

RECOMMENDED ACTIONS:

1. By Close of Business (COB) one business day from the date of release, the **Patient Safety Manager** should share this Patient Safety Notice with their facility leadership, and the **Patient Safety Officer** should share this Notice with their Veterans Integrated Service Network (VISN) leadership. NCPS encourages facilities to continue to report patient safety concerns related to PAPRs in the Joint Patient Safety Reporting (JPSR) system.
2. By COB three business days from the date of release, the **Director of Operations** or designee should work with facility leadership and facility chiefs of service to develop a PAPR utilization plan that incorporates the strategies outlined in the Patient Safety Notice and establishes a routine reevaluation of PAPR utilization through the duration of the COVID-19 pandemic.
3. By COB five business days from the date of release, the **Facility Director** or designee should ensure ongoing preparedness for use of PPE in your facility by making plans to ensure staff are trained and prepared to use the equipment they will be using:
 - a. Fit test VHA staff for N-95 respirators.

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- b. VHA staff who cannot be fit tested should be trained on PAPR use.
4. By COB 1 week from release date, the **Patient Safety Manager** will document receipt of this notice in the VHA Alerts and Recalls Web site
(<http://vaww.recalls.ncps.med.va.gov/WebRecalls/Recalls.html>).

REFERENCES:

AORN (2019). "3 Interventions When Using a Powered Air-Purifying Respirator in the OR." Retrieved from <https://www.aorn.org/about-aorn/aorn-newsroom/periop-today-newsletter/2019/2019-articles/powered-air-purifying-respirator> on 5/12/2020.

CDC (2020a). Considerations for Optimizing the Supply of Powered Air-Purifying Respirators (PAPRs). April 19, 2020. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/powered-air-purifying-respirators-strategy.html> on 4/28/2020.

CDC (2020b). Respirator Trusted-Source Information; Section 3: Ancillary Respirator Information. April 9, 2020. Retrieved from https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/respsource3healthcare.html on 5/7/2020.

CDC (2020c). Clinical Questions about COVID-19: Questions and Answers. May 6, 2020 Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html> on 5/11/2020.

United States Department of Labor Occupational Safety and Health Administration (OSHA). Standard 29CFR; 1910.134 ; 1910.134(e). Retrieved from <https://www.osha.gov/laws-regs/standardinterpretations/2004-10-28-0> on 5/7/2020.

VHA Assistant Under Secretary for Clinical Services (10NC) Memorandum, April 30, 2020, "Coronavirus (COVID-19)—Guidance for Urgent/Emergent Operating Room Procedures for COVID-19 Patients."

CONTRIBUTORS:

NCPS would like to acknowledge Occupational Safety and Health, Office of Nursing Services and National Infectious Disease Service (NIDS) for their assistance in reviewing the content and developing this Patient Safety Notice. This Notice was informed by the input, discussion, and analysis of these expert contributors.

CONTACT:

This Notice is intended to confirm awareness of this issue, share recommendations from VHA Central Office (VHACO), and learn from VHA facilities what additional problems and solutions exist for these products. If you have questions about this Notice, would like to inform NCPS of additional issues, or have solutions that might be useful for other VHA facilities, please contact (b)(6)@va.gov or (b)(6)



Veterans Health
Administration

Patient Safety Notice

Issued by VHA National Center for Patient Safety

N20-10

July 16, 2020

ITEM:

Veterans Health Administration (VHA) guidance on the use of face coverings for patients on acute mental health units, specifically with regard to suicide risk, during the COVID-19 pandemic

AFFECTED PRODUCT:

Face coverings for patients on acute mental health units

GENERAL INFORMATION:

A Memorandum was issued from VA Central Office (VACO) indicating that, due to the possibility of asymptomatic COVID-19 positive Veterans and staff, VHA was instituting source control masking measures by May 7, 2020 (see Reference 1). The Memorandum states all inpatients are required to wear a face covering during their time at VA facilities.

Face coverings provide the potential benefit of source control; however, they are also a potential safety risk for patients when the material(s) can be used for self-harm. As such, the National Center for Patient Safety (NCPS) collaborated with the Office of Mental Health and Suicide Prevention (OMHSP), National Infectious Diseases Service, Office of Nursing Services, National Center for Ethics in Health Care, and the U.S. Department of Health & Human Services Substance Abuse and Mental Health Services Administration (SAMHSA) on the following guidance to assist facilities in mitigating harm to all inpatients on acute mental health units while source control masking measures are in place. Also see additional guidance located within References 2-5 regarding social distancing and other COVID-19-related mitigations.

- Provide VHA-issued, tie-on face coverings to inpatients on acute mental health units. Ensure face covering ties are just long enough to secure the face covering over the nose and mouth but no longer than they need to be to secure the face covering. Facilities should determine a way to do this safely.
- Do not issue cloth face coverings on acute mental health units because they can be shredded, tied together, and used as ligatures for hanging. Patients cannot bring in face coverings from home to wear while they are inpatients on acute mental health units.
- Do not use face coverings with elastic (e.g., elastic bands) or that possess any metal (e.g., nose piece made of metal or metal encased in plastic). Elastic parts could be used for strangulation by wrapping them around the neck (i.e., the elasticity facilitates strangulation even after the patient has passed out), and metal parts can be used as cutting devices.

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- Monitor patients wearing face coverings during normal rounding procedures per facility policy (e.g., every 15 minutes). Whenever possible, collect face coverings from patients while not in use (e.g., patient sleeping at night).
- Provide one face covering per patient at a time to reduce the risk of patients tying multiple face coverings together to make a lanyard for hanging.
- Consider developing a process for tracking distribution, retrieval, storage, and disposal of face coverings for inpatients. Face coverings should be stored and disposed of in a locked area not accessible to inpatients.
- If a shortage of face coverings is anticipated, VA facilities may need to apply strategies to optimize the supply, as outlined in the Centers for Disease Control and Prevention (CDC) guidelines (see Reference 6) or as otherwise provided by VACO.
- Healthcare providers can determine, on an individual basis, which patients may have trouble breathing or otherwise are unable to tolerate wearing a face covering. A determination would be based on the patient's medical history and current signs, symptoms, and medical conditions, as well as by consult with their local ethics committee. Refer to the "Framework for Healthcare Systems Providing Non-COVID-19 Clinical Care During the COVID-19 Pandemic" for additional guidance (see Reference 7).
- For patients who refuse to wear a face covering, staff may choose to consult with other facility or national offices (e.g., local ethics, infection control committees, OMHSP) for guidance on risk mitigation strategies. For those patients who are uncomfortable wearing a face covering, The National Center for PTSD (posttraumatic stress disorder) in the OMHSP provides general advice on strategies to reduce this discomfort.
- If patients are unable to or refuse to wear face coverings, staff members may require added protection from possible infection.
- In situations where face coverings are not utilized by patients, consider quarantining patients until the results of coronavirus tests are received. If the test is positive, the patient(s) should be relocated to a medically appropriate isolation room or, if confined to the mental health unit, to a single room (i.e., without a roommate) where contact with others can be minimized. Note that both options may require additional intensive psychiatric services to promote patient recovery and maximize safety.
- On the rare occasion when an inpatient mental health unit (or a subsection of the unit) is designated a COVID positive area (i.e., all patients have tested positive), the guiding principles for face coverings noted above shall remain in effect (to minimize the risk of virus transmission to staff and recovering patients) with the exception that rooms may have more than one patient.

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RECOMMENDED ACTIONS:

1. By Close of Business (COB) two business days from the date of release, the **Patient Safety Manager** should share this Patient Safety Notice with facility leadership and Mental Health staff.
2. By COB five business days from the date of release, the **Patient Safety Manager** should work with leadership to confirm that the Joint Patient Safety Reporting System (JPSR) will be used to report any adverse events and close calls related to use of face coverings by patients on acute mental health units during the COVID-19 pandemic. Patient Safety Managers should select “Yes” in the “Notify NCPS that a nationwide alert may be necessary” field for these specific reports.
3. By COB seven business days from the date of release, the **Patient Safety Manager** will document receipt of this notice in the VHA Alerts and Recalls website (<http://vaww.recalls.ncps.med.va.gov/WebRecalls/Recalls.html>).

REFERENCES:

1. Department of Veterans Affairs Memorandum. Update: Coronavirus (COVID-19) Mask Use in Veterans Health Administration (VHA) Facilities. May 1, 2020. Available at: <https://dvagov.sharepoint.com/sites/VACOVHAPublicHealth/HCI/Administration/DUSHOM%20Guidance/Update%20Coronavirus%20COVID-19%20Mask%20Use%20in%20VHA%20Facilities%20Signed.pdf>. Accessed July 5, 2020.
2. Department of Veterans Affairs Memorandum. Continuity in Mental Health Services and Suicide Prevention Activities During Coronavirus (COVID-19): Suicide Prevention Population Risk Identification and Tracking for Exigencies (SPPRITE), Somatic Treatments, Inpatient Mental Health Care. April 13, 2020. Available at: <https://dvagov.sharepoint.com/sites/VACOVHAPublicHealth/HCI/Administration/DUSHOM%20Guidance/04132020%20-%20Mental%20Health%20and%20Suicide%20Prevention%20During%20COVID-19%20-%20SPPRITE%20Somatic%20Treatments%20Inpatient%20MH%20Care%20signed.pdf>. Accessed July 5, 2020.

NOTE: The above Memorandum has 3 Attachments. To access the Attachments, the following steps need to be completed:

- a. click on the link above
- b. left mouse click on the “v” next to “Options” (located to the right and towards the top of the page)
- c. choose “Trust this host one time only”
- d. right mouse click on Attachment A and choose “Save Attachment”; save to a desired location
- e. right mouse click on Attachment B and choose “Save Attachment”; save to a desired location

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- f. right mouse click on Attachment C and choose "Save Attachment"; save to a desired location
 - g. open each Attachment from its saved location
3. U.S. Department of Veterans Affairs, VHA High Consequence Infection (HCI) Preparedness Program. Novel Coronavirus Infection. [No date provided]. Available at: <https://dvagov.sharepoint.com/sites/VACOVHAPublicHealth/HCI/SitePages/Home.aspx>. Accessed July 5, 2020.
4. Veterans Health Administration. Patient Safety Notice N20-06 REVISED: VHA Personal Protective Equipment (PPE) Strategies in Response to COVID-19. April 3, 2020. Available at: <http://vaww.ncps.med.va.gov/Guidelines/alerts/Docs/N20-06%20REVISED%20-%20PPE%20strategies%20in%20response%20to%20COVID-19%2004032020.pdf>. Accessed July 5, 2020.
5. Department of Veterans Affairs Memorandum. Update: Coronavirus (COVID-19) Facemask and N95 Respirator Use. April 4, 2020. Available at: <https://dvagov.sharepoint.com/sites/VACOVHAPublicHealth/HCI/Administration/DUSHOM%20Guidance/04042020%20-%20COVID-19%20%20Mask%20and%20Respirators%20Final%20signed.pdf>. Accessed July 5, 2020.
6. Centers for Disease Control and Prevention. Strategies for Optimizing the Supply of Facemasks. June 28, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html>. Accessed July 5, 2020.
7. Centers for Disease Control and Prevention. Framework for Healthcare Systems Providing Non-COVID-19 Clinical Care During the COVID-19 Pandemic. June 30, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/framework-non-COVID-care.html>. Accessed July 5, 2020.

CONTACT:

This Notice is intended to confirm awareness of this issue, share recommendations from VHA Central Office, and learn from VHA facilities what additional problems and solutions exist for this product. If you have questions about this Notice, would like to inform NCPS of additional issues, or have solutions that might be useful for other VHA facilities, please contact the VHA National Center for Patient Safety at (b)(6)@va.gov.

PPE and Isolation for PUI for COVID-19

Note: COVID-19 is an emerging infection, and this guidance may change as knowledge of the virus grows.

Please follow CDC for updated and complete guidance:

<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html>

PPE and Precautions

All personnel entering or in contact w patient must use PPE (including period after patient vacates room) and follow CDC guidance for donning and doffing

<https://www.cdc.gov/hai/pdfs/ppe/ppe-sequence.pdf>

• Hand Hygiene

Before and after all contact and before and after PPE

• Gown

Clean isolation gown on entry.
Change if soiled. Remove before leaving patient room/care area.
Discard disposable gowns after use.
Launder cloth gowns after use.

• Respiratory protection

Prior to entering room or care area.
Respirator must be AT LEAST AS protective as a fit-tested NIOSH-certified disposable N95 filtering facepiece respirator.
Disposable respirators – remove/discard AFTER exiting room and closing door. Hand hygiene after removing.
Reusable respirators – clean and disinfect per manufacturer prior to re-use.
Staff should be medically cleared and fit-tested if using respirators with tight-fitting facepieces (e.g., a NIOSH certified disposable N95) and trained in the proper use of respirators, safe removal and disposal, and medical contraindications to respirator use.

• Eye protection

Upon entry to patient room or care area.
Goggles or face shield covering front and side of face.

• Gloves

Change if torn or contaminated.

For updated guidance including minimizing exposure risk during procedures, visit:

<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html>

Patient with Respiratory Symptoms or Fever

Implement respiratory hygiene and cough etiquette. Facemask over patient's nose and mouth.

Does patient have signs, symptoms, and/or history concerning for COVID-19?

No

Evaluation and precautions based on clinical picture

Yes

PUI:
Implement respiratory hygiene and cough etiquette and place facemask over the patient's nose and mouth if not already done.
PPE and Evaluation.

Is Hospitalization Clinically Indicated?

Yes

No

Is an Airborne Infection Isolation Room (AIIR) available?

No

Transfer to a facility with AIIR as soon as feasible

AND

Isolate in an AIIR*

AND

*In AIIR, patient can remove facemask. Outside of AIIR, facemask at all times

Clinical evaluation, care and contact with local public health authority per CDC:

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/identify-assess-flowchart.html>

AND

Isolate patient.
Exam room w door closed. Ideally, not a room where exhaust is recirculated within building without HEPA filtration
Use AIIR if available in the immediate vicinity.

HCI Preparedness Sharepoint:
<https://dvagov.sharepoint.com/sites/VACOVHAPublicHealth/HCI/Siter-agesHome.aspx>

VA-VHA-20-0880-B-000097

N95 Respirator



MaxAir Powered Air Purifying Respirator (PAPR)



PAPRs are being Purchased

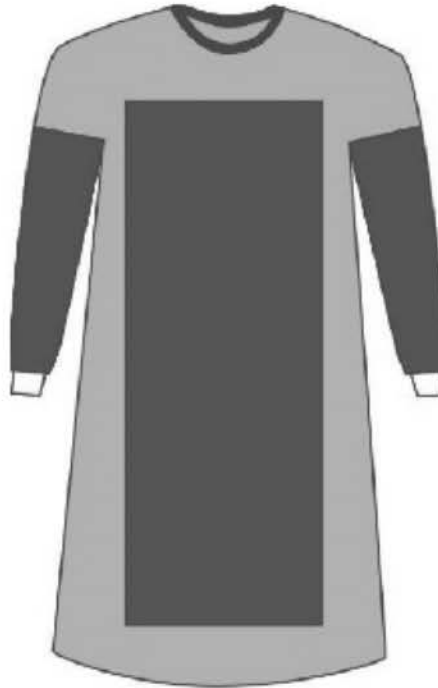
Isolation Gown



Level 2 Surgical Gown



Level 4 Surgical Gown



Difference is that these are reinforced in the darker sections.

Gown Descriptions

Type of PPE	Feature Tested	Standard Designation	Sub headings	Description	Applicability
Gowns	Liquid Barrier Performance	AAMI PB70:2012		Classifies a gown's ability to act as a barrier to penetration by liquids or liquid-borne pathogens based on four levels. The critical protective zones for surgical and non-surgical gowns are defined differently by the standard. While the critical zones designate different protective areas for the different gowns, the levels of protection are the same for both surgical and non-surgical gowns.	Liquid barrier performance is not related to the strength of the material. This standard references several other standards
			Level 1	- Used for MINIMAL risk situations - Provides a slight barrier to small amounts of fluid penetration - Single test of water impacting the surface of the gown material is conducted to assess barrier protection performance.	basic care, standard hospital medical unit
			Level 2	- Used in LOW risk situations - Provides a barrier to larger amounts of fluid penetration through splatter and some fluid exposure through soaking - Two tests are conducted to assess barrier protection performance: - Water impacting the surface of the gown material - Pressurizing the material	Blood draw from a vein, Suturing, Intensive care unit, Pathology lab
			Level 3	- Used in MODERATE risk situations - Provides a barrier to larger amounts of fluid penetration through splatter and more fluid exposure through soaking than Level 2 - Two tests are conducted to test barrier protection performance: - Water impacting the surface of the gown material - Pressurizing the material	Arterial blood draw, Inserting an IV, Emergency Room, Trauma
			Level 4	- Used in HIGH risk situations - Prevents all fluid penetration for up to 1 hour - May prevent VIRUS penetration for up to 1 hour - In addition to the other tests conducted under levels 1-3, barrier level performance is tested with a simulated blood containing a virus. If no virus is found at the end of the test, the gown passes.	Pathogen resistance, Infectious diseases (non-airborne), Large amounts of fluid exposure over long periods

PPE at a Glance: Patients with Respiratory Symptoms and/or Fever.

Patient		Staff				
Clinical Picture:	Face mask	Face mask	Respirator*	Gowns, Gloves, Eye protection	Hand Hygiene	Standard Precautions
Fever and/or respiratory symptoms, (-) PUI criteria						
Fever and/or respiratory symptoms + PUI criteria , no AIIR, amb/ED						
Fever and/or respiratory symptoms + PUI criteria , +AIIR, amb/ED						
Fever and/or respiratory symptoms + PUI criteria , +AIIR, hospitalized						

***Respirator must be AT LEAST AS protective as a fit-tested NIOSH-certified disposable N95 filtering facepiece respirator.**

AIIR = Airborne Infection Isolation Room

PUI = Person Under Investigation <https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html>

Follow updated PPE guidance at <https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html>

Note: This guidance was created February 13, 2020. Guidance may change as knowledge of the virus grows.

**Department of
Veterans Affairs****Memorandum**

Date: May 1, 2020

From: Assistant Under Secretary for Health for Operations (10N)

Subj: Update: Coronavirus (COVID-19) Mask Use in Veterans Health Administration (VHA) Facilities.

To: Network Directors (10N1-23)

1. The Department of Veterans Affairs (VA) response to provide a safe environment for employees and Veterans during the COVID-19 pandemic has included personal protective equipment (PPE), hand hygiene, physical distancing, screening for symptoms of disease, testing, exposure and contact tracing, and appropriate disinfection. Recently, VHA conducted a point prevalence study for COVID-19 on Veterans and staff living and working in Community Living Centers and Spinal Cord Injury Units. The study identified several facilities with asymptomatic, COVID-19 positive Veterans and staff. As a result of these findings, VHA will institute source control masking measures by May 7, 2020.

2. Source control for a health care facility involves the use of a face covering on all individuals entering a facility, whether employees, patients, or visitors. Face coverings are normally cloth and are not considered PPE. The face covering must cover the mouth and nose, fit snugly, allow for breathing without restriction, and be laundered daily. Individuals should be informed to be careful when removing their face covering and not to touch their eyes, nose, and mouth when removing their face covering. Individuals should wash their hands immediately after removing their face covering. In addition, source control face coverings are to be provided to inpatients who move outside of their room. Information on face coverings from the CDC can be found here: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html>

3. All individuals entering a VHA facility have the option to bring their own face covering or be provided one by VHA for the duration of their time on campus. VHA staff that require additional respiratory protection to provide direct patient care (enter a room, interact within 6 feet) and/or evaluate any suspected or confirmed COVID-19 infected patients will receive appropriate PPE including surgical masks and/or N95 respirators or PAPRS. All other staff, trainees, volunteers, Veterans, inpatient residents, and visitors are required to wear a face covering during their time at the VHA facility. The appropriate respiratory protection PPE will be provided to staff conducting home visits to Veterans.

4. Questions regarding this memorandum, please contact (b)(6) Deputy Chief Officer in Patient Care Services for Public Health, by sending an email to

Page 2.

Subj: Update: Coronavirus (COVID-19) Mask Use in Veterans Health Administration (VHA) Facilities

(b)(6)

@va.gov. This guidance will be continually reviewed and updated.

(b)(6)

for
Renee Oshinski



US Department of Veterans Affairs COVID-19 Response

What Equipment is Required, and Where?

Guidance as of
05/07/2020

The Department of Veterans Affairs takes the safety and health of our nation's Veterans, their families, and our outstanding employees very seriously. In this facility, all personnel are advised to maintain effective hand hygiene, physical distancing of at least 6 feet when possible, and to keep their hands away from their face. A minimum of a cloth face covering is required for source control and in some areas, a more advanced mask may be required.

Public and Administrative Areas:

Face Coverings



Patients and
Family

Face Coverings



Staff and
Volunteers

Everyone in VA facilities should wear, at minimum, a face covering. This includes visitors and non-clinical staff. Face coverings can be scarves, cloth masks, or other non-medical masks. These should be in compliance with local regulations.

Non-COVID-19 Units:

Face Coverings



Surgical Masks



Or

Face Coverings



Surgical Masks



Or

All personnel performing direct patient care within 6 feet of an individual who does not have a positive COVID-19 test and is not under observation as a PUI for COVID-19 should wear either a face covering or a surgical mask depending on the procedure.

COVID-19 Units:

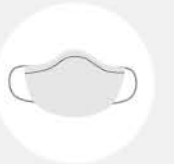
Surgical Masks



Surgical Masks



N-95 Masks



Or

All personnel in a COVID-19 unit should wear, at minimum, an N95 mask. Additional PPE such as a face-shield, gown, eye protection and gloves should be worn for aerosol generating procedures (AGP).

Disclaimer: The above chart serves only as a minimum standard and does not replace effective infection prevention control protocols. N95, KN-95, or other equivalent respirators that are given to patients or guests without proper fit testing serves only as source control and should not be mistaken for effective respiratory protection for those in direct contact with infectious persons or in proximity of aerosol generating procedures. Follow "Standard and Transmission-Based Precautions" per CDC guidance, dated April 13th, 2020: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>

Department of
Veterans Affairs

Memorandum

Date: **APR 17 2020**

From: Assistant Under Secretary for Health for Operations (10N)

Subj: Reporting Personal Protective Equipment (PPE) Levels and Daily Consumption

To: Veterans Integrated Service Network (VISN) Directors (10N1-23)

1. The purpose of this memorandum is to provide updated guidance for reporting critical Personal Protective Equipment (PPE) levels and daily consumption in the COVID-19 Response Monitoring Tool. This guidance describes measures to reduce the variation in methods used to report and calculate PPE levels on hand within the Veterans Health Administration (VHA). By reducing variation in reporting, VHA Senior Leaders will have full visibility of our supply chain and be able to easily identify areas of need, thereby preventing PPE shortages and keeping every employee safe.
2. **VISNs and VA Medical Centers (VAMCs) will use the COVID-19 Response Monitoring Tool to report PPE on a daily basis (7 days a week), effective Monday, April 20, 2020.** The tool reflects a new standardized list of PPE, including sizes where applicable.
3. Sites will be responsible for entering two data points:
 - a. Quantity on hand
 - b. Usage.
4. VISNs are responsible for determining who will enter data at the VAMC. Additional details and instructions can be found in the attached Standard Operating Procedure.
5. For questions regarding this guidance, please contact (b)(6) VHA Procurement and Logistics Office, at (b)(6) @va.gov or (b)(6)

(b)(6)

 Renee Oshinski

Attachment

Attachment

PERSONAL PROTECTIVE EQUIPMENT (PPE) LEVELS AND DAILY CONSUMPTION REPORTING STANDARD OPERATING PROCEDURE

1. **PURPOSE:** To reduce workload on the field and improve standardization and accuracy of data, the Veterans Health Administration (VHA) Procurement and Logistics Office has established a standard operating procedure (SOP) for reporting mission critical Personal Protective Equipment (PPE) levels and daily consumption. This guidance describes the standardized methods to calculate and report this data using the COVID-19 Response Monitoring Tool as the single reporting template. Reducing the variation in reporting will allow VHA Senior Leaders to have full visibility of our supply chain and be able to easily identify areas of need, preventing PPE shortages and keeping every employee safe.
2. **SCOPE:** These procedures apply to all VA medical centers (VAMCs) and Veterans Integrated Service Networks (VISNs) when reporting their daily PPE levels (7 days a week) and consumption rates.
3. **DEFINITIONS:**
 - a. **Mission Critical Personal Protective Equipment (PPE):** Equipment that is necessary to protect staff in the performance of their duties.
 - b. **Primary Inventory Point:** Main operational inventory point for expendable items.
 - c. **Contingency Inventory:** Inventory held to meet unexpected or unforeseen demand or requirements.
 - d. **Stock on Hand:** Quantity of on hand stock from both contingency and primary stock locations. This does not include quantities stored in secondary inventory points
 - e. **Daily Usage:** Daily usage of on hand stock from both contingency and primary stock locations. This does not include quantities issued from secondary inventory points
 - f. **Picking Ticket:** Document produced after you scan your secondaries documenting issues from primary to secondary supply locations.
 - g. **Inventory Sales Report:** A report generated in Generic Inventory Package (GIP) that documents sales from the primary inventory point.
 - h. **Serviceable:** Complete and functional, ready to use.
 - i. **Eaches:** Lowest unit of measure. (For Example: One case of gloves = 10 boxes; One box of gloves = 100 pair; 100 pair of gloves = 200 eaches of gloves)

Attachment

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- j. **VA approved automated supply chain management system:** The Veteran Health Information Systems and Technology (VISTA), Generic Inventory Package (GIP), Integrated Funds Distribution Control Point Activity Accounting and Procurement (IFCAP), and/or the Defense Medical Logistics Standard System (DMLSS).

PROCEDURE FOR PPE REPORTING:

- a. Supply chain management collect **daily on hand** mission critical PPE at the station level per the items listed in the COVID-19 Response Monitoring Tool (Reference Resources section for link to tool).

1. Count primary and contingency stock on hand quantities.

Please Note: Quantity on hand data should be pulled from VA approved automated supply chain management system

2. Convert unit of measure into eaches (Example: One case of gloves = 10 boxes; One box = 100 pair; 100 pair = 200 eaches. One case = 2000 eaches). Reference Resources section for a visual example.
3. Capture quantity of on hand mission critical PPE **in eaches**. Reference the Resources section for a checklist that can be used to assist you with the organization/conversion of data.

Please note: Power Air Purifying Respirators (PAPRs) and Controlled Air Purifying Respirators (CAPRs) are to be reported as one complete serviceable unit.

- b. Supply chain management collect **daily usage** of mission critical PPE at the station level per the items listed in the COVID-19 Response Monitoring Tool (Reference Resources section for link to tool).

1. Collect daily usage data using the following suggested methods:
 - i. Inventory Sales Report
 - ii. Manual counts
 - iii. Picking tickets
 - iv. Any other method approved by the VISN Chief Supply Chain Officer (CSCO)

Please Note: Usage is to be reported from primary. Issues from the contingency to the primary are not counted as part of usage.

2. Convert unit of measure into eaches (Example: One case of gloves = 10 boxes; One box = 100 pair; 100 pair = 200 eaches. One case = 2000 eaches). Reference Resources section for visual example.
3. Capture quantity of all daily usage of mission critical PPE **in eaches**. Reference the Resources section for a checklist can be used to assist you with the organization/conversion of data.

Please note: **Do not** report usage of Powered Air-Purifying Respirators (PAPRs) and Controlled Air Purifying Respirators (CAPRs).

- c. Supply chain management enter data into the COVID-19 Response Monitoring Tool.
 1. Open monitoring tool
 2. Click on appropriate facility
 3. Locate PPE report tool
 4. Enter usage and quantity on hand data in eaches
 5. Click on "Edit Personal Protective Equipment" button to submit

4. RESOURCES:

- a. EMCC PPE Memo

- b. Visual example for converting PPE to eaches



Gloves Visual.pptx

- c. Excel checklist to assist with organizing PPE data in eaches



PPE
Checklist_FINAL.xlsx

- d. Reference guide on Run Inventory Sale Report (PPT)



INVENTORY SALES
REPORT.pptx

- e. COVID-19 Response Monitoring Tool Form

5. REVIEW DATE: This SOP will remain in effect until rescinded.

(b)(6)

Deborah E. Kramer
Acting Assistant Under Secretary for Health
for Support Services

17 APR 2020
Date

Attachment

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1. Count primary and contingency stock on hand quantities.

Please Note: Quantity on hand data should be pulled from VA approved automated supply chain management system

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Checklist_FINAL.xlsx

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INVENTORY SALES
REPORT.pptx

e. COVID-19 Response Monitoring Tool Form

5. REVIEW DATE: This SOP will remain in effect until rescinded.

Deborah E. Kramer
Acting Assistant Under Secretary for Health
for Support Services

Date

Department of
Veterans Affairs

Memorandum

Date: April 9, 2020

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: Process for Providing Resources to State and Federal Partners Via FEMA Mission Assignments

To: Veterans Integrated Service Network (VISN) Directors (10N1-23)

1. The Veterans Health Administration (VHA) is committed to providing humanitarian assistance during the COVID-19 pandemic. The purpose of this memorandum is to provide guidance for offering resources to State and Federal partners and explain the process by which VHA accomplishes this activity.

- **Mission Assignment (MA):** MAs are work orders issued by FEMA, with or without reimbursement, which directs another federal agency to utilize its authorities and the resources granted to it under federal law in support of state, local, tribal, and territorial government assistance. (42 U.S. C. § 5170a, 5192; 44 C.F.R. § 206.2(a)(18)).
- **Mission Assignment Task Order (MATO):** MATOs define specific tasks based on the original statement of work.

2. Given the nature of the pandemic and the national declaration of emergency, VHA has the ability to utilize the Stafford Act and that is the Agency's preference.

3. Any request for VHA resources should be made through the process FEMA has established.

- a. Local organizations/agencies should request assistance through the state emergency management agency.
- b. If the state cannot source this request, the request is elevated to federal partners at the FEMA Regional Response Coordination Center (RRCC); there are ten across the Nation.
- c. VHA has an Area Emergency Manager (AEM) serving as a Liaison Officer (LNO) in each of these RRCCs to assist in coordinating these resource requests.

4. State requests are documented on a FEMA Resource Request Form (RRF). The RRF is submitted to the RRCC and reviewed by the VHA RRCC LNOs and all State and Federal partners. The VHA RRCC LNO will notify the Emergency Management Coordination Cell (EMCC), the Network Director(s) involved, and will work to coordinate the requirements of the request. Medical Center and Network leadership should discuss the hospital capability and capacity to provide such resources. A clearly detailed statement of work will be drafted that details this agreement to provide resources (see attachment Template for VHA Beds). The final

Page 2.

Subj: Process for Providing Resources to State and Federal Partners Via FEMA Mission Assignments

draft of the RRF is reviewed by the Office of General Counsel (OGC) to ensure all legal authorities are in line with the request for services, resources and personnel.

5. The approved RRF (see attachment Michigan RRF) is sent by the EMCC to the FEMA National Response Coordination Center (NRCC) for final approval and is reclassified as a Mission Assignment (MA) (see attachment New Jersey MA). Subsequent requests for similar resources in the same state (such as another VAMC in the state, or for more of the same resource at the same hospital, or for a longer duration, or for more money, etc.) are all follow-on RRFs which are known as Mission Assignment Task Orders (MATO) to the original MA. MATOs are updates to the original MA. A request for a different resource, such as staff, ventilators or vehicles, etc., is a new MA.

6. The driver of this Acute Respiratory Distress Syndrome (ARDS) COVID-19 response is Intensive Care Unit (ICU) beds. A non-COVID patient can become a COVID positive patient overnight, and medical/surgical (med/surg) patients can rapidly become an ICU patient. VHA does not have official cost estimates for cost of care for a COVID positive ICU patient. Utilizing the actual costs from fiscal year 19 for VHA ICU beds (see attachment), which shows the national average for ICU beds in FY 19 for **NON-COVID** patients was \$10,900, has allowed VHA to establish a value of **\$10,000/bed/day** as the estimated cost of care for all med/surg or ICU beds as an estimated cost on Resource Request Forms. The estimated value for beds will be used for all facilities throughout the Nation.

7. The EMCC, once all coordination has been completed to include OGC input, will monitor the progress of the MA through the FEMA approval system. If an MA is denied, or modified in such a way as to require a redraft, the process starts all over again and usually results in a delay of at least 24 hours. Due to this process and delay it is critical to ensure the draft is correct the first time.

8. Prior to the approval of the MA and if a request is urgent and requires immediate, life-saving action, Medical Center Directors may use their authorities under Humanitarian Assistance (Title 38). If this circumstance occurs please notify the EMCC as soon as possible and the EMCC will provide the appropriate guidance and actions for each circumstance.

9. If you have any questions regarding this memorandum, please contact the EMCC at

(b)(6) @va.gov.
(b)(6)

Renee Oshinski

Attachments

Attachment: MI RRF

The main parts of the RRF (sample attached from Michigan) are the Description of Requested Assistance (Block II, para 1), the Statement of Work (Block IV, para 7), the start and end dates, and the total estimated cost (Block IV, para 9). The RRF tracking number is on the second page at the top of the Tracking Information block. Make note of the tracking number if you need to talk to anyone at the RRCC about it. Make sure you put in the POC info for people to ask questions.

DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
RESOURCE REQUEST FORM (RRF)

O.M.B. No. 16600002
Expires May 31, 2017

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 20 minutes per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and submitting this form. This collection of information is required to obtain or retain benefits. You are not required to respond to this collection of information unless it displays a valid OMB control number. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 500 C Street, SW, Washington, DC 204723100, Paperwork Reduction Project (16600047). **NOTE: Do not send your completed form to this address.**

I. REQUESTING ASSISTANCE (To be completed by Requestor)

1. Requestor's Name (b)(6)	2. Title (b)(6)	3. Phone No. (b)(6)
4. Requestor's Organization: State	State: MI	5. Fax No.
		6. Email Address: (b)(6) (b)(6)@michigan.gov

II. REQUESTING ASSISTANCE (To be completed by Requestor)

1. Description of Requested Assistance:
 The State of Michigan requests that the Department of Veterans Affairs (VA), Veterans Health Administration (VHA) provide short term acute care and/or intensive care beds at the Detroit and/or Ann Arbor VAMCs as needed and as available.
 Requested Resources: Other Other Resources:

2. Quantity 0	3. Priority ☐ Lifesaving ☐ Normal ☐ Life Sustaining ☐ High	4. Date and Time Needed 04/04/2020 12:00:00
5. Delivery Site Location Name: Various Site: Other Address: Various City: Various County: State: MI Zip: 00000 Remarks: Sites of Care for service delivery are: John D. Dingell VA Medical Center, 4646 John R. St, Detroit, MI, 48201 and VA Ann Arbor Healthcare System, 2215 Fuller Rd., Ann Arbor, MI, 48105. Transfer protocols and Points of Contact prearranged with State of Michigan and Region 2 South Healthcare Coalition.		6. Site Point of Contact (POC) (b)(6)
		7. 24Hour Phone No. (b)(6)
		8. Fax: Email: (b)(6)@michigan.gov
9. State Approving Official Signature		10. Date and Time:

III. SOURCING THE REQUEST REVIEW/COORDINATION

1. ☐ OPS/RCBD Review by: Electronically signed by (b)(6)@fema.dhs.gov as IM OPS Operations Section Chief (OSC) on 04/07/2020 13:23:00 ☐ LOG/OSGS Review by: ☐ Other Review by: ☐ Other Review by: ☐ Other Review by: 	2. Source: ☐ Contract ☐ Deployment Tracking System (DTS) ☐ Donations ☐ Logistics Supply Chain Management System (LSCMS) ☐ Interagency Agreement (IAA) ☐ Mission Assignment (MA) ☐ Purchase Card ☐ HHS SNS ☐ Other ☐ Not Identified	3. Assigned to: Agency: VA ESF/RSF: ESF 8: Public Health and Medical Services Date/Time: 04/04/2020 12:00:00
4. Immediate Action Required ☐ Yes ☐ No		

IV. STATEMENT OF WORK

1. OFA Action Officer (b)(6)	2. 24Hour Phone No. (b)(6)	3. Fax: Email: (b)(6)@va.gov
4. FEMA Project Manager	5. 24Hour Phone No.	6.
		VA-VHA-20-0880-B-000118 Email:

8. Estimated Completion Date: 05/07/2020 00:00:00

9. Current Estimated Cost: \$10500000.0000

V. ACTION TAKEN

☐ Accepted☐ Rejected☐ Requestor Notified

2. Reason/Disposition:

FEMA FORM 01007

PREVIOUSLY FF 90136

TRACKING INFORMATION (FEMA Use Only)

ECAPS / NEMIS Task ID:	Resource Request No. 2655178368	Program Code/Event No.	☐ Originated from State ☐ Originated as verbal
Received by (Name and Organization):	State:	Date/Time Submitted: 04/07/2020 12:55:00	

INSTRUCTIONS

Items on the Resource Request form that are not specifically listed are self-explanatory. Indicate "see attached" in any field for which additional space or more information is required.

I. Who is requesting assistance? Completed by requestor.

II. What needs to be done? Completed by requestor.

Description of Requested Assistance: Detail of resource shortfalls, statement of deliverable, or simply state problem/need.

Priority: The requestor's priority, which may differ from the priority in BOX III.

Site POC: The person at the delivery site coordinating reception and utilization of the requested resources. 24-hour contact information required. If

for Direct Federal Assistance (DFA), State Approving Official: Signature certifies that:

- (1) State and local governments cannot perform, nor contract for the performance of the requested work;
- (2) Work is required as a result of the event, not a preexisting condition; and
- (3) The State is providing the required assurances found in 44 CFR, Section 206.208.

III. Action Review/Coordination (OPS Section Use Only): Completed by the Operations Section Chief or Resource Capability Branch Director.

Accept/Reject: Operations Section Chief or Resource Capability Branch Director accepts or rejects the request; provide reason if rejection. If request accepted, coordinates with others, i.e., Branch Directors or Group Supervisors, begins to determine best means of fulfilling request. All involved in coordination should check appropriate box and initial or print their name.

Assigned to: Operations Section Chief or Resource Capability Branch Director assigns tasks origination, may indicate the OFA Action Officer. Operations Section Chief may also indicate the Action Officer if known, or tasked organization may make this assignment. This may be Emergency Support Function, internal FEMA Organization (i.e., Logistics), or other organization.

Date/Time Assigned: Operations Section Chief or Resource Capability Branch Director provides date and time of when sourcing should begin.

IV. Statement of Work (OPS Section Use Only): Completed by the Operations Section Chief or Resource Capability Branch Director. OFA

Action Officer: Ops Section Chief obtains from OFA if request fulfilled by a MA; 24hr phone/fax required. Information used in eCAPS.

FEMA Project Manager: Provided by Operations Section Chief; a Region PFT; 24hr phone/fax required. Information used in eCAPS. Statement of Work: Description of tasks to be performed. Could be to assess a problem and report back, or could be to proceed with a specific action. If 401 or MA, this goes in "justification" tab in eCAPS.

V. Action Taken (OPS Section Use Only): Completed by Operations Section Chief, Resource Capability Branch Director, MA Unit or Logistics.

Resource Request Results: Ops Section Chief, Resource Support Section Chief, MA Unit, or LOG should note what type of document the action resulted in by "checking" the appropriate box i.e., Mutual Aid, Donations, Requisition, Procurement, IA, MA, Other. If "Other" is selected write in appropriate response or state "see below" and give detail description in "Disposition" field. "Disposition" field should note steps taken to complete the Action, and personnel, subtask agencies, contracts and other resources utilized.

TRACKING INFORMATION. Completed by Action Tracker. Required for all requests.

FEMA FORM 01007

PREVIOUSLY FF 90136

TRACKING INFORMATION (FEMA Use Only)

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State Req. #:

Enabler:

☐ Enabler

I/+ Hours:

MA#:

MA Category:

☐ DFA ☐ FOS ☐ Amendment ☐ Task Order

Movement Coordination:

Username / Position	Comment
(b)(6)@va.gov as IM OFA ESF08 Public Health and Medical Services 04/07/2020 17:25:00	04/07/2020 17:25 Request On Hold: VA OGC legal review of RRF as submitted.
(b)(6)@fema.dhs.gov as IM OPS Operations Section Chief (OSC) 04/07/2020 13:24:00	04/07/2020 13:24 Routed to ESD to coordinate with HHS and VA

DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
MISSION ASSIGNMENT (MA)

O.M.B. No. 1660-0002
Expires May 31, 2017

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I. TRACKING INFORMATION (FEMA Use Only)

State NJ (New Jersey) Incident:2020030901-COVID-19 Pandemic	Resource Request Number 2605-139262
Program Code/Event Number 4488DR-NJ: COVID-19 PANDEMIC	Date/Time Received 04/01/2020 12:55

II. ASSISTANCE REQUIRED☐ See Attached**Assistance Requested**

Amend 1 - Correction to the delivery location

NJ request the Department of Veterans Affairs (VA), Veterans Health Administration (VHA) will provide 5 Intensive Care Unit (ICU) and 15 Acute Care beds at the East Orange VAMC for immediate and short term medical treatment of non-veteran patients.

Delivery Location East Orange VAMC, 385 Tremont Ave. East Orange, NJ 07018	Internal Control Number	Date/Time Required
Initiator/Requestor Name (b)(6)	24 Hour Phone Number (b)(6)	Email Address (b)(6)@njsp.org
Site POC Name (b)(6)	24 Hour Phone Number (b)(6)	Date 04/01/2020

III. INITIAL FEDERAL COORDINATION (Operations Section)

Action to: ☐ ESF # : ☒ Other : ☐ RSF: ☐	Date/Time 04/01/2020 12:53	Priority ☐ 1. Lifesaving ☐ 3. High ☐ 2. Life sustaining ☒ 4. Normal
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IV. DESCRIPTION (Assigned Agency Action Officer)☒ See Attached**Statement of Work**

As directed by and in coordination with FEMA in support of the New Jersey request, the Department of Veterans Affairs (VA), Veterans Health Administration (VHA) will provide 5 Intensive Care Unit (ICU) and 15 short term Care Medical beds at the East Orange VA Medical Center for immediate and short-term Acute medical treatment. The work will include any or all the following VHA capabilities: 24-hour

Your agency must validate the unliquidated MA balance at least annually as stipulated by FEMA to maintain reimbursable authority. Accrual data must also be provided to FEMA no later than the third business day after fiscal quarter end close. Information can be submitted to FEMA-Disaster-MA-ULO@dhs.gov. For MA billing and reimbursement information, please visit <http://www.fema.gov/federal-agencies-providing-disaster-assistance>.

Assigned Agency VA (VETERANS ADMINISTRATION)	Projected Start Date 03/29/2020	Estimated Projected End Date 06/01/2020
☐ New or ☒ Amendment to MA # : 4488DRNJVA0100	Total Cost Estimated \$0.00	Total Required this Obligation Cycle
ESF/OFA/RSF Action Officer (b)(6)	Phone # (b)(6)	Email (b)(6)@va.gov

V. COORDINATION (FEMA Use Only)

Type of MA: ☒ Direct Federal Assistance ☒ State Cost Share (0%, 10%, 25%)	☐ Federal Operations Support ☐ State Share (0%)
State Cost Share Percent 25 %	State Cost Share Amount: \$ 0.00
Fund Citation: (b)(4)	Appropriation code: 70X0702
Mission Assignment Manager (Preparer) (b)(6)	Date 04/01/2020
**FEMA Project Manager/Branch Director (Program Approval) (b)(6)	Date 04/01/2020
**Comptroller/Funds Control (Funds Review) (b)(6)	Date 04/01/2020

MISSION ASSIGNMENT (MA)

VI. APPROVAL			
*State Approving Official (Required for DFA)			Date
**Federal Approving Official (Required for all)			Date
(b)(6)			04/01/2020
VII. OBLIGATION (FEMA Use Only)			
Mission Assignment Number	4488DR-NJ-VA-01	Amount This Action \$	0.00
		Date/Time Obligated	: 04/01/2020
Amendment Number	01	Cumulative Amount \$	12,500,000.00
		Initials: IFMIS	
** Signature required for all MAs.			
INSTRUCTIONS			
Items on the Mission Assignment (MA) form that are not listed are self-explanatory.			
I. TRACKING INFORMATION. Completed by Resource Support Section or Operations staff. Required for all requests.			
<u>State:</u> If multi-State, choose State most likely to receive resource(s), (i.e., when using 7220-SU Program Code) <u>Resource Request No.:</u> Based on chronological log number. Used for tracking. <u>Program Code/Event No.:</u> The pre-declaration, emergency, or major disaster number assigned for funding the event. Examples: 7220-SU, 3130-EM, 1248-DR.			
II. ASSISTANCE REQUESTED. Completed by requestor.			
<u>Assistance Requested:</u> Details from the Resource Request Form will provide information concerning the assistance requested. <u>Internal Control No.:</u> Internal requestor reference, log, or control number, if applicable. <u>Initiator/Requestor:</u> The initiator may be an individual filling out the mission assignment and making a request on behalf of the POC. <u>POC Name:</u> The person coordinating reception and utilization of the requested resources. 24-hour contact information required.			
III. INITIAL FEDERAL COORDINATION. Completed by FEMA Personnel with Delegated Authority.			
<u>Action to:</u> May be Emergency Support Function (ESF), Recovery Support Function (RSF), internal FEMA organization, or other organization, which assigns the Action Officer. Remainder of MA used only if solution is to request Federal agency to perform reimbursable work under (MA). Deliberate validation and verification of information must occur before MA is completed and issued.			
IV. DESCRIPTION. Completed by assigned agency Action Officer.			
<u>Statement of Work:</u> Detailed description of work to be performed that includes: Overview of MA, objectives, tasks, resources, personnel, deliverable, location, period of performance and comprehensive cost estimate for period of performance. Statement of Work may be attached. Additional guidance concerning the writing of a Statement of Work can be found in the Mission Assignment Guide and FAR. <u>Assigned Agency:</u> Agency receiving the MA from FEMA. Activities within the scope of an ESF/RSF result in an MA to primary agency. Cite subordinate organization if applicable. Example; DOT-FAA, COE-SAD. <u>Projected Start/End Date:</u> If end date is not clear, estimate and budget for 30, 60, or 90 days, then reevaluate. TBD is not acceptable; a date must be entered. <u>Total Cost Estimate:</u> Enter dollar value and attach a detailed budget outlining personnel, equipment, contract, sub-tasked agency, travel and other costs. The cost estimate should include the total cost projection for the MA across the entire length of the MA. The 90 day obligation cycle is used to obligate funding in 90 day increments when completion period is expected to exceed 90 days.			
V. COORDINATION. Completed by MAM, except for Project Manager and Comptroller signatures.			
Type of MA: Select only one. <u>Appropriation Code:</u> Static data. Do not change. This is for information only, should not be used to report internal agency finances to Treasury. <u>Reporting:</u> MA agencies are required to provide reporting as determined by the Program Manager.			
VI. APPROVAL. Completed by State Approving Official and Federal Approving Official.			
VII. OBLIGATION. Completed by Financial Specialist			
<u>Mission Assignment No.:</u> Assigned in FEMA financial system chronologically using assigned agency acronym and two digit number. <u>Amendment No.:</u> Note supplement number. For example: COE: SAD-01, Supp. 1, or DOR-08, Supp. 3. <u>Amount this Action:</u> Taken from total cost estimate above. <u>Cumulative Amount:</u> Cumulative amount for this MA, including amendments.			

Additional Statement of Work

medical/administrative/support staff, medical/nonmedical equipment, sustenance, pharmaceuticals and ancillary services to care for critical and non-critical COVID positive non-Veteran patients.

VHA cannot accept Pediatric or OB/GYN patients.

HHS/New Jersey will return the beds/space to the original condition and all necessary disinfection/decontamination will be completed to ensure a rapid and completed return to Veteran occupancy as soon as possible. HHS/New Jersey will be responsible for any damages or repairs

VHA ICU Bed Day Cost

Below is what the cost estimates are comprised of:

Variable Cost: The costs of direct patient care that vary directly and proportionately with fluctuations in workload. Examples include salaries of providers and the cost of medical supplies. Variable direct Cost = Variable Supply Cost + Variable Labor Cost.

Fixed Direct Cost: The costs of direct patient care that do not vary in direct proportion to the volume of patient activity. The word "fixed" does not mean that the costs do not fluctuate, but rather that they do not fluctuate in direct response to workload changes. Examples include depreciation of medical equipment and salaries of administrative positions in clinical areas (and clinician administrative time).

Fixed Indirect Cost: The costs not directly related to patient care, and therefore not specifically identified with an individual patient or group of patients. These costs are allocated to direct departments through the indirect cost allocation process. Examples include utilities, maintenance and administration costs. All indirect costs are classified as fixed.

Network (as of Jan FY20)	VISN Cost per ICU Treating Specialty (TS)		
	Cardiac TS13	Medical TS12	Surgical TS63
1V01 - BEDFORD (NEW ENGLAND) MA	\$9,733	\$9,202	\$12,432
1V02 - NY/NJ VA HEALTH CARE NETWORK	\$7,840	\$7,644	\$10,379
1V04 - PITTSBURGH (VA HEALTHCARE) PA	\$12,253	\$7,833	\$11,172
1V05 - LINTHICUM (CAPITOL) MD	\$5,241	\$7,336	\$8,857
1V06 - DURHAM (MID-ATLANTIC) NC	\$8,810	\$7,367	\$12,942
2V07 - DULUTH (SOUTHEAST) GA	\$6,118	\$6,413	\$8,426
2V08 - BAY PINES (SUNSHINE) FL	\$6,293	\$6,612	\$8,547
2V09 - NASHVILLE (MIDSOUTH) TN	\$8,009	\$6,799	\$12,262
3V10 - VISN 10 SERVING IN, MI, OH	\$6,806	\$6,813	\$9,763
3V12 - HINES (GREAT LAKES) IL	\$7,115	\$7,799	\$10,326
3V15 - KANSAS CITY (HEARTLAND) MO		\$7,148	\$11,065
3V23 - MINNEAPOLIS (MIDWEST) MN	\$7,214	\$9,857	\$9,092
4V16 - JACKSON (SOUTH CENTRAL) MS	\$11,131	\$9,109	\$9,411
4V17 - ARLINGTON (HEART OF TX) TX	\$11,375	\$8,059	\$11,820
4V19 - GLENDALE (ROCKY MTN) CO		\$8,796	\$9,675
5V20 - PORTLAND (NORTHWEST) OR	\$9,729	\$9,542	\$12,585
5V21 - MARE ISLND (SIERRA PACIFIC) CA		\$9,901	\$15,889
5V22 - LONG BEACH (DESERT PACIFIC) CA	\$9,002	\$9,997	\$11,609
National Average =	\$8,445	\$8,124	\$10,903

Costs accessed March 6, 2020 from <https://mcareports.va.gov/trt/CostPerTrt.aspx>

**Department of
Veterans Affairs**

Memorandum

Date: April 4, 2020

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: On-Hand Inventory Reporting Requirements for Critical Care and Coronavirus Drugs

To: Veterans Integrated Service Network (VISN) Directors (10N1 – 23)

1. On the April 2, 2020 National COVID-19 teleconference, Dr. Stone announced that ventilator-associated medications in short supply in the United States will be treated as enterprise resources in VA and that VISNs are encouraged to move these drugs across the system as needed, similar to the process used for personal protective equipment (PPE), ventilators and staff.
2. The Pharmacy Benefits Management (PBM) Services has been directed to engage each VISN Pharmacist Executive (VPE) to establish national visibility of critical care drugs so your Chief Medical Officers (CMO) can review inventories of critical care drugs for cross-leveling within your Network, with VISNs in your consortium or other VISNs.
3. PBM has identified the critical care and COVID-19 treatment drugs that will be tracked (Attachment 1). PBM can add or delete drugs based on input from VPEs and CMOs.
4. Effective immediately, PBM and VPEs will begin to use the following reporting tool developed by VISN 15 to report “on-hand” inventory levels. The tool is located at the following link:
https://vaww.fre.cdw.va.gov/sites/D03_VISN15/layouts/15/ReportServer/RSViewerPage.aspx?rv:RelativeReportUrl=/sites/D03_VISN15/Reports/V15%20PBM%20Critical%20Inventory%20Tracker.rdl.
5. For questions related to the reporting requirements of this memorandum, please contact please contact (b)(6) by email:
 (b)(6)@va.gov and contact the VISN 15 Critical Medication Tracker group by email (b)(6)@va.gov for technical questions related to the VISN 15 reporting tool.

(b)(6)

for
Renee Oshinski

Attachment

**Department of
Veterans Affairs**

Memorandum

Date: April 2, 2020

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: COVID-19 Bed Expansion Planning Guidance and Reporting

To: Veterans Integrated Service Network (VISN) Directors
Medical Center Directors (00)

1. The purpose of this memo is to provide guidance on bed expansion (surge) planning and reporting across VISNs and VAMCs for COVID-19.
2. To respond to the current pandemic, VISNs and Department of Veterans Affairs Medical Centers need to actively plan and report out on bed expansion projections, looking out at a minimum the next 3-4 months. These projections will allow VHA Executive Leadership to ensure a coordinated approach to identifying opportunities and risks with ever-evolving predictive modeling scenarios. Furthermore, by providing these projections, Veterans Health Administration (VHA) can better assist VISNs in procuring necessary equipment and staff to prepare for rapid rises locally in COVID-19 cases.
3. VISNs should designate at least one VISN Bed Expansion POC who will be responsible for reporting out a daily status of bed expansion and any additional needs for staffing, supplies, or PPE. Email ^{(b)(6)} [REDACTED]@va.gov by Friday, April 3, 2020 at 9 AM EDT with the designated VISN Bed Expansion POC with Name, Email, and Preferred Contact Number. The VHA Bed Expansion team is hosting kick-off calls with all VISN POCs on Thursday, April 2nd and Friday, April 3rd both at 3 PM EDT on Skype (dial in 844-358-7954, access code ^{(b)(6)} [REDACTED]) to review data submission and answer questions.
4. The VISN POC (or designee) must submit the initial Bed Expansion Plan for each VAMC, with proposed activation dates, alongside any additional Supply, PPE, and staffing requests into the Integrated Operations Platform (IOP) by Friday, April 3, 2020 at 10 PM. Moving forward, the VISN POC must submit any updated Bed Expansion Plans daily by 10 PM EDT. Bed Expansion Plans should include a breakdown of beds by Medical/Surgical, ICU and Negative Pressure, if established.
5. The IOP contains the Bed Expansion Toolkit which includes guidance specific to Supplies, Staffing, and Space during Contingency and Crisis planning. Please refer to the guidance, which will be updated in real time to reflect deviations from standard operating procedure and should be accounted for in projections for equipment, PPE, and staff.

Page 2.

COVID-19 Bed Expansion Planning Guidance and Reporting

6. Questions regarding this memorandum should be directed to the OHT IPT Bed Expansion team email at (b)(6)@va.gov.

7. Please see the comprehensive VHA COVID-19 Bed Expansion Planning IOP.

(b)(6)

for
Renee Oshinski

**Department of
Veterans Affairs**

Memorandum

Date: March 29, 2020

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: Leveraging Capacity to Support Surges in Demand for COVID-19

To: Veterans Integrated Service Network (VISN) Directors (10N1-23)

1. The purpose of this memorandum is to develop an enterprise-wide plan that leverages capacity and optimizes the Veterans Health Administration (VHA) workforce for COVID-19 related surges in care. Specifically, VHA must prepare for surges in staff and supplies in Intensive Care Units (ICU), Emergency Departments (ED) and inpatient wards.
2. In anticipation of the projected COVID-19 surge patterns as referenced in Appendix A, facilities must take immediate action to repurpose certain staff with acute care capabilities to leverage capacity and optimize the workforce to care for our Veterans. Staff will be expected to initially assist within their own VISNs with the potential for enterprise-wide expansion as needed as the COVID-19 pandemic requires. Facilities must plan to augment ICU, ED and inpatient hospital staff through deployment of direct care personnel as well as those who may assist by telehealth modalities, within 5 days of this memo:
 - a. VISNs must register their health care professionals as specified in Appendix B into the Disaster Emergency Management Personnel System (DEMPS) as “In-Person” and “Virtual Only” providers. The DEMPS Virtual Only link can be found at the following site: <https://vhapims.orau.org/>. **Expedited supervisor approval within DEMPS for both “In-Person” and “Virtual Only” is critical and required.**
 - b. The health care professionals as specified in Appendix B must also register their skills within the LEAF database at the following site: https://leaf.va.gov/NATIONAL/EmergencyResponse/Essential_Services/report.php?a=myProfile#5.
 - c. VISNs must establish the capability of health care professionals to deliver video telehealth from their usual workstation using VA Video Connect (VVC). Health care professionals are required to complete either the 3 TMS required trainings for VVC or attend a live or recorded “just-in-time” VVC training (see Appendix C).

Page 2

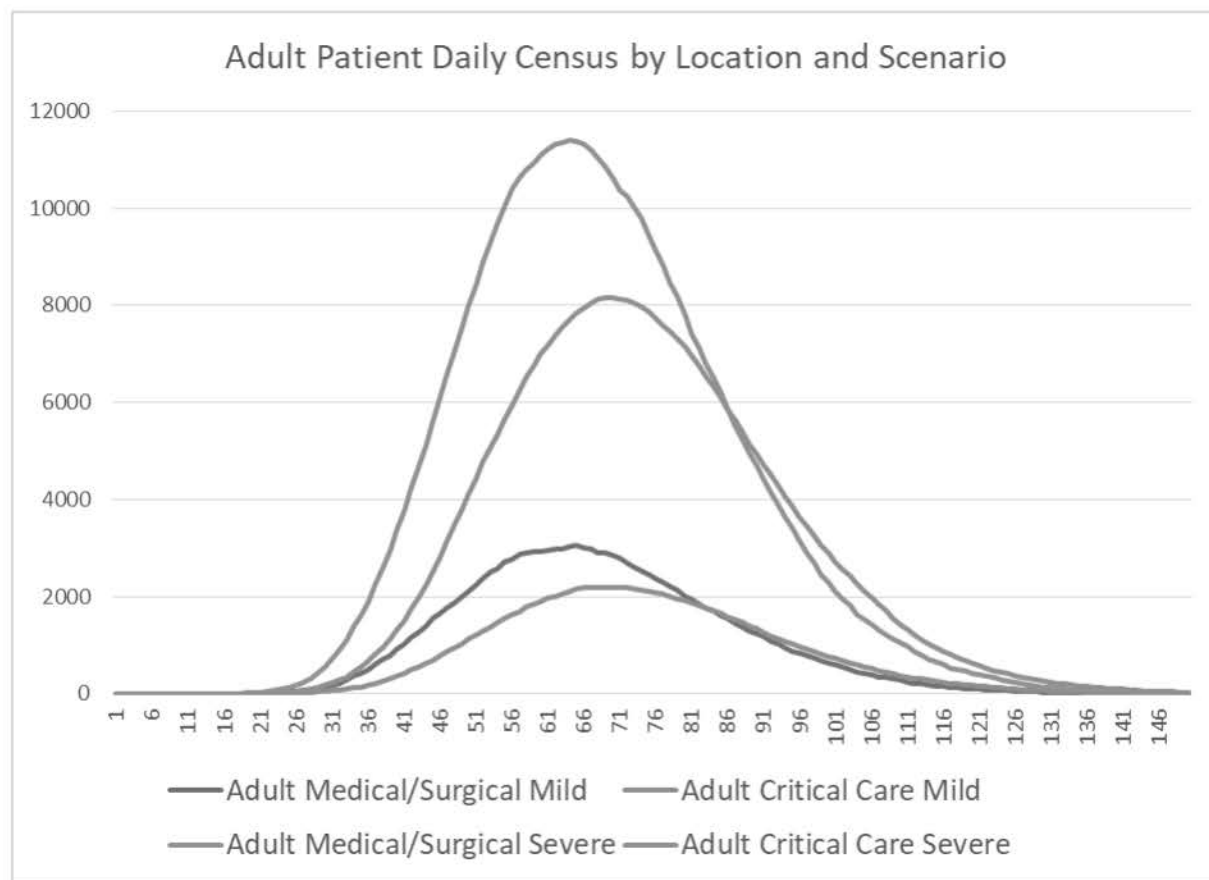
Subj: Leveraging Capacity to Support Surges in Demand for COVID-19

- d. VISNs must establish the capability of health care professionals to deliver video telehealth using VVC from their homes. Traditional training for VVC has been waived and providers will receive expedited “just-in-time” training.
 - e. Additionally, facilities should leverage all available staff and supplies to maximize surge capacity efforts locally. To this end, please reference the attached Surge Capacity Toolkit for further implementation strategies.
3. **The health care professionals in Appendix B have been deemed critical for immediate support of surge capacity efforts.** Facilities may also proactively choose to register additional healthcare professionals in DEMPS and LEAF as outlined above. Facilities may also proactively choose to authorize additional health care professionals for telehealth services that can be effectively delivered from a health care professional's home to a medical center or to a Veteran's home.
4. All relevant and updated supporting materials for the Telehealth COVID-19 response are available on the VHA High Consequence Infection SharePoint site's Virtual Care folder at the following link:
<https://dvagov.sharepoint.com/sites/VACOVHAPublicHealth/HCI/Virtual%20Care/Folders/AllItems.aspx>.
5. Your commitment to this effort is critical during this unprecedented public health pandemic. VHA recognizes the fear and uncertainty associated with allocation of valuable resources. Please be assured that we will continue to work with all facilities to maximize support when and where it is needed the most. VHA sincerely appreciates all your work in providing the highest level of care to our Veterans.
 Should you have any questions regarding this memorandum, please contact (b)(6) (b)(6) Telehealth Service, at (b)(6)@va.gov or the Office of Veterans Access to Care at VHA 10NG
 Action.

(b)(6)

for
 Renee Oshinski

Attachments

Appendix A: Projected COVID-19 Surge Patterns

Appendix B: Healthcare Professionals Required to Register in DEMPS and LEAF

Cardiology (MD/DO/NP/PA/RN/Pharmacist)
Emergency Medicine (MD/DO/NP/PA/RN/Pharmacist)
Gastroenterology (MD/DO/NP/PA/RN/Pharmacist)
Geriatrics (MD/DO/NP/PA/RN/Pharmacist)
Hospice/Palliative Care (MD/DO/NP/PA/RN/Pharmacist)
Infectious Diseases (MD/DO/NP/PA/RN/Pharmacist)
Nephrology (MD/DO/NP/PA/RN/Pharmacist)
Neurology (MD/DO/NP/PA/RN/Pharmacist)
Pulmonary/Critical Care (MD/DO/NP/PA/RN/Pharmacist)
Wound Care (MD/DO/NP/PA/RN/Pharmacist)

Appendix C: Becoming Telehealth Capable

1. Ensure each provider's primary clinical workstation is VA Video Connect/telehealth capable by obtaining and setting up additional necessary equipment as needed. For the purposes of this action, a telehealth capable workstation that includes a webcam or codec for video conferencing as well as a headset or speakers for audio at the healthcare professionals usual place of work. **NOTE:** A second monitor is recommended.
 - a) Equipment (monitors, webcams, speakers) is available through Telehealth Services, and can be requested through the following link: <https://vaww.vashare.vha.va.gov/sites/telehealthtechnology/SitePages/Home.aspx>. For questions about equipment orders, please contact (b)(6)@va.gov.
2. Ensure that a VVC VISTA clinic grid has been established for the healthcare professionals as listed above, but also including any other healthcare providers who have been authorized to perform telehealth.
3. Ensure that one clinic scheduler and one back-up scheduler in the clinics of all Tier 2 healthcare professionals are trained to schedule and manage VVC appointments using Virtual Care Manager. **NOTE:** requirements for Virtual Care Manager can be found on the Virtual Care Manager at the following link: <https://vaww.telehealth.va.gov/pgm/vcm/>

National Office Hours for VVC scheduling are offered:

Wednesdays 04/01/2020-04/22/2020@1500 Eastern time

1-877-668-4490 access code (b)(6) password (b)(6)

[Join meeting](#)

4. Health care professions may complete the following 3 required TMS courses for VVC: Telehealth to Home Using VA Video Connect Provider training (TMS training 4279741), Virtual Care Manager training (TMS training 4486527) and the Telehealth Emergency Plans Memorandum Self-Certification (TMS training 4551375).

NOTE: *It is recommended that providers complete test calls with other telehealth capable providers or the facility telehealth team as part of their local training.*

Alternatively, health care professionals may attend a live or recorded “just in time” VVC training at the following times:

Tuesdays 03/31/2020-04/21/2020@ 1500 Eastern time

1-877-668-4490 access code password

[Join meeting](#)

Thursdays 04/02/2020-04/23/2020@ 1700 Eastern time

1-877-668-4490 access code password

[Join meeting](#)

Appendix D: Becoming Telework Telehealth Capable

1. There are multiple possible equipment configurations to achieve a telework telehealth capable workstation at home. Due to limited supplies of government furnished IT equipment, use of personally owned equipment (POE) is recommended to prepare for potential COVID-19 related telework for those who do not already have government furnished IT equipment.
2. The recommended configuration for healthcare professionals using POE requires:
 - a. High speed internet connection (e.g. 10Mbps download speed or 4G)
 - b. Computer/laptop connected to Citrix Access Gateway (CAG) for remote access to the medical record
 - c. A PIV reader connected to the computer/laptop. **NOTE:** A temporary PIV exemption can be granted if a PIV reader is not available.
 - d. A secondary video capable device, e.g. computer/laptop/tablet/smartphone

NOTE: Apple mobile devices (e.g., iPhone, iPad) will require the VA Video Connect iOS app from the Apple App Store to be installed.

- e. A headset or earbuds that can be used with the secondary video capable device is recommended but not required.
- f. Access to a phone, in case of video failure.



Figure 1. Example of a telehealth capable workstation at home

The goals of the recommended configuration are to allow one monitor for the VVC visit, one monitor for access to the medical record, and a headset for optimal audio. Alternate POE configurations may be used. A description of alternate configuration options are available on the High Consequence Infection SharePoint site's Virtual Care folder at the following link:
<https://dvagov.sharepoint.com/sites/VACOVHAPublicHealth/HCI/Virtual%20Care/Forms/AllItems.aspx>

NOTE: VVC does not work through the CAG window.

3. Establish a new, non-VA email account (e.g. Gmail, Yahoo etc.) to receive VA Video Connect appointment links by email on POE.

NOTE: To protect personal email privacy, Information Security recommends that healthcare professional set up a new, non-VA email account as government communications may be subject to inquiry.

4. To be considered telework telehealth capable, healthcare professionals must test their remote access to the medical record and also test VA Video Connect from home with other telehealth capable providers or the facility telehealth team. Alternatively, for VVC, a self-test may be conducted at the

following link: <https://care.va.gov/vvc-app/#/?name=Patient&join=1&media=1&escalate=1&conference=testwaitingroom@care.va.gov&pin=5678>

NOTE: For the VA Video Connect self-test to be considered successful the healthcare professional should be able to see themselves in the video preview window and hear the audio.

5. To understand the process of using your personal email address in Virtual Care Manager, healthcare professionals should review the workflow available on the VHA High Consequence Infection SharePoint site's Virtual Care folder at the link above.

Department of
Veterans Affairs

Memorandum

Date: **MAR 23 2020**

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: Preparedness for Mechanical Ventilation of COVID-19 patients during Pandemic

To: Veterans Integrated Service Network (VISN) Directors (10N1-23)

Thru: Assistant Deputy Under Secretary for Health for Clinical Operations (10NC)

1. As part of ensuring preparedness for the COVID-19 pandemic, it is important to identify supply gaps for patients requiring mechanical ventilation. These gaps will differ depending on local plans to treat such patients. Accordingly, it is necessary to measure these gaps in order to best meet the projected needs of the field.
2. Each facility must assess and verify whether there are sufficient numbers of ventilators required to cover all Intensive Care Unit (ICU) beds **and** whether additional ventilators might be needed to provide care **outside** the ICU (for example, in the Emergency Department [ED] or post anesthesia care unit [PACU] settings). Please review and complete the following actions in the attached spreadsheet:
 - a. Verify the inventory list of Intensive Care and Transport Ventilators.
 - i. Validate current Ventilator counts
 - ii. Make corrections directly into AEMS/MERS or Maximo maintenance management databases
 - b. In the tab labeled "Data Requested," provide the information requested below.
 - i. Number of Current Total ICU beds
 - ii. Number of Additional Ventilators Needed
 - iii. Filters on exhalation ports of the ventilators are rated as N100/Viral/Bacterial/etc., to exclude viral aerosolization into the room (Y/N)
3. For all ventilators that require preventive maintenance (PM) before June 30, 2020, complete these PMs as soon as possible.
4. Submit responses to (b)(6) [@va.gov](mailto:(b)(6)@va.gov) by close of business Thursday, March 26, 2020.

Page 2.

Subj: Preparedness for Mechanical Ventilation of COVID-19 patients during
Pandemic

5. For Pulmonary/Critical Care questions, please contact (b)(6)
(b)(6)
(b)(6) or (b)(6) @va.gov. For questions related to Biomedical Engineering
or equipment inventory, please contact (b)(6)
(b)(6) or (b)(6) @va.gov.

(b)(6)

(b)(6)

Renee Oshinski

Attachment

**Department of
Veterans Affairs**

Memorandum

Date: March 20, 2020

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: Updated Guidance: Managing Local Requests for Assistance related to Coronavirus (COVID-19)

To: Veterans Integrated Service Network (VISN) Directors (10N1-23)

1. This memorandum provides an update to the guidance provided on February 5, 2020. The declaration of a nationwide emergency pursuant to Sec. 501(b) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121-5207 (the "Stafford Act") on March 13, 2020, increases federal support to the Department of Health and Human Services (HHS) in its role as the lead federal agency for the ongoing COVID-19 pandemic response.
2. Information on the process for requesting Federal assistance through HHS has been sent to congressional staff and the Governors of every state and territory this week (attached). VA cannot receive direct requests for assistance from State and local governments.
3. If a VISN or VA health care facility receives a health care-related request for assistance from a non-VA entity, please respond using this approved message.

HHS is the lead federal agency directing the federal response to COVID-19. A State, Tribe, or Territory may request assistance from the federal government through their local HHS Regional Emergency Coordinator (REC) if the maximum capacity of intrastate or interstate resources are exhausted. To request federal government assistance, contact your State's HHS REC: <https://www.phe.gov/Preparedness/responders/rec/Pages/default.aspx>

VA is standing by ready to support as needed; our COVID-19 emergency preparedness exercises began weeks before the first case was confirmed in the U.S. We have plans in place to protect everyone who gets care, visits or works at one of our facilities. Updates on VA's COVID-19 response activities can be found here: <https://www.publichealth.va.gov/n-coronavirus>

4. For situational awareness, all local requests for assistance received by VISNs or VA health care facilities should be reported to the Emergency Management Coordination Center through (b)(6) @va.gov.

Page 2.

Subj: Updated Guidance: Managing Local Requests for Assistance related to Coronavirus (COVID-19)

5. Questions concerning this memorandum may be directed to the VHA Office of Emergency Management at (b)(6) or email at (b)(6)@va.gov.

(b)(6)

for
Renee Oshinski

Attachment (2)
Managing Local Requests for Assistance related to Coronavirus (nCoV2019)
Sample SECVA Letter to Governors

VISN	Facility Name	# of Current ICU Beds	# of Additional Ventilators Needed	Filters on Exhalation Ports of Current Ventilators are Rated as N100/Viral/Bacterial/etc., to Exclude Viral Aerosolization into the Room (Y/N)
------	---------------	-----------------------	------------------------------------	--

VISN	FacilityName	Number of "VENTILATORS: INTENSIVE CARE"	Number of "VENTILATORS: TRANSPORT"
1	(402) Togus ME	8	0
1	(405) White River Junction VT	9	7
1	(523) Boston HCS (Boston)	23	7
1	(608) Manchester, NH	0	1
1	(650) Providence, RI	4	5
1	(689) Connecticut HCS (Westhaven)	16	10
2	(526) Bronx, NY	39	9
2	(528) Buffalo, NY	20	42
2	(528A6) Bath, NY	0	3
2	(528A7) Syracuse, NY	14	6
2	(528A8) Albany, NY	9	7
2	(561) New Jersey HCS (East Orange)	0	20
2	(630) New York HHS (Brooklyn)	40	44
2	(632) Northport, NY	15	10
4	(460) Wilmington DE	9	3
4	(595) Lebanon, PA	5	5
4	(642) Philadelphia, PA	10	11
4	(646) Pittsburgh HCS (Pittsburgh PA)	34	7
4	(693) Wilkes-Barre, PA	12	1
5	(512) Maryland HCS (Baltimore MD)	21	11
5	(517) Beckley, WV	6	2
5	(540) Clarksburg, WV	7	4
5	(581) Huntington, WV	10	3
5	(613) Martinsburg, WV	7	8
5	(688) Washington DC	25	4
6	(558) Durham, NC	16	15
6	(565) Fayetteville, NC	8	0
6	(590) Hampton, VA	15	4
6	(637) Asheville, NC	12	2
6	(652) Richmond, VA	31	10
6	(658) Salem, VA	15	4
6	(659) Salisbury, NC	12	0
7	(508) Atlanta, GA	20	40
7	(509) Augusta, GA	20	24
7	(521) Birmingham, AL	23	6
7	(534) Charleston, SC	23	18
7	(544) Columbia, SC	17	13
7	(557) Dublin, GA	0	2
7	(619) Central Alabama HCS (Montgomery AL)	6	0
8	(516) Bay Pines, FL	14	6
8	(546) Miami, FL	27	17
8	(548) West Palm Beach, FL	16	32
8	(573) N. Florida/S. Georgia HCS (Gainesville FL)	35	20
8	(672) San Juan, PR	30	13
8	(673) Tampa, FL	25	5
8	(675) Orlando, FL	19	3
9	(596) Lexington, KY	16	3
9	(603) Louisville, KY	9	14
9	(614) Memphis, TN	24	4
9	(621) Mountain Home, TN	29	2
9	(626) Tennessee Valley HCS (Nashville TN)	33	34
10	(506) Ann Arbor, MI	16	2
10	(538) Chillicothe, OH	6	0
10	(539) Cincinnati, OH	13	9
10	(541) Cleveland, OH	22	21

10	(552) Dayton, OH	10	5
10	(553) Detroit, MI	15	22
10	(583) Indianapolis, IN	26	10
10	(610) Northern Indiana HCS (Marion, IN)	6	0
12	(537) Chicago (Westside), IL	33	3
12	(556) North Chicago, IL	12	2
12	(578) Hines, IL	41	28
12	(607) Madison, WI	11	2
12	(695) Milwaukee, WI	18	16
15	(589) Kansas City, MO	12	0
15	(589A4) Columbia, MO	20	1
15	(589A5) Eastern Kansas HCS	8	14
15	(589A7) Wichita, KS	17	0
15	(657) St. Louis, MO	10	1
15	(657A4) Poplar Bluff, MO	3	0
15	(657A5) Marion, IL	8	4
16	(502) Alexandria, LA	1	2
16	(520) Biloxi, MS	18	0
16	(564) Fayetteville, AR	8	0
16	(580) Houston, TX	42	56
16	(586) Jackson, MS	22	0
16	(598) Central Arkansas HCS (Little Rock AR)	40	7
16	(629) New Orleans, LA	30	3
16	(667) Shreveport, LA	8	0
17	(504) Amarillo HCS (Amarillo TX)	5	4
17	(519) West Texas HCS (Big Spring TX)	0	9
17	(549) North Texas HCS (Dallas TX)	47	0
17	(671) South Texas HCS (San Antonio TX)	41	4
17	(674) Central Texas HCS (Temple TX)	38	0
19	(436) Montana HCS (Fort Harrison MT)	4	2
19	(442) Cheyenne WY	5	0
19	(554) Eastern Colorado HCS (Denver CO)	20	4
19	(575) Grand Junction, CO	4	1
19	(623) Muskogee, OK	7	3
19	(635) Oklahoma City, OK	22	1
19	(660) Salt Lake City HCS (Salt Lake City UT)	17	4
20	(531) Boise, ID	6	9
20	(648) Portland, OR	20	13
20	(663) Puget Sound HCS (Seattle WA)	31	3
20	(668) Spokane, WA	4	9
21	(570) Central California HCS (Fresno CA)	12	5
21	(593) Southern Nevada HCS (Las Vegas NV)	11	12
21	(612) Northern California HCS (Martinez CA)	15	1
21	(640) Palo Alto HCS (Palo Alto CA)	18	21
21	(654) Sierra Nevada HCS (Reno NV)	11	1
21	(662) San Francisco, CA	12	23
22	(501) New Mexico HCS (Albuquerque NM)	12	6
22	(600) Long Beach HCS (Long Beach CA)	23	23
22	(605) Loma Linda, CA	24	8
22	(644) Phoenix, AZ	24	15
22	(649) Northern Arizona HCS (Prescott AZ)	3	2
22	(664) San Diego HCS (San Diego CA)	20	28
22	(678) Southern Arizona HCS (Tucson AZ)	23	5
22	(691) Greater Los Angeles HCS (Los Angeles CA)	18	16
23	(437) Fargo, ND	5	1
23	(438) Sioux Falls SD	8	7
23	(568) Black Hills HCS (Fort Meade SD)	6	2

23	(618) Minneapolis, MN	28	6
23	(636) Omaha, NE	32	0
23	(636A6) Central Iowa HCS	9	2
23	(636A8) Iowa City, IA	20	4
23	(656) St. Cloud, MN	9	1

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AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: INTENSIVE CARE	366403	3512135323	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: INTENSIVE CARE	366404	3512135313	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: INTENSIVE CARE	366405	3512135329	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: INTENSIVE CARE	366406	3512135325	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: TRANSPORT	378546	43680	AIRCON CORP	PHLETON MODEL A	840
AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: TRANSPORT	378547	43680	AIRCON CORP	PHLETON MODEL A	840
AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: TRANSPORT	383552	178435	CAREFUSION	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: TRANSPORT	383553	178436	CAREFUSION	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: INTENSIVE CARE	384319	351185594	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: TRANSPORT	384871	7835	CAREFUSION	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: TRANSPORT	384872	78324	CAREFUSION	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	4	1646 Pittsburgh HCS (Pittsburgh PA)	VENTILATORS: TRANSPORT	394846	182405	CAREFUSION	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	32618	3510092824	PURITAN BENNETT/INFA CARE	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	32619	3510092835	PURITAN BENNETT/INFA CARE	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	32620	3510092822	PURITAN BENNETT/INFA CARE	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	32621	3510092967	PURITAN BENNETT/INFA CARE	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	32622	3510092976	PURITAN BENNETT/INFA CARE	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	35024	3121104260	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	35025	3121104920	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	35026	3121104480	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	35027	3121104720	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	35028	3121103280	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	35029	3121103400	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: INTENSIVE CARE	35031	3121103440	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	4	1693 Wilkes-Barre, PA	VENTILATORS: TRANSPORT	4638	120227	SMITH & DAVIS MANUFACTURING	SMITHS MEDICAL	VENTIPAC 2000
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	527516	C8C02444	GE HEALTHCARE USA	GE HEALTHCARE USA	ENGSTROM PRO
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	527518	C8C02445	GE HEALTHCARE USA	GE HEALTHCARE USA	ENGSTROM PRO
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	527520	C8C02432	GE HEALTHCARE USA	GE HEALTHCARE USA	ENGSTROM PRO
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	527522	C8C02450	GE HEALTHCARE USA	GE HEALTHCARE USA	ENGSTROM PRO
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	527523	C8C02434	GE HEALTHCARE USA	GE HEALTHCARE USA	ENGSTROM PRO
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	527526	C8C02441	GE HEALTHCARE USA	GE HEALTHCARE USA	ENGSTROM PRO
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: TRANSPORT	536631	A3609	AIRCON CORPORATION	PHLETON MODEL A	840
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: TRANSPORT	536631	A3601	AIRCON CORPORATION	PHLETON MODEL A	840
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: TRANSPORT	537982	1N4HT720513770	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70 PLUS
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: TRANSPORT	537983	1N4HT720513770	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70 PLUS
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: TRANSPORT	537984	1N4HT720513770	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70 PLUS
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: TRANSPORT	537985	1N4HT720513770	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70 PLUS
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: TRANSPORT	537986	1N4HT720513729	NIWORT MEDICAL INSTRUMENTS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70 PLUS
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: TRANSPORT	537987	1N4HT720513770	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70 PLUS
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: TRANSPORT	537988	1N4HT720513732	SMITHS MEDICAL	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70 PLUS
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: TRANSPORT	549891	1601336	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: TRANSPORT	549892	1601277	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554013	27332	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554014	27337	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554015	27338	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554016	27339	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554017	27340	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554018	27341	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554019	27342	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554020	27343	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554021	27344	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554022	27345	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554023	27346	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554024	27347	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554025	27348	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554026	27349	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1512 Maryland HCS (Baltimore MD)	VENTILATORS: INTENSIVE CARE	554027	27353	MAQUET MEDICAL SYSTEMS USA	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1517 Beckley, WV	VENTILATORS: TRANSPORT	20285	A3609	AIRCON CORPORATION	PHLETON MODEL A	840
AEM/MS/RS	5	1517 Beckley, WV	VENTILATORS: TRANSPORT	20286	A3609	AIRCON CORPORATION	PHLETON MODEL A	840
AEM/MS/RS	5	1517 Beckley, WV	VENTILATORS: INTENSIVE CARE	23021	3581500229	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1517 Beckley, WV	VENTILATORS: INTENSIVE CARE	23022	3581500219	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1517 Beckley, WV	VENTILATORS: INTENSIVE CARE	23023	3581500212	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1517 Beckley, WV	VENTILATORS: INTENSIVE CARE	23024	3581500205	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1517 Beckley, WV	VENTILATORS: INTENSIVE CARE	23025	3581400297	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1517 Beckley, WV	VENTILATORS: INTENSIVE CARE	23026	3581400264	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1540 Clarksville, WV	VENTILATORS: TRANSPORT	11998	NONE	ALMED	OCEANIC MEDICAL PRODUCTS INC	MAGILLAN VENTILATOR
AEM/MS/RS	5	1540 Clarksville, WV	VENTILATORS: TRANSPORT	15498	N9HTS00913531	ZCCOVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	5	1540 Clarksville, WV	VENTILATORS: TRANSPORT	15497	N9HTS00913532	ZCCOVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	5	1540 Clarksville, WV	VENTILATORS: TRANSPORT	15498	N9HTS00913533	ZCCOVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	5	1540 Clarksville, WV	VENTILATORS: INTENSIVE CARE	2708	3581801607	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1540 Clarksville, WV	VENTILATORS: INTENSIVE CARE	2709	3581801602	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1540 Clarksville, WV	VENTILATORS: INTENSIVE CARE	2710	3581801918	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1540 Clarksville, WV	VENTILATORS: INTENSIVE CARE	27101	3581801763	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1540 Clarksville, WV	VENTILATORS: INTENSIVE CARE	27102	3581801563	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1540 Clarksville, WV	VENTILATORS: INTENSIVE CARE	27103	3581801489	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1540 Clarksville, WV	VENTILATORS: INTENSIVE CARE	27104	3581801511	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: TRANSPORT	4255	1401173	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: TRANSPORT	4255	1401174	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: TRANSPORT	4255	1401175	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: INTENSIVE CARE	51889	28613	MAQUET CARDIOVASCULAR	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: INTENSIVE CARE	51890	28614	MAQUET CARDIOVASCULAR	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: INTENSIVE CARE	51891	28615	MAQUET CARDIOVASCULAR	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: INTENSIVE CARE	51892	28616	MAQUET CARDIOVASCULAR	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: INTENSIVE CARE	51893	28617	MAQUET CARDIOVASCULAR	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: INTENSIVE CARE	51894	28618	MAQUET CARDIOVASCULAR	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: INTENSIVE CARE	51895	28619	MAQUET CARDIOVASCULAR	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: INTENSIVE CARE	51896	28620	MAQUET CARDIOVASCULAR	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: INTENSIVE CARE	51897	28661	MAQUET CARDIOVASCULAR	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1581 Huntington, WV	VENTILATORS: INTENSIVE CARE	51898	28662	MAQUET CARDIOVASCULAR	MAQUET CARDIOVASCULAR LLC	SERVO-U
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: TRANSPORT	37738	130408	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: TRANSPORT	37739	130606	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: TRANSPORT	37740	130443	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: TRANSPORT	37741	130487	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: TRANSPORT	37742	130494	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: TRANSPORT	39484	160231	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: TRANSPORT	39486	160230	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: INTENSIVE CARE	61753	3581705614	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: INTENSIVE CARE	61754	3581703284	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: INTENSIVE CARE	61755	3581703280	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: INTENSIVE CARE	61756	3581702644	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: INTENSIVE CARE	61757	3581702638	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: INTENSIVE CARE	61758	3581702620	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1613 Martinsburg, WV	VENTILATORS: INTENSIVE CARE	61759	3581702578	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1281686	870W101142	CAREFUSION 209 INC	CAREFUSION RESPIRATORY	3100R
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1281687	VC7002	GE HEALTHCARE USA	GE HEALTHCARE USA	NEW 201
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1306258	0702	ACUTRONIC MEDICAL SYSTEMS AG	ACUTRONIC MEDICAL SYSTEMS AG	MONDOHM II
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1310103	ASK8-0176	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1310104	ASK8-0180	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1310105	ASK8-0182	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1310106	ASK8-0171	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1310107	ASK8-0167	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1310108	ASK8-0168	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1310109	ASK8-0164	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1310110	ASK8-0172	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1310111	ASK8-0159	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1310112	ASK8-0173	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	5	1680 Washington DC	VENTILATORS: INTENSIVE CARE	1310113	ASK8-0185	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V5

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Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	1285716	Hamilton Medical Inc	13849	HAMILTON MEDICAL INC	HAMILTON-G5
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	1285754	Hamilton Medical Inc	13850	HAMILTON MEDICAL INC	HAMILTON-G5
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	1285757	Hamilton Medical Inc	13847	HAMILTON MEDICAL INC	HAMILTON-G5
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	1285758	Hamilton Medical Inc	13848	HAMILTON MEDICAL INC	HAMILTON-G5
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	1285760	Hamilton Medical Inc	13846	HAMILTON MEDICAL INC	HAMILTON-G5
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	1285761	Hamilton Medical Inc	13845	HAMILTON MEDICAL INC	HAMILTON-G5
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	2024544	Hamilton Medical Inc	17528	HAMILTON MEDICAL INC	HAMILTON-G5
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	2024545	Hamilton Medical Inc	17494	HAMILTON MEDICAL INC	HAMILTON-G5
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	2024546	Hamilton Medical Inc	17478	HAMILTON MEDICAL INC	HAMILTON-G5
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	2024547	Hamilton Medical Inc	17448	HAMILTON MEDICAL INC	HAMILTON-G5
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	2024549	Hamilton Medical Inc	18754	HAMILTON MEDICAL INC	HAMILTON-C1
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	2024551	Hamilton Medical Inc	18706	HAMILTON MEDICAL INC	HAMILTON-C1
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	2024552	Hamilton Medical Inc	19047	HAMILTON MEDICAL INC	HAMILTON-C1
Maximo	8	16751 Orlando, FL	VENTILATORS: INTENSIVE CARE	2024553	Hamilton Medical Inc	3092	HAMILTON MEDICAL INC	HAMILTON-C1
Maximo	8	16751 Orlando, FL	VENTILATORS: TRANSPORT	2024554	Hamilton Medical Inc	3092	HAMILTON MEDICAL INC	HAMILTON-MR1
Maximo	8	16751 Orlando, FL	VENTILATORS: TRANSPORT	2024557	Hamilton Medical Inc	3094	HAMILTON MEDICAL INC	HAMILTON-MR1
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	36156	3510041854		COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	46111	3510053266	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: TRANSPORT	41213	0101020	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: TRANSPORT	46005	2707272	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: TRANSPORT	46005	2707272	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83935	3581700964	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83934	3581700912	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83935	3581700752	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83936	3581700966	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83937	3581700962	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83938	3581700941	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83939	3581700910	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83940	3581700907	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83941	3581700912	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83942	3581700927	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83943	3581700911	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83944	3581700989	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83945	3581700985	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	15961 Lexington, KY	VENTILATORS: INTENSIVE CARE	83946	3581700987	COVIDIEN RMS	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	46236	41393	AIRCON CORP	AIRCON CORP	PNEUMON MODEL A
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	46237	41393	AIRCON CORP	AIRCON CORP	PNEUMON MODEL A
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: INTENSIVE CARE	70057	74111	MAQUET INC	MAQUET CARDIOVASCULAR LLC	SERVO-I
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: INTENSIVE CARE	70058	74105	MAQUET INC	MAQUET CARDIOVASCULAR LLC	SERVO-I
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: INTENSIVE CARE	70059	74108	MAQUET INC	MAQUET CARDIOVASCULAR LLC	SERVO-I
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: INTENSIVE CARE	70060	74109	MAQUET INC	MAQUET CARDIOVASCULAR LLC	SERVO-I
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: INTENSIVE CARE	70061	74110	MAQUET INC	MAQUET CARDIOVASCULAR LLC	SERVO-I
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: INTENSIVE CARE	70062	74112	MAQUET INC	MAQUET CARDIOVASCULAR LLC	SERVO-I
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: INTENSIVE CARE	70063	74104	MAQUET INC	MAQUET CARDIOVASCULAR LLC	SERVO-I
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: INTENSIVE CARE	70064	74105	MAQUET INC	MAQUET CARDIOVASCULAR LLC	SERVO-I
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: INTENSIVE CARE	70065	74107	MAQUET INC	MAQUET CARDIOVASCULAR LLC	SERVO-I
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81324	201612140033	ALIED HEALTHCARE PRODUCTS INC	ALIED HEALTHCARE PRODUCTS INC	EPV200
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81325	201612140016	ALIED HEALTHCARE PRODUCTS INC	ALIED HEALTHCARE PRODUCTS INC	EPV200
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81326	201612140022	ALIED HEALTHCARE PRODUCTS INC	ALIED HEALTHCARE PRODUCTS INC	EPV200
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81327	201612140028	ALIED HEALTHCARE PRODUCTS INC	ALIED HEALTHCARE PRODUCTS INC	EPV200
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81328	201612140099	ALIED HEALTHCARE PRODUCTS INC	ALIED HEALTHCARE PRODUCTS INC	EPV200
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81329	201612140025	ALIED HEALTHCARE PRODUCTS INC	ALIED HEALTHCARE PRODUCTS INC	EPV200
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81330	201612140014	ALIED HEALTHCARE PRODUCTS INC	ALIED HEALTHCARE PRODUCTS INC	EPV200
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81331	201612140023	ALIED HEALTHCARE PRODUCTS INC	ALIED HEALTHCARE PRODUCTS INC	EPV200
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81332	201612140035	ALIED HEALTHCARE PRODUCTS INC	ALIED HEALTHCARE PRODUCTS INC	EPV200
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81333	201612140012	ALIED HEALTHCARE PRODUCTS INC	ALIED HEALTHCARE PRODUCTS INC	EPV200
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81346	1701131	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
ACM/AMERS	9	16031 Louisville, KY	VENTILATORS: TRANSPORT	81457	1609158	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: TRANSPORT	67848	41734	AIRCON CORPORATION	AIRCON CORP	PNEUMON MODEL A
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: TRANSPORT	67849	41737	AIRCON CORPORATION	AIRCON CORP	PNEUMON MODEL A
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: TRANSPORT	67850	41736	AIRCON CORPORATION	AIRCON CORP	PNEUMON MODEL A
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: TRANSPORT	67851	41738	AIRCON CORPORATION	AIRCON CORP	PNEUMON MODEL A
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72632	3581700913	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72631	3581700997	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72632	3581700982	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72633	3581700945	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72634	3581700929	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72635	3581700984	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72636	3581700996	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72637	3581700973	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72638	3581700997	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72639	3581700964	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72640	3581700985	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72641	3581701031	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72642	3581700935	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	72643	3581700964	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	76995	3581800666	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	76996	3581800683	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	76997	3581800576	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	76998	3581800618	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	76999	3581800495	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	77000	3581800564	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	77001	3581800528	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	77002	3581800902	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	77003	3581800589	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16141 Memphis, TN	VENTILATORS: INTENSIVE CARE	77004	3581800605	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16211 Mountain Home, TN	VENTILATORS: TRANSPORT	40497	1101131	SMITHS MEDICAL	SMITHS MEDICAL	VENTIPAC 2000
ACM/AMERS	9	16211 Mountain Home, TN	VENTILATORS: TRANSPORT	40742	1102421	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
ACM/AMERS	9	16211 Mountain Home, TN	VENTILATORS: INTENSIVE CARE	52526	3581702111	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16211 Mountain Home, TN	VENTILATORS: INTENSIVE CARE	52527	3581800482	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16211 Mountain Home, TN	VENTILATORS: INTENSIVE CARE	52528	3581800490	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16211 Mountain Home, TN	VENTILATORS: INTENSIVE CARE	52529	3581800491	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16211 Mountain Home, TN	VENTILATORS: INTENSIVE CARE	52530	3581800492	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16211 Mountain Home, TN	VENTILATORS: INTENSIVE CARE	52531	3581800505	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16211 Mountain Home, TN	VENTILATORS: INTENSIVE CARE	52532	3581800509	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16211 Mountain Home, TN	VENTILATORS: INTENSIVE CARE	52533	3581800598	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16211 Mountain Home, TN	VENTILATORS: INTENSIVE CARE	52534	3581800566	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: TRANSPORT	83672	0610001AA0V	ZOLL	ZOLL MEDICAL CORP	UNIVENT 750
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: TRANSPORT	83673	0610001AA0V	ZOLL	ZOLL MEDICAL CORP	UNIVENT 750
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: TRANSPORT	83674	0610004AA0V	ZOLL	ZOLL MEDICAL CORP	UNIVENT 750
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: TRANSPORT	83675	0610006AA0V	ZOLL	ZOLL MEDICAL CORP	UNIVENT 750
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: TRANSPORT	83676	0610003AA0V	ZOLL	ZOLL MEDICAL CORP	UNIVENT 750
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: TRANSPORT	83677	0610001AA0V	ZOLL	ZOLL MEDICAL CORP	UNIVENT 750
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: TRANSPORT	83678	0610008AA0V	ZOLL	ZOLL MEDICAL CORP	UNIVENT 750
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: TRANSPORT	83679	0610005AA0V	ZOLL	ZOLL MEDICAL CORP	UNIVENT 750
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: INTENSIVE CARE	148918	3581703018	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: INTENSIVE CARE	148919	3581703050	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: INTENSIVE CARE	148920	3581703055	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: INTENSIVE CARE	148921	3581703091	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: INTENSIVE CARE	148922	3581703165	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: INTENSIVE CARE	148923	3581703176	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: INTENSIVE CARE	148924	3581703181	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: INTENSIVE CARE	148925	3581703197	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: INTENSIVE CARE	148926	3581702727	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: INTENSIVE CARE	148935	3581703184	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: INTENSIVE CARE	148936	3581703172	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: TRANSPORT	148986	HT77171274	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: TRANSPORT	148989	HT77171275	MEDTRONIC, INC	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
ACM/AMERS	9	16261 Tennessee Valley HCS (Nashville TN)	VENTILATORS: TRANSPORT					

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VA-VHA-20-0880-B-000154

VA-VHA-20-0880-B-000156

VA-VHA-20-0880-B-000157

VA-VHA-20-0880-B-000158

VA-VHA-20-0880-B-000159

AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: TRANSPORT	300621	030236	SMITHS MEDICAL ASD, INC.	SMITHS MEDICAL	VENTIPAC 2000
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307087	ASD0M0167	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307088	ASD0M0168	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307089	ASD0M0169	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307090	ASD0M0170	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307091	ASD0M0171	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307092	ASD0M0172	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307093	ASD0M0173	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307094	ASD0M0174	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307095	ASD0M0175	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307096	ASD0M0176	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307097	ASD0M0177	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: INTENSIVE CARE	307098	ASD0M0178	DRAGER MEDICAL SYSTEMS INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: TRANSPORT	312270	020215	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: TRANSPORT	312271	020270	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: TRANSPORT	312272	020252	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: TRANSPORT	312274	020287	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: TRANSPORT	312275	020309	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: TRANSPORT	312277	020305	VIASYS	CAREFUSION RESPIRATORY	LTU 1200
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: TRANSPORT	323204	15073033	FUGHT MEDICAL INNOVATIONS	FUGHT MEDICAL INNOVATIONS LTD	FUGHT 60
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: TRANSPORT	323205	15081316	FUGHT MEDICAL INNOVATIONS	FUGHT MEDICAL INNOVATIONS LTD	FUGHT 60
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: TRANSPORT	323206	15073035	FUGHT MEDICAL INNOVATIONS	FUGHT MEDICAL INNOVATIONS LTD	FUGHT 60
AEMV/MERS	21	1662	San Francisco, CA	VENTILATORS: TRANSPORT	323207	15032667	FUGHT MEDICAL INNOVATIONS	FUGHT MEDICAL INNOVATIONS LTD	FUGHT 60
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	46123	0608299	SMITHS MEDICAL PM INC	SMITHS MEDICAL	PMUPAC V81
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	44180	0609124	SMITHS MEDICAL PM INC	SMITHS MEDICAL	PMUPAC V81
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	44181	0609124	SMITHS MEDICAL PM INC	SMITHS MEDICAL	PMUPAC V81
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	46182	0605137	SMITHS MEDICAL PM INC	SMITHS MEDICAL	PARAPAC
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55850	ASD0C090	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55856	ASD0C091	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55857	ASD0C092	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55858	ASD0C093	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55859	ASD0C094	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55860	ASD0C095	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55861	ASD0C096	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55862	ASD0C097	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55863	ASD0C098	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55864	ASD0C099	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55865	ASD0C100	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55872	ASD0C095	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55873	ASD0C098	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55874	ASD0C099	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55875	ASD0C100	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	55876	ASD0C101	DRAGER MEDICAL INC	DRAGER MEDICAL INC	EVITA INFINITY V500
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	74475	ET2455	CAREFUSION	CAREFUSION RESPIRATORY	LTU 1200
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	74480	ET2456	CAREFUSION	CAREFUSION RESPIRATORY	LTU 1200
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107747	88996	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107748	50350	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107749	48605	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107750	50362	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107751	48601	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107752	48609	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107753	50366	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107754	50364	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107755	48604	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107756	50366	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107757	48607	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107758	50366	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107759	48610	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107760	50363	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107761	50367	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107762	50368	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107763	50370	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107764	48972	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107765	50368	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	107766	48408	CAREFUSION INC.	CAREFUSION RESPIRATORY	REVEL
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112907	35121115	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112903	35121103	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112904	351212040	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112905	351212103	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112906	351212105	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112907	351212108	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112908	351212103	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112909	351212039	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112910	351212052	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112911	351212095	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112912	351212084	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112913	351212611	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112914	351212151	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112915	351212104	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112916	351212154	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112917	351212079	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112918	351212092	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112919	351212109	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112920	351212625	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112921	351212107	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112922	351212106	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112923	351212151	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	112924	351212107	COVIDIEN	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	132025	3712072	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC PLUS
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	132026	3712067	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC PLUS
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	5101799	0409102	SMITHS MEDICAL	SMITHS MEDICAL	PARAPAC
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	5101825	0409125	MEDICAL DEVICES CORP	SMITHS MEDICAL	PARAPAC
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	37641	0606264	TR AMH CO	SMITHS MEDICAL	PARAPAC
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	37642	0606276	TR AMH CO	SMITHS MEDICAL	PARAPAC
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: TRANSPORT	37643	0606266	TR AMH CO	SMITHS MEDICAL	PARAPAC
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	300900	351087438	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37905	351212037	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37906	351212080	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37907	351212036	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37908	351212075	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37909	351212154	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37910	351212081	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37911	351212079	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37912	351212098	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37913	351212109	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37914	351212092	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37988	351212056	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37989	351212091	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37990	351212034	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37991	351212069	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37992	351212094	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEMV/MERS	22	1501	New Mexico HCS (Albuquerque NM)	VENTILATORS: INTENSIVE CARE	37994	351212041	PURITAN BENNETT CORP	COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840

AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: TRANSPORT	100352	880037	CAREFUSION	CAREFUSION RESPIRATORY	LYT 1200
AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: TRANSPORT	100354	880034	CAREFUSION	CAREFUSION RESPIRATORY	LYT 1200
AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: INTENSIVE CARE	114077	3581920549	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: INTENSIVE CARE	114078	3581920558	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: INTENSIVE CARE	114079	3581920575	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: INTENSIVE CARE	114080	3581920590	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: INTENSIVE CARE	114081	3581920584	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: INTENSIVE CARE	114082	3581920600	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: INTENSIVE CARE	114083	3581920602	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: INTENSIVE CARE	114084	3581920610	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: INTENSIVE CARE	114085	3581920606	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6640 Phoenix, AZ	VENTILATORS: INTENSIVE CARE	114086	3581920583	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6649 Northern Arizona HCS (Prescott AZ)	VENTILATORS: TRANSPORT	33729	41919	VEN TEL	MODEL A	980
AEM/MS/RS	22	6649 Northern Arizona HCS (Prescott AZ)	VENTILATORS: TRANSPORT	33730	42061	VEN TEL	MODEL A	980
AEM/MS/RS	22	6649 Northern Arizona HCS (Prescott AZ)	VENTILATORS: INTENSIVE CARE	34173	3581920741	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6649 Northern Arizona HCS (Prescott AZ)	VENTILATORS: INTENSIVE CARE	34174	3581920841	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6649 Northern Arizona HCS (Prescott AZ)	VENTILATORS: INTENSIVE CARE	34175	3581920710	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	980
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	32602	40299	Carefusion Respiratory	CAREFUSION RESPIRATORY	LYT 1200
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	31914	0812176	SMITHS MED	SMITHS MEDICAL	PARAFAC
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	53964	0709223/NCAP	SMITHS MED	SMITHS MEDICAL	PARAFAC
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	53965	0707141/NCAP	SMITHS MED	SMITHS MEDICAL	PARAFAC
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	53975	0807223	SMITH MEDICAL, PA, INC	SMITHS MEDICAL	PARAFAC
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	53974	0807225	SMITH MEDICAL, PA, INC	SMITHS MEDICAL	PARAFAC
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	53977	0807228	SMITH MEDICAL, PA, INC	SMITHS MEDICAL	PARAFAC
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	53978	0807231	SMITH MEDICAL, PA, INC	SMITHS MEDICAL	PARAFAC
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	53979	0807235	SMITH MEDICAL, PA, INC	SMITHS MEDICAL	PARAFAC
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	53980	0807237	SMITH MEDICAL, PA, INC	SMITHS MEDICAL	PARAFAC
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	61204	N10MT5001409	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	61205	N10MT5001409	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	61206	N10MT5001409	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	61207	N10MT50014112	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	61208	N10MT50014113	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	61209	N10MT50014115	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	61311	N10MT50014317	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	61312	N10MT50014318	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	61313	N10MT50014319	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76014	351212054	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76015	351212007	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76016	351212032	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76017	351212011	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76018	351212193	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76019	351212016	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76020	351212018	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76021	351212005	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76022	351212043	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76023	351213012	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76024	351212050	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76025	351212013	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76026	351212003	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76027	351212058	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76028	351212034	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76029	351212046	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76030	351212054	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76031	351212068	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76032	312123540	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: INTENSIVE CARE	76033	351212041	PURITAN BENNETT CORP	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	76571	N13MT72041540	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	76572	N13MT72041546	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	76573	N13MT72041548	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	76574	N13MT72041555	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70
AEM/MS/RS	22	6660 San Diego HCS (San Diego CA)	VENTILATORS: TRANSPORT	76575	N13MT72041543	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: TRANSPORT	50555	0709138	SMITHS MEDICAL	SMITHS MEDICAL	PARAFAC
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: TRANSPORT	50556	0709139	SMITHS MEDICAL	SMITHS MEDICAL	PARAFAC
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: TRANSPORT	64078	1106177	SMITHS MEDICAL	SMITHS MEDICAL	VENTIPAC
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: TRANSPORT	64079	1106132	SMITHS MEDICAL	SMITHS MEDICAL	VENTIPAC
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: TRANSPORT	64080	1106133	SMITHS MEDICAL	SMITHS MEDICAL	VENTIPAC
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68406	ASD0006	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68406	ASD0008	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68447	ASD0005	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68448	ASD0006	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68449	ASD0007	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68450	ASD0008	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68511	ASD0009	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68512	ASD0090	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68553	ASD0091	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68554	ASD0092	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68555	ASD0048	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68556	ASD0049	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68557	ASD0050	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68558	ASD0051	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68559	ASD0052	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68602	ASD0053	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68601	ASD0054	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68602	ASD0055	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68603	ASD0056	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68604	ASD0057	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68605	ASD0058	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	68606	ASD0059	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6678 Southern Arizona HCS (Tucson AZ)	VENTILATORS: INTENSIVE CARE	73713	ASD-0109	NORTH AMERICAN DRAGER	DRAGER MEDICAL INC	EVITA INFINITY V500
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: TRANSPORT	101718	0505718	NEWPORT CORPORATION	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: TRANSPORT	122500	0309278	NEWPORT CORPORATION	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT50
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147941	351213087	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147942	351213086	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147943	351213081	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147944	351213090	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147945	351213096	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147946	351213078	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147947	351213084	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147948	351213082	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147949	351213067	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147950	351213078	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147951	351213084	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147952	351213040	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147953	351213097	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147954	351213071	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147956	351213090	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147957	351213078	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147958	351213078	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: INTENSIVE CARE	147959	351213082	COVIDEN	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	840
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: TRANSPORT	148119	1111306	SMITHS MEDICAL	SMITHS MEDICAL	VENTIPAC 200D
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: TRANSPORT	148120	1111302	SMITHS MEDICAL	SMITHS MEDICAL	VENTIPAC 200D
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: TRANSPORT	157168	N14MT720613962	NEWPORT MEDICAL INSTRUMENTS	COVIDEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT70
AEM/MS/RS	22	6991 Greater Los Angeles HCS (Los Angeles CA)	VENTILATORS: TRANSPORT	157169	N14MT720613			

Maximo	23	63682 Sioux Falls, SD	VENTILATORS: INTENSIVE CARE	239845	Dräger Medical Inc.	ASL0112	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Black Hills HCS (Port Meade SD)	VENTILATORS: TRANSPORT	218429	Covidien RMS (Respiratory & AI N1317700717193		COVIDIEN RMS (RESPIRATORY & MONITORING SOLUTIONS)	NEWPORT HT77
Maximo	23	63682 Black Hills HCS (Port Meade SD)	VENTILATORS: INTENSIVE CARE	219733	Dräger Medical Inc.	ASL0088	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Black Hills HCS (Port Meade SD)	VENTILATORS: INTENSIVE CARE	219716	Dräger Medical Inc.	ASL0089	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Black Hills HCS (Port Meade SD)	VENTILATORS: INTENSIVE CARE	219747	Dräger Medical Inc.	ASL0122	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Black Hills HCS (Port Meade SD)	VENTILATORS: INTENSIVE CARE	219752	Dräger Medical Inc.	ASL0122	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Black Hills HCS (Port Meade SD)	VENTILATORS: INTENSIVE CARE	219757	Dräger Medical Inc.	ASL0123	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Black Hills HCS (Port Meade SD)	VENTILATORS: INTENSIVE CARE	219762	Dräger Medical Inc.	ASL0121	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Black Hills HCS (Port Meade SD)	VENTILATORS: TRANSPORT	189668	CardiFlow Respiratory	ASL0090	CARDIFLOW RESPIRATORY	PHLETON MODEL A
Maximo	23	63682 Minneapolis, MN	VENTILATORS: TRANSPORT	254852	Airon Corp	A1315	AIRON CORP	PHLETON MODEL A
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254845	Dräger Medical Inc.	ASL0089	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254842	Dräger Medical Inc.	ASL0088	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254841	Dräger Medical Inc.	ASL0088	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254840	Dräger Medical Inc.	ASL0119	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254839	Dräger Medical Inc.	ASL00130	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254838	Dräger Medical Inc.	ASL0122	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254835	Dräger Medical Inc.	ASL00131	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254834	Dräger Medical Inc.	ASL0123	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254833	Dräger Medical Inc.	ASL0124	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254832	Dräger Medical Inc.	ASL0125	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254831	Dräger Medical Inc.	ASL0126	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254830	Dräger Medical Inc.	ASL0127	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254829	Dräger Medical Inc.	ASL0128	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	254828	Dräger Medical Inc.	ASL0129	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Minneapolis, MN	VENTILATORS: TRANSPORT	254827	Bi-Med Devices Inc	2535023	BIO-MED DEVICES INC	CROSSFLOW 3+
Maximo	23	63682 Minneapolis, MN	VENTILATORS: TRANSPORT	254826	CardiFlow Respiratory	E13352	CARDIFLOW RESPIRATORY	LTY 1200
Maximo	23	63682 Minneapolis, MN	VENTILATORS: TRANSPORT	254825	CardiFlow Respiratory	E13351	CARDIFLOW RESPIRATORY	LTY 1200
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	255542	MAQUET Cardiovascular LLC	8628	MAQUET CARDIOVASCULAR LLC	SERVO-S
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	255547	MAQUET Cardiovascular LLC	8626	MAQUET CARDIOVASCULAR LLC	SERVO-S
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	255552	MAQUET Cardiovascular LLC	8627	MAQUET CARDIOVASCULAR LLC	SERVO-S
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	255555	MAQUET Cardiovascular LLC	8629	MAQUET CARDIOVASCULAR LLC	SERVO-S
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	255536	GE Healthcare USA	U12147	GE HEALTHCARE USA	VENT 201
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	255541	GE Healthcare USA	U12003	GE HEALTHCARE USA	VENT 201
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	255533	MAQUET Cardiovascular LLC	8790	MAQUET CARDIOVASCULAR LLC	SERVO-S
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	255539	MAQUET Cardiovascular LLC	8788	MAQUET CARDIOVASCULAR LLC	SERVO-S
Maximo	23	63682 Minneapolis, MN	VENTILATORS: TRANSPORT	254546	CardiFlow Respiratory	E12027	CARDIFLOW RESPIRATORY	LTY 1200
Maximo	23	63682 Minneapolis, MN	VENTILATORS: TRANSPORT	254542	CardiFlow Respiratory	E12018	CARDIFLOW RESPIRATORY	LTY 1200
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	257775	GE Healthcare USA	U12072	GE HEALTHCARE USA	VENT 201
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	259092	GE Healthcare USA	U123870	GE HEALTHCARE USA	VENT 201
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	259097	GE Healthcare USA	U12202	GE HEALTHCARE USA	VENT 201
Maximo	23	63682 Minneapolis, MN	VENTILATORS: INTENSIVE CARE	259128	GE Healthcare USA	U122100	GE HEALTHCARE USA	VENT 201
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	259573	GE Healthcare USA	U122104	GE HEALTHCARE USA	VENT 201
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	259574	GE Healthcare USA	U122065	GE HEALTHCARE USA	VENT 201
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	259575	GE Healthcare USA	U123861	GE HEALTHCARE USA	VENT 201
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	259576	Dräger Medical Inc.	ASL00644	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257091	Dräger Medical Inc.	ASL00032	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257095	Dräger Medical Inc.	ASL00037	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257096	Dräger Medical Inc.	ASL00046	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257106	Dräger Medical Inc.	ASL00047	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257101	Dräger Medical Inc.	ASL00047	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257105	Dräger Medical Inc.	ASL00039	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257106	Dräger Medical Inc.	ASL00048	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257110	Dräger Medical Inc.	ASL00049	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257111	Dräger Medical Inc.	ASL00040	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257115	Dräger Medical Inc.	ASL00050	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257118	Dräger Medical Inc.	ASL00041	DRAGER MEDICAL INC.	EVITA INFINITY V500
Maximo	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	Dräger Medical Inc.	ASL00042	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00043	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00043	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00044	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00044	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00045	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00045	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00046	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00046	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00047	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00047	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00048	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00048	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00049	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00049	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00050	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00050	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00051	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00051	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00052	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00052	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00053	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00053	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00054	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00054	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00055	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00055	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00056	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00056	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00057	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00057	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00058	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00058	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00059	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00059	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00060	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00060	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00061	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00061	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00062	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00062	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00063	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00063	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00064	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00064	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00065	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00065	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00066	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00066	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00067	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00067	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00068	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00068	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00069	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00069	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00070	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00070	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00071	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00071	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00072	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00072	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00073	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00073	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00074	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00074	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00075	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00075	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00076	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00076	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00077	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00077	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00078	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00078	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00079	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00079	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00080	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00080	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00081	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00081	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00082	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00082	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00083	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00083	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00084	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00084	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00085	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00085	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00086	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00086	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00087	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00087	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00088	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00088	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00089	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00089	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00090	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00090	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00091	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00091	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00092	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00092	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00093	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00093	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00094	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00094	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00095	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00095	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00096	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00096	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00097	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00097	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00098	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00098	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00099	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00099	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00100	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00100	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00101	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00101	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00102	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00102	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00103	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00103	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00104	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00104	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00105	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00105	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00106	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257121	ASL00106	DRAGER MEDICAL INC.	DRAGER MEDICAL INC.	EVITA INFINITY V500
ASL00107	23	63682 Omaha, NE	VENTILATORS: INTENSIVE CARE	257				

Department of
Veterans Affairs

Memorandum

Date: FEB 18 2020

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: Coronavirus (COVID-19) Table-Top Exercise(TTX) (VIEWS# 02449593)

To: Veterans Integrated Service Network Directors (10N1-23)

1. The Office of Emergency Management (OEM) has developed a COVID-19 TTX for Veterans Health Administration (VHA) medical facilities, Community Based Outpatient Clinics, and staff offices. The COVID-19 TTX was developed in conjunction with subject matter experts from VHA clinical specialists and facility emergency managers.

2. The purpose of each TTX is to assist all VHA entities and affiliates in identifying strengths, weaknesses, and gaps associated with response capabilities and resource availability when responding to the COVID-19. Also, TTX provides insight into the medical facilities and staff offices' response to a public health emergency, including communicating and coordinating with other agencies, departments, and/or organizations. The exercises can be modified to meet any specific requirements deemed appropriate by each facility or staff office.

3. The exercises can be found in the VHA Performance Improvement Management System at the following link: <https://vhapims.orau.org>, under the Primary Organization "OEM-HQ" (See attachments).

4. To ensure all VHA facilities and staff offices are preparing for a potential COVID-19 outbreak in the United States, I am directing all VHA medical facilities to conduct a COVID-19 specific TTX **no later than March 6, 2020**. I am encouraging all staff offices and program offices to contact the local VAMC Emergency Manager for the date and time of their exercise and participate as appropriate. Facilities are not required to use the TTX prepared by OEM, however, the exercises should address the modules identified in the OEM TTX. If a facility has already accomplished a COVID-19 related exercise, it has met the intended requirements for TTX. Reporting exercise completion can be found in the attached instructions.

5. Questions regarding the TTX can be emailed to (b)(6) @va.gov.

(b)(6)

Renee Oshinski

Attachment

Instructions for the COVID-19 VAMC and Clinics Table Top Exercise

1. Access the exercise templates: (two access point)
 - a. VHA Performance Improvement Management System (PIMS):
 - 1) Log into PIMS <https://vhapims.orau.org/>
 - 2) Navigate to the “Event Builder” drop-down “Events List”
 - 3) Filter under Primary Organization select “OEM-HQ”
 - 4) View or copy the “2019 Novel Coronavirus TTX for VAMCs and Clinics”
 - b. VHA High Consequence Infection (HCI) SharePoint:
 <https://dvagov.sharepoint.com/sites/VACOVHAPublicHealth/HCI/SitePages/Home.aspx>
 - a. Open the Shared Documents tab.
 - b. Open the COVID-19 Tabletop Exercises folder.
2. Tailor the exercise for your facility (Dates, Times, Participants, etc.)
3. Export and review the Situation Manual (SitMan) as a guide to the facilitators of the exercise.
4. Conduct the tabletop exercise.
5. Record any gaps identified.
6. Build and implement a corrective action plan to resolve the gaps.
7. ~~Send any questions/issues~~ that require national-level guidance/solutions to:

(b)(6)

[@va.gov](mailto: @va.gov).
8. Save the facility’s exercise in PIMS.

Note:

There are multiple versions; look for the 2019 Novel Coronavirus TTX for **Staff Offices** on PIMS or the HCI SharePoint.

SITUATION MANUAL



2019 Novel Coronavirus TTX for Staff Offices

Date TBD

SITUATION MANUAL

U/FOUO

Department of Veterans Affairs

EXERCISE OVERVIEW

Exercise Name	COVID-19 TTX for Staff Offices
Exercise Date(s)	TBD
Scope	This Table-Top Exercise (TTX) is planned for <Date> at <Location Name>. The TTX is designed for staff at VA business occupancies (e.g. VACO, VISN Offices, VBA, etc..). Participants should include at a minimum: leadership, operating unit managers, and security (if applicable).
Mission Area(s)	Mitigation Preparedness Response
Program Priorities	<u>Continuity of Operations (COOP)</u> 1.7.1 - The staff office addresses Continuity of Operations (COOP) elements in its Emergency Operations Plan (EOP) include, at a minimum, the following: 1.7.1.1 - COOP Plan activation. 1.7.1.9 - Designation of essential staff. 1.7.1.10 - Emergency telework policy and process. 1.7.1.12 - Plans and procedures. 1.7.3 - The leadership explains or describes the following COOP processes: 1.7.3.2 - When and how the COOP Plan is activated. 1.7.3.5 - Implementation of emergency telework or remote work processes.

Objectives	Objective 1: The office has developed Continuity of Operations (COOP) plans and policies that describe how essential functions are maintained during an outbreak of COVID-19. Objective 2: The office is able to implement Continuity of Operations procedures to reduce the impact of a COVID-19 outbreak on essential functions and activities. Objective 3: The office is able to maintain a healthy work force during an outbreak of COVID-19.
Threat or Hazard	Natural Hazards: Epidemic
Scenario	The 2019 Novel Coronavirus, or COVID-19, is a new respiratory virus first identified in Wuhan, Hubei Province, China. CDC states the virus spreads in a similar way that seasonal influenza viruses spread—primarily through the coughs and sneezes of people who are sick with the virus. Similar to seasonal influenza, the virus may also spread by individuals' touching infected objects and then touching their nose, mouth, or eyes. Current symptoms reported for patients with COVID-19 have included mild to severe respiratory illness with fever, cough, and difficulty breathing. While Coronavirus spreads in a similar way to influenza, many of the recommendations for mitigation against spreading the virus have focused on Non-Pharmaceutical Interventions (NPIs). It has been known to cause longer hospital stays for those who do contract it. There are currently no preventative or mitigating treatments for it, with anti-viral medications not being effective and vaccines still in development to prevent it. Local media outlets are reporting several hospitalized cases in your community diagnosed with the COVID-19 virus. These hospitalized cases concern medical experts who fear a shortage of treatment resources will occur. State and local Public Health are emphasizing Non-Pharmaceutical Interventions (NPIs) activities to reduce the spread of COVID-19. These NPIs include: • What you can do personally: Stay home when you are sick. Cover your coughs and sneezes with a tissue. Wash your hands often with soap and water. • What can be done in the work place: Reduce face to face meetings by using Skype and conference calls. Expand telework where possible.

	• What communities can do: Implement social distancing interventions in schools, workplaces, and at events. • What everyone can do to keep the environment germ-free: Clean frequently touched surfaces and objects like door knobs.
Purpose	Assist leadership and operating unit managers in identifying strengths, weaknesses, and gaps associated with response capabilities and resource availability for continuity of business operations should COVID-19 cases increase in the U.S.
Sponsor	Office of Emergency Management (OEM)
Participating Organizations	<u>Additional Participating Organizations</u> <Additional Participating Organization(s)>
Point of Contact	(b)(6) @va.gov

GENERAL INFORMATION

Exercise Objectives and Core Capabilities

The following exercise objectives in Table 1 describe the expected outcomes for the exercise.

Exercise Objective	Program Priority
Objective 1: The office has developed Continuity of Operations (COOP) plans and policies that ensure essential functions are maintained during an outbreak of COVID-19.	1.7.1 - The staff office addresses Continuity of Operations (COOP) elements in its Emergency Operations Plan (EOP) include, at a minimum, the following: 1.7.1.1 - COOP Plan activation. 1.7.1.9 - Designation of essential staff. 1.7.1.10 - Emergency telework policy and process. 1.7.1.12 - Plans and procedures.
Objective 2: The office is able to implement Continuity of Operations procedures to reduce the impact of a COVID-19 outbreak on essential functions and activities.	1.7.3 - The leadership explains or describes the following COOP processes: 1.7.3.2 - When and how the COOP Plan is activated. 1.7.3.5 - Implementation of emergency telework or remote work processes.
Objective 3: The office is able to maintain a healthy work force during an outbreak of COVID-19.	1.7.3 - The leadership explains or describes the following COOP processes: 1.7.3.5 - Implementation of emergency telework or remote work processes.

Table 1. Exercise Objectives and Associated Core Capabilities

Participant Roles and Responsibilities

The term *participant* encompasses many groups of people, not just those playing in the exercise. Groups of participants involved in the exercise, and their respective roles and responsibilities, are as follows:

- **Players.** Players are personnel who have an active role in discussing or performing their regular roles and responsibilities during the exercise. Players discuss or initiate actions in response to the simulated emergency.
- **Observers.** Observers do not directly participate in the exercise. However, they may support the development of player responses to the situation during the discussion by asking relevant questions or providing subject matter expertise.
- **Facilitators.** Facilitators provide situation updates and moderate discussions. They also provide additional information or resolve questions as required. Key

Exercise Planning Team members also may assist with facilitation as subject matter experts (SMEs) during the exercise.

- **Evaluators.** Evaluators are assigned to observe and document certain objectives during the exercise. Their primary role is to document player discussions, including how and if those discussions conform to plans, policies, and procedures.

Exercise Structure

This exercise will be a facilitated exercise. Players will participate in the following 2 modules:

- Cases of COVID-19 are appearing in the Community
- Outbreak is affecting operations

Each module begins with a scenario update that summarizes key events occurring within that time period. After the updates, participants review the situation and engage in discussions of appropriate issues. For this exercise, the functional groups are as follows:

- Business Processes
- Communications
- Human Resources
- Infection Control
- Personal Protective Equipment
- Security

During and after these discussions, participants will identify gaps or requirements which need to be implemented should an outbreak of COVID-19 occur. These should be written down and assigned to appropriate individuals for action.

Exercise Guidelines

- This exercise will be held in an open, low-stress, no-fault environment. Varying viewpoints, even disagreements, are expected.
- Respond to the scenario using your knowledge of current plans and capabilities (i.e., you may use only existing assets) and insights derived from your training.
- Decisions are not precedent setting and may not reflect your organization's final position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.
- Problem-solving efforts should be the focus.

Exercise Assumptions and Artificialities

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted and/or account for logistical limitations. Exercise participants should

accept that assumptions and artificialities are inherent in any exercise and should not allow these considerations to negatively impact their participation. During this exercise, the following apply:

- The exercise is conducted in a no-fault learning environment wherein capabilities, plans, systems, and processes will be evaluated.
- The exercise scenario is plausible, and events occur as they are presented.
- All players receive information at the same time.

Exercise Evaluation

Evaluation of the exercise is based on the exercise objectives. Additionally, players will be asked to complete participant feedback forms. These documents, coupled with facilitator observations and notes, will be used to evaluate the exercise and compile the After-Action Report (AAR).

MODULE 1: CASES OF COVID-19 ARE APPEARING IN THE COMMUNITY

03/01/2020 0800

"Day of exercise" COVID-19 is becoming more commonly reported in the community, but no one in the office has reported being ill yet. VA staff are concerned about what the organization is doing to protect them in the workplace.

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 1. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Communications

1. Who is responsible for communicating COVID-19 information with staff and Veterans that receive service from you?
2. What information should be provided to Veterans who call about appointments? Is there a process to address their issues over the telephone instead of coming into the office? Are there any services which require the Veteran to come in-person?
3. If the VA offices are in a building that is shared with other non-VA entities is there a plan for consistent COVID-19 precautions for the work-place?

Human Resources

1. Have employees who are able to accomplish their work from home been identified? Are they currently approved and capable of Regular or Ad-Hoc for telework (policy, training, equipment)? If not, how quickly can they be able to telework?
2. How will employees be cleared prior to returning to work? Will employees completing isolation/quarantine be required to be cleared by Occ. Health? (Explain HR policies, procedures, directives and memos as it relates to COVID-19.)

Infection Control

1. Are there infection control stations (masks, hand sanitizer, tissues) in the office for staff and Veterans to use?

2. Does the office have signage informing staff and Veterans on proper infection control procedures? Is there a means to inform staff and Veterans not to enter the office if they have flu-like symptoms? Are there control measures to prevent individuals from entering the office if they are ill?

Personal Protective Equipment

1. What personal protective equipment (PPE) should be made available to staff? Should PPE be made available/required for visitors?

MODULE 2: OUTBREAK IS AFFECTING OPERATIONS

03/10/2020 0910

"Day of Exercise+10" COVID-19 cases have increased significantly in the community. Some staff have called in sick, others are very concerned about getting sick. Some of the daily office functions are not being accomplished due to absent staff.

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 2. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Business Processes

1. Employee absenteeism is beginning to impact production and provision of services. What services should be prioritized to accomplish the Essential Functions? Are staff cross-trained to ensure overlap of the essential activities necessary for organizational success? How do managers determine what activities are critical to continuity of services?
2. Healthy employees have started calling out sick to prevent coming to the office because they are worried about getting sick. What should you do to alleviate their fears? Discuss caring for family members, kids, spouses, older parents, and how that might affect the VAMC.

Communications

1. The first positive case of COVID-19 in a staff member is reported. The individual had been working with 3 others in an office in the last week prior to showing symptoms. What self-isolation information should be provided to staff? What leave category should these "self-isolation" staff fall under? How long?

Infection Control

1. An individual with symptoms is placed in a waiting area with several other people. What instructions should be provided to the individual? Are there masks, tissues and hand sanitizer available in the waiting area? Is there sufficient space to isolate the individual from those without symptoms?
2. Your office space has several public gathering spaces, including a cafeteria. What are your concerns regarding these spaces and what actions should you take?

Security

1. Security notices a Veteran/visitor is ill when arriving at check point. What should they do? What authorities are in place to allow them to turn the Veteran/visitor away?

Key References:

VHA EMCC SharePoint

<https://dvagov.sharepoint.com/sites/VHAreprogs/EMSHG/EMCC>

VHA HCI SharePoint

<https://dvagov.sharepoint.com/sites/VACOVHAPublicHealth/HCI/SitePages/Home.aspx>

VHA nCoV Web Site

<https://www.publichealth.va.gov/n-coronavirus/index.asp>

VHA Directive 0320.02, Veterans Health Administration Health Care Continuity Program has been approved for publication; it can be found by clicking on the following link

http://vaww.va.gov/vhapublications/ViewPublication.asp?pub_ID=8644

CDC 2019 Novel Coronavirus Main Page

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

CDC Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States

https://www.cdc.gov/flu/pandemic-resources/pdf/community_mitigation-sm.pdf

CDC Community Mitigation Guidelines to Prevent Pandemic Influenza - United States

<https://www.cdc.gov/media/dpk/cdc-24-7/preventing-pandemic-influenza/community-mitigation-guidelines-for-preventing-pandemic-flu.html>

NETEC 2019 nCoV Repository

<https://repository.netecweb.org/>

ASPR TRACIE, Infectious Disease Topic Collection

<https://asprtracie.hhs.gov/infectious-disease>

SITUATION MANUAL



2019 Novel Coronavirus TTX for VAMCs and Clinics

Dates

SITUATION MANUAL

U/FOUO

Department of Veterans Affairs

EXERCISE OVERVIEW

Exercise Name	2019 Novel Coronavirus TTX for VAMCs
Exercise Date(s)	02/12/2020 - 02/29/2020
Scope	This Table-Top Exercise (TTX) is planned for <Date> at <Location Name>. This TTX is designed for staff at VAMCs and Out-Patient Clinics. Participants should include leadership and service chiefs as identified in the facility's Highly Contagious Infectious Disease and other associated plans. VAMCs should feel free to invite local/state health department representatives.
Mission Area(s)	<u>VHA Capabilities Mission Area(s)</u> Mission Area 5: Medical Operations Each VA Medical Center should convene an inter-disciplinary group to review the scenarios and address the questions in order to identify gaps in their current capabilities.
Program Priorities	<u>VHA Capabilities</u> 5.2.1 - The Emergency Operations Plan (EOP) describes the management of an influx of potentially infectious patients to include the following: 5.2.1.1 - Identification of information sources that monitor high consequence infections (HCI). 5.2.1.2 - Methods to communicate critical information regarding HCIs to Licensed Independent Practitioners and staff. 5.2.1.3 - How the facility will screen, isolate, notify, and determine if they have the capability to diagnose and treat or transfer patients with a potential HCI to a more appropriate VA or other health care facility. 5.2.1.4 - How the facility manages patients with a potential HCI for a period consistent with the facility's level of preparedness while transfer is being arranged. 5.2.1.5 - How the facility will transport infectious/contagious patients and materials.

5.2.1.6 - How the facility will address environmental decontamination.

5.2.2 - In accordance with the facility's EOP, the facility maintains the following:

5.2.2.1 - Patient care and associated equipment and supplies necessary to screen, isolate, diagnose, treat and/or transfer a patient with a potential HCI following standard and pathogen specific guidance.

5.2.2.2 - Required medical equipment, supplies, including PPE and space.

5.2.2.3 - Required non-medical supplies.

5.2.2.4 - Designated room where patients with a potential HCI can be isolated and supportive patient care provided.

5.2.3 - Facility staff describe the following regarding an infectious disease outbreak:

5.2.3.1 - How the facility obtains information sources that monitor HCIs to make decisions regarding implementation of HCI plans.

5.2.3.2 - How the facility will communicate information regarding the implementation of exposure control procedures.

5.2.3.3 - How the facility will screen, isolate, determine its ability to diagnose and treat and/or transfer a patient with a potential HCI.

5.2.3.4 - How the facility will provide supportive care to patients with a potential HCI while awaiting transfer.

5.2.4 - The facility trains personnel on the responsibilities and procedures described in the HCI plan.

Objectives

Note: The facility should pick which objective(s) they want to pursue.

Objective 1: Explain how VHA Health Care Systems and public health agencies will coordinate surveillance and implement

	emergency response activities to triage and manage patients presenting with symptoms and/or diagnosed with the 2019 Coronavirus (COVID-19) in accordance with Emergency Operations Plans and VHA guidance. Objective 2: Explain how your VHA Health Care System will coordinate with local and state agencies to share and disseminate COVID-19 related information and guidance to Veterans, staff, and their families in accordance with Emergency Operations Plans and VHA guidance. Objective 3: Explain how the VHA Health Care System will screen, isolate, diagnose, and treat a Veteran which presents with COVID-19 symptoms. Objective 4: The facility identifies and determines the availability of required PPE and associated equipment required to protect staff, visitors, and Veterans during a local outbreak of the COVID-19. Objective 5: Describe the process for how the allocation of scarce resources will occur when staffing, supplies, and/or equipment become limited. Objective 6: Identify additional processes or plans necessary to support Veterans who receive care in the community or at home and are considered vulnerable (home health, immunocompromised, O2 dependent, HUD-VASH, etc.).
Threat or Hazard	Natural Hazards: Epidemic
Scenario	The 2019 Novel Coronavirus, or COVID-19, is a new respiratory virus first identified in Wuhan, Hubei Province, China. CDC states the virus spreads in a similar way that seasonal influenza viruses spread—primarily through the coughs and sneezes of people who are sick with the virus. Similar to seasonal influenza, the virus may also spread by individuals' touching infected objects and then touching their nose, mouth, or eyes. Current symptoms reported for patients with COVID-19 have included mild to severe respiratory illness with fever, cough, and difficulty breathing. While Coronavirus spreads in a similar way to influenza, many of the recommendations for mitigation against spreading the virus have focused on non-pharmaceutical interventions (NPIs). It has been known to cause longer hospital stays for those who do contract it. There are currently no preventative or mitigating treatments for it, with anti-viral

	medications not being effective and vaccines still in development to prevent it. Local media outlets are reporting several hospitalized cases in your community diagnosed with the COVID-19 virus. These hospitalized cases concern medical experts who fear a shortage of treatment resources will occur. Of specific concern would be seniors ≥ 65 years, and those who have chronic medical conditions such as asthma or other respiratory issues.
Purpose	Assist VAMCs in identifying strengths, weaknesses, and gaps associated with response capabilities and resource availability for their hospital and Clinics when responding to the 2019 Novel Coronavirus (COVID-19). Moreover, it provides insight into the hospital's response to a public health emergency, including communicating and coordinating with other agencies, departments, or organizations.
Sponsor	Office of Emergency Management (OEM)
Participating Organizations	<u>Additional Participating Organizations</u> <Additional Participating Organization(s)>
Point of Contact	VHA Emergency Management Coordination Cell (EMCC) (b)(6) @va.gov

GENERAL INFORMATION

Exercise Objectives and Core Capabilities

The following exercise objectives in Table 1 describe the expected outcomes for the exercise. The objectives are linked to core capabilities, which are distinct critical elements necessary to achieve the specific mission area(s). The objectives and aligned core capabilities are guided by elected and appointed officials and selected by the Exercise Planning Team.

Exercise Objective	Program Priority
Objective 1: Explain how VHA Health Care Systems and public health agencies will coordinate surveillance and implement emergency response activities to triage and manage patients presenting with symptoms and/or diagnosed with the 2019 Coronavirus (COVID-19) in accordance with Emergency Operations Plans and VHA guidance.	5.2.1 - The Emergency Operations Plan (EOP) describes the management of an influx of potentially infectious patients to include the following: 5.2.1.1 - Identification of information sources that monitor high consequence infections (HCI). 5.2.1.2 - Methods to communicate critical information regarding HCIs to Licensed Independent Practitioners and staff. 5.2.1.3 - How the facility will screen, isolate, notify, and determine if they have the capability to diagnose and treat or transfer patients with a potential HCI to a more appropriate VA or other health care facility. 5.2.1.4 - How the facility manages patients with a potential HCI for a period consistent with the facility's level of preparedness while transfer is being arranged. 5.2.1.5 - How the facility will transport infectious/contagious patients and materials. 5.2.1.6 - How the facility will address environmental decontamination.
Objective 2: Explain how your VHA Health Care System will coordinate with local and state agencies to share and disseminate COVID-19 related information and guidance to Veterans, staff, and their families in accordance with Emergency Operations Plans and VHA guidance.	5.2.3 - Facility staff describe the following regarding an infectious disease outbreak: 5.2.3.1 - How the facility obtains information sources that monitor HCIs to make decisions regarding implementation of HCI plans. 5.2.3.2 - How the facility will communicate information regarding the implementation of exposure control procedures.
Objective 3: Explain how the VHA Health Care System will screen, isolate, diagnose and treat a Veteran which presents with COVID-19 symptoms.	5.2.3.3 - How the facility will screen, isolate, determine its ability to diagnose and treat and/or transfer a patient with a potential HCI.
Objective 4: The facility identifies and determines the availability of required PPE and associated equipment	5.2.2 - In accordance with the facility's EOP, the facility maintains the following: 5.2.2.1 - Patient care and associated equipment and supplies necessary to screen, isolate, diagnose, treat and/or transfer a patient

Exercise Objective	Program Priority
required to protect staff, visitors, and Veterans during a local outbreak of the COVID-19.	with a potential HCI following standard and pathogen specific guidance. 5.2.2.2 - Required medical equipment, supplies, including PPE and space. 5.2.2.3 - Required non-medical supplies. 5.2.2.4 - Designated room where patients with a potential HCI can be isolated and supportive patient care provided. 5.2.4 - The facility trains personnel on the responsibilities and procedures described in the HCI plan.
Objective 5: Describe the process for how the allocation of scarce resources will occur when staffing, supplies, and/or equipment become limited.	5.2.2.2 - Required medical equipment, supplies, including PPE and space. 5.2.2.3 - Required non-medical supplies. 5.2.3.2 - How the facility will communicate information regarding the implementation of exposure control procedures.
Objective 6: Identify additional processes or plans necessary to support Veterans who receive care in the community or at home and are considered vulnerable (home health, immunocompromised, O2 dependent, HUD-VASH, etc.).	5.2.1.2 - Methods to communicate critical information regarding HCIs to Licensed Independent Practitioners and staff. 5.2.1.3 - How the facility will screen, isolate, notify, and determine if they have the capability to diagnose and treat or transfer patients with a potential HCI to a more appropriate VA or other health care facility. 5.2.1.4 - How the facility manages patients with a potential HCI for a period consistent with the facility's level of preparedness while transfer is being arranged. 5.2.1.6 - How the facility will address environmental decontamination. 5.2.2.2 - Required medical equipment, supplies, including PPE and space. 5.2.2.3 - Required non-medical supplies. 5.2.2.4 - Designated room where patients with a potential HCI can be isolated and supportive patient care provided. 5.2.3.2 - How the facility will communicate information regarding the implementation of exposure control procedures. 5.2.3.4 - How the facility will provide supportive care to patients with a potential HCI while awaiting transfer. 5.2.4 - The facility trains personnel on the responsibilities and procedures described in the HCI plan.

Table 1. Exercise Objectives and Associated Core Capabilities

Participant Roles and Responsibilities

The term *participant* encompasses many groups of people, not just those playing in the exercise. Groups of participants involved in the exercise, and their respective roles and responsibilities, are as follows:

- Players.** Players are personnel who have an active role in discussing or performing their regular roles and responsibilities during the exercise. Players discuss or initiate actions in response to the simulated emergency.

- **Observers.** Observers do not directly participate in the exercise. However, they may support the development of player responses to the situation during the discussion by asking relevant questions or providing subject matter expertise.
- **Facilitators.** Facilitators provide situation updates and moderate discussions. They also provide additional information or resolve questions as required. Key Exercise Planning Team members also may assist with facilitation as subject matter experts (SMEs) during the exercise.
- **Evaluators.** Evaluators are assigned to observe and document certain objectives during the exercise. Their primary role is to document player discussions, including how and if those discussions conform to plans, policies, and procedures.

Exercise Structure

This exercise will be a discussion-based, facilitated exercise. Players will participate in the following 10 modules of their choosing to validate or work through areas of concern:

- Local Health Surveillance
- Activating Emergency Operations Plans
- Screening and Triage
- Declaration of Public Health Emergency
- Infection Control/Prevention
- Patient Surge and Impacts to Staffing
- Medical Ethics
- Logistics
- Alternate Care Site(s)
- Ancillary Health Care Facilities Considerations

Each module begins with an update that summarizes key events occurring within that time period. After the updates, participants review the situation and engage in functional group discussions of appropriate issues. For this exercise, the functional groups are as follows:

- Communications
- Continuity
- Incident Command
- Infection Prevention/Control
- Logistics
- Medical Ethics
- Medical Surge
- Mental Health
- Notification
- Police and Security
- Reporting Requirements
- Surveillance

- Triage
- Vulnerable Populations

After these functional group discussions, participants will engage in a moderated plenary discussion in which a spokesperson from each group will present a synopsis of the group's actions, based on the scenario.

Exercise Guidelines

- This exercise will be held in an open, low-stress, no-fault environment. Varying viewpoints, even disagreements, are expected. Focus is Performance Improvement.
- Respond to the scenario using your knowledge of current plans and capabilities (i.e., you may use only existing assets) and insights derived from your training.
- Decisions are not precedent setting and may not reflect your organization's final position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.
- Issue identification is not as valuable as suggestions and recommended actions that could improve preparedness and response efforts. Problem-solving efforts should be the focus.

Exercise Assumptions and Artificialities

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted and/or account for logistical limitations. Exercise participants should accept that assumptions and artificialities are inherent in any exercise and should not allow these considerations to negatively impact their participation. During this exercise, the following apply:

- The exercise is conducted in a no-fault learning environment wherein capabilities, plans, systems, and processes will be evaluated.
- The exercise scenario is plausible, and events occur as they are presented.
- All players receive information at the same time.

Exercise Evaluation

Evaluation of the exercise is based on the exercise objectives and aligned capabilities, capability targets, and critical tasks, which are documented in Exercise Evaluation Guides (EEGs). Evaluators have EEGs for each of their assigned areas. Additionally, players will be asked to complete participant feedback forms. These documents, coupled with facilitator observations and notes, will be used to evaluate the exercise and compile the After-Action Report (AAR).

MODULE 1: LOCAL HEALTH SURVEILLANCE

03/01/2020 0800

"Day of exercise" Local health department reports that a case of COVID-19 has been detected in the community. While the patient is not a Veteran, the patient lives in an over 55-y.o. community at which several Veterans live. Telephone Advice/Triage has received a number of calls asking if Veterans should come to the Medical Center or CBOC for evaluation.

Key Issues

- Coordination with local health departments and health surveillance
- Preparation and coordination of communications
- Outreach to programs and supported services

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 1. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Surveillance

1. What departments within your hospital do you coordinate with to monitor for cases of COVID-19? How and to whom would it be reported?
2. If you are monitoring your hospital for other diseases or infections (such as hepatitis, meningitis, or Methicillin-resistant *Staphylococcus aureus* [MRSA]), will you continue to monitor for them during a COVID-19 outbreak?
3. Do you receive timely information from local health departments regarding Infectious Disease outbreaks in your catchment area (VAMC, CBOCs)?
4. What additional resources are required to conduct COVID-19 monitoring?

Triage

1. How will the facility ensure scripts used by Telephone Triage and front-line hospital staff are consistent with the national call centers in providing information to Veterans calling and coming into the Medical Center asking for advice and evaluation? Is this direction different for a CBOC?
2. Has the facility updated communications to shareholders with VHA and local guidance on COVID-19?

Vulnerable Populations

1. Are there any special requirements when dealing with providing direction to vulnerable populations?

Vulnerable Patient Categories
All Home-based Primary Care (HBPC) patients
All home oxygen patients under the care of a VA Provider
Patients enrolled in Homeless Programs (HUD-VASH community-based and project-based apartments; GPD grantee residential care; HCHV contract residential care)
All Spinal Cord Injury (SCI) and ventilator patients
All contract, and State Veterans Nursing Home patients
High risk mental health patients (Opioid Treatment Program [i.e. methadone treatment for opioid use disorder], Active High-Risk Flag for Suicide, Mental Health Intensive Case Management (MHICM/Seriously Mentally Ill (SMI))
All dialysis patients (in-center hemodialysis, home hemodialysis, home peritoneal dialysis and contract dialysis)
All active chemo/infusion service patients treated at VA or in community with care managed by VA.
All Tier 1 telehealth patients

MODULE 2: ACTIVATING EMERGENCY OPERATIONS PLANS

03/02/2020 0900

"Exercise Day+1" You activate your hospital's Emergency Operations Plan (EOP).

Key Issues

- Activating plans
- Communicating plans to the staff
- Communicating plans to the public
- Mental Health considerations

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 2. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Communications

1. How is the plan activation communicated to your health care system staff? VISN?
2. Who communicates your plan activation to your local public health and/or emergency management agency? To whom do you communicate it?
3. How do you ensure regular updates are provided to stakeholders?

Incident Command

1. Who is responsible for officially activating your hospital plan? What are the indicators that trigger its activation? What are the indicators that trigger its deactivation?
2. Is your COOP Plan adequate to address impacts a COVID-19 outbreak could create?

Medical Ethics

1. How might your hospital's standard of care change as a result of the outbreak? How would you communicate these altered standards of care to your staff? How would you communicate these altered standards of care to the public?

Mental Health

1. Would mental health interventions need to be available for your hospital workers to manage stress arising from the enactment of these altered standards of care?

Police and Security

1. Are there plans in place to secure/limit perimeter and facility access? Is there adequate staff to employ these measures? Will contracted VA clinics vs. a VA staffed clinic be any different from a response perspective?
2. Is there adequate signage for Veterans, staff, and visitors to follow?
3. Are there procedures to secure or limit access to high demand items such as PPE?
4. Have VA Police been trained how to protect themselves from becoming infected by those who may be showing symptoms of this infectious disease?

MODULE 3: SCREENING AND TRIAGE

03/03/2020 0800

"Exercise day + 3" Patient arrives in any location Community-based Outpatient Clinics, Clinics or the Emergency Department complaining of shortness of breath and fever after the first cases of community acquired COVID-19 have been reported. Two days later, the patient's COVID-19 testing comes back positive and infection with the COVID-19 is confirmed.

NOTE: Consider blending in questions from Module 10.

Key Issues

- Means to triage patients both in hospital and out-of-hospital (see Module 10)
- Personal Protective Equipment (PPE)
- Surge planning

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 3. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Reporting Requirements

1. What reporting needs to be completed and to whom? What community considerations need to be reviewed?

Triage

1. Has the facility created a plan to map out how these Veterans will transit to the campus, how they will navigate on site, where assessment of these cases will take place, and their disposition (i.e., admit at VA, admit to another facility, send to home or other residence)?
2. How should the patient be triaged upon arrival? How should patient care (out-patient and inpatient) be adjusted to accommodate COVID-19 patient care? What PPE precautions should be taken?
3. What would be the COVID-19 Person Under Investigation (PUI) flow through your hospital? What infection control measures would you prescribe in these situations?

4. What steps would you take to keep the "worried well" from presenting at your hospital? What steps would you take to keep the "mildly ill" from presenting at your hospital?

MODULE 4: DECLARATION OF PUBLIC HEALTH EMERGENCY

03/05/2020 0900

"Exercise Day+5" The COVID-19 is being reported in other parts of your state and neighboring states. Your state has declared a statewide public health emergency. As this virus moves into your area, local health departments have declared a public health emergency and activated their Emergency Operations Center (EOC) and its Incident Command System (ICS).

Key Issues

- Incident Command System (ICS)
- Emergency Operations Center (EOC)

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 4. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Incident Command

1. In the face of a public health emergency, does your hospital's emergency operations plan prescribe an incident management structure? If so, describe this structure, including its chain of command, the staff who would make up its key components, and their roles and responsibilities.
2. How does your hospital's incident management structure interact with external EOCs and Incident Management Teams (IMTs)? What information is shared between your hospital and these EOCs/IMTs?

MODULE 5: INFECTION CONTROL/PREVENTION

03/07/2020 0900

"Exercise Day + 7" Disease management recommendations are changing, including infection control recommendations. You learn that one of the Medical Center's Environmental Management Service workers with family members at home ill with the COVID-19 is present at work due to financial obligations.

Key Issues

- Changing Infection Control recommendations
- Maintaining appropriate Personal Protective Equipment (PPE)
- Managing possibly exposed employees
- Managing ill employees

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 5. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Continuity

1. What is your hospital's plan to monitor for ill staff? Who monitors them? What actions are taken with staff who are ill, but still working?
2. Does the facility's continuity procedures include decreasing/cancelling group events and visiting hours, and implementing other social distancing methods?
3. Have positions able to accomplish their work from home been identified? Are they currently approved and capable of Regular or Ad-Hoc for telework (policy, training, equipment)? If not, how quickly can they be able to telework?
4. What is your hospital's plan to encourage employees to work during a crisis, such as a highly infectious disease, when they may not want to work even though they are not ill?

Infection Prevention/Control

1. How does your hospital monitor infection control recommendations? How often? Who monitors these recommendations? How are new recommendations communicated within your hospital? To whom are they communicated?

2. Has the facility discussed balancing normal workload vs. COVID-19 workload? What services care might be cancelled/rescheduled (do we want well patients coming into a COVID-19 infected facility?)
3. Is there a capability to respirator fit-test large numbers of people?

Logistics

1. How do you monitor your hospital's supply of PPE?
2. What are your alternate sources of PPE should your primary vendor fail?
3. If a new type of PPE that your hospital does not stock was recommended, what steps would you take to secure this PPE? How would you train staff on the use of new PPE? Who would conduct this training?

MODULE 6: PATIENT SURGE AND IMPACTS TO STAFFING

03/10/2020 0800

"Exercise day + 10" Despite of efforts by local health departments to slow the progress of the disease, it is rapidly spreading throughout your community. As a result, the number of people presenting in your hospital Emergency Department (ED) with influenza-like symptoms is rapidly increasing, as is the number of citizens who have no influenza-like illness symptoms but are worried about exposure to the disease.

Key Issues

- Infection Control for staff
- Infection Control for patients and visitors
- Staffing shortages

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 6. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Continuity

1. What planning factors need to be considered to maintain staffing levels?
2. Does your hospital have a continuity of operations plan (COOP) that prescribes protocols for managing a reduction in your workforce?
3. Does your hospital have a succession plan that identifies individuals to fill critical management roles in the absence of hospital decision makers?
4. Has your hospital identified a reserve of medical and non-medical volunteers to work in your hospital in such situations?
5. If staffing shortages begin to impact delivery of healthcare, how does the Medical Center prioritize available services to maintain appropriate patient care and patient safety? Does your hospital have a plan to provide essential services during such a situation?
6. If an outbreak of COVID-19 is identified in a particular department or group of hospital personnel, what is your hospital's plan to manage the outbreak and shortages of personnel?
7. How do Service lines determine what activities are critical to continuity of Veteran care? How do the activities, or decreased activities, affect other Services?

8. How do Service lines return to "normal" operations? How does the facility manage reconstitution of services that may have been curtailed or altered during the event?

Infection Prevention

1. What infection control practices do you prescribe for your hospital staff?

Medical Surge

1. Does your hospital have a plan for managing a surge of patients? If so, how would this plan be used to manage the surge of patients in this situation? At what point would your hospital be unable to manage a surge in patients in the ED?
2. At what point would your hospital be unable to manage a surge in patients in your Intensive Care Unit (ICU)? What alternative strategies have you identified to avoid such a situation?
3. How will the facility track those Veterans being cared for through Community Care contracts?

MODULE 7: MEDICAL ETHICS

03/20/2020 0800

"Exercise Day+20" As the Coronavirus pandemic continues, your hospital begins to experience shortages in resources necessary to treat your patients. You are now faced with a shortage of staff (including both health care providers and support staff), ventilators and disposable/single-use supplies.

In a worst-case scenario, your hospital is overwhelmed. You are experiencing a huge reduction in staff and an increase in people seeking care. Other hospitals, healthcare facilities, and public health departments are experiencing the same effect. You are about to reach the point where you must turn people away from your hospital, even if doing so violates legal acts such as the Emergency Medical Treatment and Active Labor Act (EMTALA).

Key Issues

- Medical Ethics
- Managing scarce resources

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 7. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Medical Ethics

1. Has your hospital incorporated Crisis Standards of Care in its emergency operations procedures?
2. Who has the authority to change normal standards of care – the State or the Federal Government?
3. What is the process for suspending legal requirements in a pandemic?
4. How long does it take to get a legal suspension of these requirements?
5. Does your hospital have an ethical framework for allocating/rationing scarce resources?
6. Does this plan include withholding of care? If not, should it? If not, why not?

MODULE 8: LOGISTICS

03/22/2020 0800

"Exercise Day+22" CDC has changed its guidance on personal protective equipment (PPE) for personnel interacting with suspect or confirmed cases of Coronavirus.

Key Issues

- Maintaining supply chains
- Respirator supply and fit testing

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 8. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Infection Prevention/Control

1. For those employees who already have N95 respirators, are they fit tested? If so, how often are they fit tested? Is there a mechanism to perform "just-in-time" fit testing for staff?

Logistics

1. Do you have an adequate stock of recommended PPE on hand at your hospital? If not, do you have a contracted vendor to provide these to you in a timely manner? Can this vendor supply PPE to your hospital outside of its "normal" schedule?
2. If a new type of respirator was recommended by CDC, do you have a plan to quickly supply your hospital with this respirator?
3. How would you coordinate with the VISN and/or with OEM if required resources cannot be obtained through normal means?

MODULE 9: ALTERNATE CARE SITE(S)

03/24/2020 0800

"Exercise Day+24" Your hospital has reached its normal bed capacity and determines it does not have enough beds for the patients who are being admitted.

Key Issues

- Actual beds versus authorized beds
- Isolation vs. quarantine beds
- Expanding bed capacity

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 9. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Continuity

1. Does your hospital have a plan for increasing its bed capacity or expanding patient care areas? What is the difference between isolation beds and quarantine beds?
2. What capacity does your hospital have to expand staffing to cover an increase in bed capacity?
3. What agreements does your hospital have with other hospitals for patient transfer?
4. What capability does the facility have to establish alternate care sites? Has the facility discussed the use of domiciliary beds, Hoptel, empty wards?
5. What are your guidelines/procedures for decompressing your patient population?

Logistics

1. What access does your hospital have to physical beds?
2. What outside agencies or vendors can you reach out to for assistance with beds/cots or other supplies?
3. What protocols do you have in place to both procure from and reimburse vendors for the services or supplies they provide in an emergency? (Are these different from your standard procedures?)

MODULE 10: ANCILLARY HEALTH CARE FACILITIES CONSIDERATIONS

03/26/2020 1011

"Exercise Day+26" A Veteran shows up unannounced at her local CBOC where she receives her primary care. She is experiencing flu-like symptoms and is concerned she may have COVID-19.

NOTE: Blend these questions into Module 3.

Key Issues

- Infection Control
- Personal Protection Equipment (PPE)
- Screening and Triage

Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 10. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

Infection Control

1. What screening and infection control measures are recommended or in use at your ancillary health care facilities?
2. Does the clinic have appropriate PPE to protect the Staff and other patients at the clinic?
3. Do clinic staff receive fit-testing and other applicable PPE training on a regular basis? Are staff confident that the PPE and training is adequate to protect them?

Notification

1. Who would be notified about this Veteran with signs of COVID-19? What if the clinic is in another state than the VAMC?

Triage

1. How should the Veteran be triaged on arrival? Is this different than normal procedures?
2. Is there a designated room to place the Veteran?

3. Does the clinic have the ability to obtain a laboratory specimen for COVID testing?

Key References:

VHA EMCC SharePoint

<https://dvagov.sharepoint.com/sites/VHAreprogs/EMSHG/EMCC>

VHA HCI SharePoint

<https://dvagov.sharepoint.com/sites/VACOVHAPublicHealth/HCI/SitePages/Home.aspx>

VHA nCoV Web Site

<https://www.publichealth.va.gov/n-coronavirus/index.asp>

VHA Directive 0320.02, Veterans Health Administration Health Care Continuity Program has been approved for publication; it can be found by clicking on the following link

http://vaww.va.gov/vhapublications/ViewPublication.asp?pub_ID=8644

CDC 2019 Novel Coronavirus Main Page

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

CDC Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States

https://www.cdc.gov/flu/pandemic-resources/pdf/community_mitigation-sm.pdf

CDC Community Mitigation Guidelines to Prevent Pandemic Influenza - United States

<https://www.cdc.gov/media/dpk/cdc-24-7/preventing-pandemic-influenza/community-mitigation-guidelines-for-preventing-pandemic-flu.html>

NETEC 2019 nCoV Repository

<https://repository.netecweb.org/>

ASPR TRACIE, Infectious Disease Topic Collection

<https://asprtracie.hhs.gov/infectious-disease>



COVID-19 Table-Top Exercise (TTX)

- Two discussion-based exercises that focus on preparedness and response to COVID-19. The scenario is presented as an escalating event. The TTXs are designed for : VAMCs to include ancillary facilities (Built in PIMS)VA Staff offices (non-healthcare)These exercises are generic by design and would need to be slightly modified by the facility conducting the TTX.Goal is for the facility (all applicable services) to identify gaps in their response plans/training/resources and implement corrective actions.After addressing the gaps noted above, the facility should have an understanding of how to implement COVID-19 response activities.Note: Socializing this TTX with VISN and Facility Emergency Managers Wed 2/19

**Department of
Veterans Affairs****Memorandum**

Date: April 22, 2020

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: Instructions for Admitting State Home Veterans During the COVID-19
Pandemic

To: Veterans Integrated Service Network (VISN) Directors (10N1-23)

1. Effective immediately, Department of Veterans Affairs (VA) Medical Centers (VAMC) should use the attachment titled, "(VAMC) Business Implementation Managers (BIMS)" guidance to admit patients transferred to a VA medical facility from a State Veteran Home due to the coronavirus (COVID-19) pandemic.
2. These instructions are also published in the VA Knowledge Management System (VAMC) Business Implementation Managers (BIMS).
3. Should you have questions regarding this memorandum, please contact (b)(6) by sending an email to (b)(6)@va.gov. This guidance will be continually reviewed and updated.

(b)(6)

for
Renee Oshinski

Attachment

Department of Veterans Affairs Medical Centers (VAMC) Business Implementation Managers (BIMS)

Overview

This article provides guidance for the Department of Veterans Affairs Medical Centers (VAMC) Business Implementation Managers (BIMS) on entering the Source of Admission Code for pandemic-related admissions from State Veterans Homes.

Systems

The following systems may be used:

- Veterans Information Systems Technology Architecture (VistA).

Source of Admission Code

If a Veteran is admitted to the medical center from a State Home, Domiciliary, Nursing Home Care, or Hospital then follow the steps below in VistA:

1. Select **Bed Control** Menu Option: admit a Patient
2. In the **Source of Admission** field, enter Code - **1L**.

Pandemic-Related Content

VAMC Enrollment and Eligibility Pandemic content can be viewed in the Knowledge Management System portal.

Resources

<https://www.nasvh.org/State-Homes/statedir.cfm>
VAMC Enrollment and Eligibility Pandemic
Bed Management Solution Icon Keys

♦ Reviewed: 04/15/2020

**DEPARTMENT OF
VETERANS AFFAIRS**

Memorandum

Date: March 30, 2020

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: Coronavirus (COVID-19) – Guidance for Urgent and Emergent Surgical Procedures

To: Network Directors (10N1-23)

Thru: Assistant Deputy Under Secretary for Health for Clinical Operations (10NC)

1. The purpose of this memorandum is to support Veterans Health Administration (VHA) facilities' decisions regarding management of urgent and emergent surgical procedures during the COVID-19 pandemic in follow-up to Deputy Under Secretary for Health for Operations and Management Memorandum dated March 15, 2020 titled, "Coronavirus (COVID-19) – Guidance for Elective Procedures."
2. The above Memorandum directed that effective March 18, 2020, VHA facilities should cease performing non-urgent elective operations to reduce elective hospitalizations, maintain Intensive Care Unit capacity, and preserve critical supplies for anticipated management of COVID-19 patients. This Memorandum clarifies that urgent and emergent operative cases should continue.
3. VHA facilities must balance care needs of Veterans with COVID-19 while providing vital services to Veterans who require emergent or urgent surgical procedures and care.
4. Procedural urgency must be determined for individual Veterans by clinicians knowledgeable about each Veteran's disease process and anticipated clinical trajectory.
5. Procedures should be prioritized for imminently life-threatening conditions, high-risk malignancies, or diseases with active symptoms that could progress to require urgent care. Low urgency procedures may be postponed to minimize risk to patients and health care teams and to conserve resources, but monitoring of selected at-risk patients should be assured.
6. Timing and priority for urgent procedures must also consider:
 - a. Facility and regional COVID-19 disease prevalence;
 - b. Resource availability (health care providers, acute inpatient or ICU beds; personal protective equipment, mechanical ventilators, blood products, etc.);
 - c. Patient risk of concurrent COVID-19 infection during recovery.
7. Clinical judgment should integrate understanding of the disease process, patient risks, and available resources to discern the urgency and appropriate timing of surgical

Page 2

Subject: Coronavirus (COVID-19) – Guidance for Urgent and Emergent Surgical Procedures

procedures. When needed, consultation regarding specific patient care decisions should include facility and VISN surgery chiefs and other clinical leaders.

8. For community guidelines, please reference:

- a. American College of Surgeons statement: <https://www.facs.org/about-acsc/covid-19/information-for-surgeons/triage>
- b. Centers for Medicare and Medicaid Services recommendations: <https://www.cms.gov/files/document/31820-cms-adult-elective-surgery-and-procedures-recommendations.pdf>

9. For questions, please contact

Surgery Office, at (b)(6)@va.gov.

(b)(6)

for
Renee Oshinski

Attachment

**Department of
Veterans Affairs****Memorandum**

Date: March 21, 2020

From: Deputy Under Secretary for Health for Operations and Management (10N)

Subj: Interim Guidance for Medical Management of Hospitalized COVID-19 Patients

To: Network Directors (10N1-23)

1. Veterans Health Administration (VHA) is dedicated to ensuring the safety of our Veterans and staff. The purpose of this memorandum is to provide guidance on medical management for patients hospitalized with COVID-19.

2. Should you have questions or comments about this interim guidance, please contact (b)(6) by sending an email to (b)(6)@va.gov.

(b)(6)

for
Renee Oshinski

Attachments

COVID-19 Communications Toolkit

VA



U.S. Department of Veterans Affairs
Veterans Health Administration

Revision 1

Date Revised: 03/06/2020

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Purpose

VHA Communications intends to assist you in communicating to your staff and patients through this evolving toolkit. As we move from focusing on containment to mitigation of this coronavirus outbreak, the information keeps evolving. This is designed to be a blueprint, not a bible.

However, there are commandments to remember (less than 10):

1. All media queries must be forwarded to VHA Communications and OPIA.
2. Any Congressional queries must be forwarded to OCLA and OPIA.
3. Any messages (internal or external) addressing possible positive cases of COVID-19 should be coordinated and approved through VHA Communications and OPIA.
4. Any operational messages (patient and employee health and safety communications, facility instructions, signage, etc.) **do not require approval**. We are glad to review them and offer another set of eyes, but you have a hospital to run. If you have a question about whether a message might go beyond “operational,” contact VHA Communications.
5. In all communications, please make sure that you protect all Veterans’ and patients’ personal information, especially health information. [VA Policy]

This document will be continually updated, corrected, revised and generally messed with, so please make sure you have the latest revision. We will provide samples, best practices and examples of COVID-19 communications that could be helpful.

Note, many of these documents are on various SharePoint sites.

Please forward what you create locally, so we can continue to replace “the best” with “even better” to share throughout the network in future revisions.

Contacts:

(b)(6)	(b)(6)	
	@va.gov	(b)(6)

(b)(6)	(b)(6)	
(b)(6)	@va.gov	(b)(6)

Important Links

Frequently Asked Questions

[COVID-19 Frequently Asked Questions – VA](#)

[COVID-19 Frequently Asked Questions -- CDC](#)

Key Reference Websites

[VHA Public Health COVID-19 Information](#)

[CDC COVID-19 Information](#)

[VHA High Consequence Infection \(COVID-19\) SharePoint](#)

Situation Summary

[CDC Situation Summary](#)

Prevention & Treatment Guidance

[CDC Prevention & Treatment](#)

Travel Information

[CDC Travel Information](#)

Long Term Care Facilities

[CDC Long-Term Care Strategies](#)

Latest EIC Message to All Employees

MESSAGE FROM THE EXECUTIVE IN CHARGE

March 05, 2020

Novel Coronavirus (COVID-19) Disease UPDATE

We continue to work closely with the Centers for Disease Control and Prevention (CDC) and other Federal agencies to monitor and respond to the current outbreak of Novel Coronavirus (COVID-19) in the United States.

VA has received its first confirmed case of a COVID-19 positive Veteran at the Palo Alto VA Medical Center. First, I want to allay fears. VA has a comprehensive plan in place to protect the health of everyone who visits or works at one of our facilities. And while we must be prepared as a health care organization, the CDC still considers COVID-19 to be a low threat to the general American public. For people in communities where the ongoing community spread of COVID-19 has been reported, the risk of exposure is elevated but still relatively low.

That said, preparation is a team approach, and everybody needs to be involved. It is imperative that all VHA employees understand and adhere to the Standard, Contact, and Airborne Precautions, which include the use of Personal Protective Equipment (PPE). Healthcare personnel evaluating or treating a patient suspected or confirmed to have a COVID-19 infection should use these precautions. In addition, it is critical that all facilities and VISNs communicate COVID-19 outbreak-related information to the Emergency Management Coordination Cell (EMCC) at

(b)(6)

@va.gov so we can maintain accurate, up-to-date information to respond to this rapidly changing situation.

All VA medical facilities are implementing screening measures for signs of respiratory illness and exposure to COVID-19. Via telehealth services, we will provide a first line of defense using virtual screening for symptoms or exposure. Onsite, we will use standardized screening questions at appointment check in and during initial clinical screening. The [High Consequence Infection \(HCI\) SharePoint](#) site has screening scripts and resources.

Prevention is the best medicine. To protect yourselves and others, wash your hands often for 20 seconds or the length of two happy birthday songs, avoid touching your face, cover coughs and sneezes, get a flu shot if you haven't already, avoid other people who are sick, and importantly, stay home if you are sick. If you notice that a fellow employee has come to work sick, encourage them to take leave. Our goal is to prevent COVID-19 infections from spreading within VA while maintaining our usual high level of care for all Veterans.

Follow CDC Guidance

People who show symptoms of COVID-19, including fever, cough, shortness of breath, or have had exposure to a confirmed case of COVID-19 should wear a facemask and isolate themselves from others.

Currently, the CDC does not recommend that people who are well wear PPE (e.g., facemasks) to protect themselves from COVID-19 and other respiratory diseases in the community.

Please know that PPE does not fully protect a healthy person from becoming infected. Instead it is for use by people with symptoms to attempt to prevent the spread of infection.

Stay Informed

COVID-19 specific guidance developed by VA's Emergency Management Coordination Cell (EMCC) is available on the [HCI SharePoint](#) site. The site includes information on prevention, screening/diagnosis/treatment, Infection Control, Communications, Administration, and a series of frequently asked questions (FAQs).

Links to the CDC Website and resources are also on the SharePoint site. You can also visit [VA's Public Health Website](#) for general updates to the public.

It is important for us all to work together to protect ourselves from infection, keep our facilities clean, follow CDC guidelines to evaluate and care for Veterans with potential exposure and symptoms of respiratory illness, and maintain our focus on doing our jobs to the best of our abilities.

Richard A. Stone, MD
Executive In Charge, VHA

Travel Message from VA Secretary

A MESSAGE FROM THE SECRETARY

Important Information Regarding the Novel Coronavirus (COVID-19)

As the expanding global outbreak of COVID-19 continues, your health and safety as members of the Department of Veterans Affairs (VA) workforce remains a top priority.

Although the risk of contracting COVID-19 remains low, employees should be proactive in reducing the spread of disease by taking preventative actions, including:

- Cover your mouth and nose with a tissue when you cough or sneeze.
- Wash your hands often with soapy water for at least 20 seconds.
- Use alcohol-based hand sanitizer (at least 60% alcohol) if soap and water are not available.
- Clean and disinfect frequently touched objects and surfaces.
- Do not touch your eyes, nose, or mouth with unwashed hands.
- Stay home when you are sick.

Information about COVID-19 is available on the VHA High Consequence Infection [SharePoint](#) site. The site includes information on prevention, screening/diagnosis/ treatment, infection control, communications, administration, and a series of frequently asked questions. You can also visit [VA's Public Health Website](#) for general updates to the public. The Centers for Disease Control and Prevention (CDC) continues to provide [updates](#) and insight from medical professionals about how to protect you and your loved ones from COVID-19.

The VA Office of the Chief Human Capital Officer, in collaboration with Office of Personnel Management, has issued several Bulletins on HR topics that can be found on the [HR Emergency Resource Center website](#). If you have questions regarding leave or telework flexibilities available in dealing with COVID-19, please speak with your supervisor or human resources office to discuss your specific concerns.

VA is monitoring the situation and will share updates as the situation evolves. We remain deeply appreciative of your continued service to our Veterans, the Department, and the Nation.

Robert L. Wilkie

Congressional Messages

**Veterans Health Administration
Novel Coronavirus (COVID-19)
Congressional One-Pager
Current as of March 4, 2020**

The Veterans Health Administration (VHA) is working closely with the Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS) and other Federal agencies to monitor and respond to the current outbreak of Novel Coronavirus (COVID-19) in the United States. VHA is operating in accordance with CDC guidance and actively participating in response efforts in local communities to address the outbreak.

VHA Actions

VHA has a comprehensive plan in place to protect the health of everyone who visits or works at one of our facilities. The Emergency Management Coordination Cell (EMCC) has been activated and is working diligently to respond to this rapidly changing situation. Supply chain measures are in place, negative airflow beds are available across VHA facilities, and testing kits have been made available.

VHA is reinforcing adherence to the Standard, Contact, and Airborne Precautions, which include the use of Personal Protective Equipment (PPE). Healthcare personnel evaluating or treating a patient suspected or confirmed to have a COVID-19 infection have been directed to use these precautions.

VHA is conducting frequent, repeated communications with employees on the importance of common sense behaviors for reducing the spread of illness, including washing hands for at least 20 seconds, avoiding touching their faces, covering coughs and sneezes, getting vaccinated against the flu, avoiding other people who are sick, and encouraging employees to stay home if they are sick.

In addition, VHA is heavily encouraging Veterans to call their local medical center before visiting the facility and telling them to consider using [VA's telehealth and virtual care options](#) like VA Video Connect. VA's telehealth providers can evaluate their symptoms and provide a diagnosis and comprehensive care.

Screening at VHA Facilities

All VA medical facilities are in the initial stages of implementing screening measures for signs of respiratory illness and exposure to COVID-19. Via telehealth services, VHA will provide a first line of defense using virtual screening for symptoms or exposure. Standardized screening questions are in place for all administrative call centers and Clinical Contact Centers (CCC). Onsite at medical facilities, VHA is instituting

screening at all points of entry and following escalation pathways for positive screening. Facilities will use standardized screening questions at appointment check in and during initial clinical screening. In addition, facilities will use a two-tiered system with an “active” COVID-19 zone and a “passive” zone for standard care unrelated to COVID-19.

Patient Privacy

As a reminder, VHA cannot release Personally Identifying Information (PII) about patients, in accordance with the Health Insurance Portability and Accountability Act (HIPAA).

Visit [VA's Public Health Website](#) for the latest updates.

Further Detail on Screening (March 5 DUSHOM Message)

The Department of Veterans Affairs (VA) and Veterans Integrated Service Network (VISN) _____ are paying special attention to Veteran health due to the COVID-19 (Novel Coronavirus) outbreak and escalation. This effort is coordinated at the VA, Veterans Health Administration, and VISN levels to impact operations in all our facilities. VA is working closely with the Centers for Disease Control and other federal agencies, as you are already aware, to address the outbreak. Our staff is taking precautions to safeguard everyone in VA facilities.

This morning, VHA's Executive in Charge, Dr. Richard Stone, directed VHA facilities to conduct a screening process, with restricted access, to mitigate the risk of COVID-19. Leadership at our medical centers and clinics are assuring that staff minimize entry to as few entryways as necessary, and staff them for controlled access, based on a screening process.

The screening consists of three questions:

1. Do you have a fever? Do you have a worsening cough or flu-like symptoms?
2. Have you traveled to China, Japan, Italy, Iran or South Korea in the last 14 days?
3. Have you been in close contact with someone, including health care workers, confirmed to have the coronavirus disease?

Patients and staff are being advised of proper protocols to address the virus through signage, electronic messaging in facilities, on the web and through social media. Staff have been provided scripts for screening visitors and for handling patients who answer screening questions affirmatively.

A process is in place to report and track Veterans and staff who screen positively for COVID-19. Those individuals will also be taken through a complete protocol that helps them and protects staff and others. Staff have been advised of the risks and the steps to take if they find themselves feeling affected.

Messaging about COVID-19 Positive Patients/Employees

These are template messaging that will need to be adjusted per situation and **approved through VHA Communications and OPIA.**

Positive

Puget Sound

On March 5, 2020, VA Puget Sound Health Care System evaluated and tested a Veteran for Coronavirus (COVID-19). VA Puget Sound was able to discharge the Veteran home based on clinical status with instructions for home isolation and self-care according to Centers for Disease Control and Prevention guidelines. After receiving the presumptive positive COVID-19 test results, VA Puget Sound is collaborating with the local health jurisdiction for monitoring.

The risk of transmission to other patients and staff remains low, as the Veteran is in isolation at home and VA continues to follow Centers for Disease Control guidelines in treating the patient.

VA is screening Veterans and staff who present with symptoms of fever, cough, and shortness of breath who meet the CDC criteria for evaluation of COVID-19 infection. Per CDC guidance and VA protocols, individuals known to be at risk for a COVID-19 infection are immediately isolated to prevent potential spread to others.

Veterans and staff are encouraged to take every day preventative actions to avoid being exposed to the virus:

- Wash your hands often with soap and water for at least 20 seconds.
- Avoid touching your eyes, nose and mouth with unwashed hands.
- Stay home if you are sick or becoming sick.
- Use an alcohol-based hand sanitizer that contains at least 60% alcohol.
- If you have symptoms or have been exposed to someone with symptoms, call the VA before going to the facility.

For more information about the Coronavirus, please visit:
<https://www.cdc.gov/coronavirus/2019-ncov/index.html>.

Palo Alto

A Veteran who has tested positive for Coronavirus (COVID-19) was transferred to VA Palo Alto Health Care System (VAPAHCS) for treatment Monday, March 2, 2020. This is the first confirmed case to be treated at a VA health care facility.

Presumptively Test Positive

Persons with a positive test performed locally without CDC lab confirmation

<https://www.cdc.gov/coronavirus/2019-ncov/php/reporting-pui.html>

Southern Nevada

A Veteran inpatient presumptively tested positive for Coronavirus (COVID-19) March 4 at the VA Southern Nevada Healthcare System. The facility is awaiting confirmatory results from the Centers for Disease Control.

The risk of transmission to other patients and staff remains low, as the Veteran is being cared for in isolation by staff who are specially trained on the latest Centers for Disease Control treatment guidelines and utilizing personal protective equipment and infection control techniques.

VA is screening Veterans and staff who present with symptoms of fever, cough, and shortness of breath who meet the CDC criteria for evaluation of COVID-19 infection. Per CDC guidance and VA protocols, individuals known to be at risk for a COVID-19 infection are immediately isolated to prevent potential spread to others.

Veterans and staff are encouraged to take every day preventative actions to avoid being exposed to the virus:

- Wash your hands often with soap and water for at least 20 seconds.
- Avoid touching your eyes, nose and mouth with unwashed hands.
- Stay home if you are sick or becoming sick.
- Use an alcohol-based hand sanitizer that contains at least 60% alcohol.
- If you have symptoms or have been exposed to someone with symptoms, call the VA before going to the facility.

For more information about the Coronavirus, please visit:

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>.

Not Confirmed or Presumed

We only send releases for presumptive positive or positive COVID-19 infection results. We don't send releases for suspected cases or "persons under investigation."

All Employee Messaging

Goal: Provide employee update timely notifications of presumptive and confirmed cases

Key messages:

- VA is committed to protecting our staff and uninfected patients, limiting the spread of COVID-19 transmission
- Employees are all bound by HIPAA regulations (Health Insurance Portability and Accountability Act) and must respect patient privacy
- Quarantine is for people who could have been exposed and are waiting to see if they become sick; Isolation is for someone who is already sick
- Each facility has processes/procedures in place to screen for signs of respiratory illness and to ensure inventory of personal protective equipment (PPE)
- Staff who feel sick with fever or cold/flu symptoms should call in sick and contact their provider; If at work, staff should put on a mask and arrange with their supervisor to go home and call their provider
- Continue to practice good baseline hand hygiene and use PPE as indicated.

Samples:

 All Employee Message Template_M	 All Employee Message Template 2.	 All Employee Message Template 3.	 Adobe Acrobat Document	 COVID-19 Employee Education_update.ppt
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Signage

Goal: Inform internal audience of extra safety precautions to mitigate spreading of coronavirus

Samples:

 ~WRO1510.doc	 Coronavirus Alert Poster 2-28-2020 Veri	 Coronavirus Alert Poster 2-25-2020a.p	 Coronavirus Alert Poster 2-29-2020 Veri	
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Messages to Veterans

Goal: Inform Veterans of extra safety precautions to mitigate spreading of coronavirus through GovDelivery or other medium

Samples:

 Adobe Acrobat PDFXML Document				
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VETResources Messages:

02/05/2020: <https://content.govdelivery.com/accounts/USVA/bulletins/279037e>

02/26/2020: <https://content.govdelivery.com/accounts/USVA/bulletins/27c83fd>

Social Media

Blog:

VA is ready for coronavirus—and working to protect you

Planning to visit a VA health care facility? Here's what to expect

By now, you've heard about the coronavirus disease, known as COVID-19, that's causing respiratory illness around the world.

Fortunately, VA is ready. We have plans in place to protect everyone who gets care, visits or works at one of our facilities.

For Veterans, families and visitors, that means your VA visit will be different for a while. If you're a Veteran seeking medical care, call before visiting—even if you already have an appointment. Or you can sign in to MyHealtheVet and send a secure message. You may be able to get diagnosed and receive care through VA telehealth without having to come in at all.

If you do visit a VA hospital, clinic, community living center or other health care facility, you'll be met at the entrance by a VA staff. They will greet you and ask three screening questions:

1. Do you have a fever? Do you have a worsening cough or flu-like symptoms?
2. Have you traveled to China, Japan, Italy, Iran or South Korea in the last 14 days?
3. Have you been in close contact with someone, including health care workers, confirmed to have the coronavirus disease?

Depending on your answers, a VA health care professional will assist you on the next steps of your visit.

If you're a Veteran coming in for an appointment, plan to leave home a little earlier than usual to allow time for the screening.

We're doing all we can to make sure everyone in every VA facility—patients, families, visitors, staff and anyone else—stays as safe as possible during this situation. For the latest VA updates on the coronavirus and common-sense tips on preventing the spread of disease, visit www.publichealth.va.gov.

VANTAGE Blog published on January 31 and continually updated since:

<https://www.blogs.va.gov/VAntage/70999/cdc-coronavirus-information-and-resources/>

Facebook

Veterans: VA is ready for coronavirus—which means in order to protect you, your family and every Veteran, your VA visit will be different from what you're used to. If you're coming in for a health care visit, stop and call first, or send a secure message through MyHealtheVet—even if you have an appointment. You may be able to get diagnosed and receive care through VA telehealth without having to leave home. If you do visit, plan to get there earlier than usual to answer three simple screening questions. It's for everyone's safety! Find out more: (blog URL)

Twitter

#Veterans: #VA is ready for coronavirus, w/ changes that affect you. Before your appointment, call first or message your care team—you might not have to leave home. If you do need to visit a VA facility, we're doing things to protect you & your family. Find out more: (blog URL)

Both Facebook and Twitter

1. Stay informed about coronavirus. VA is prepared to protect the health and safety of staff and Veterans in our care, and is taking steps to curb the spread of respiratory illness in our facilities. <https://www.blogs.va.gov/VAntage/72072/coronavirus-be-informed-and-call-your-provider-if-symptoms-develop/>
2. Protect yourself and your loved ones against respiratory illness: Get a flu shot. Cover your coughs and sneezes. Wash hands often with soap for 20 seconds. Avoid touching your eyes, nose and mouth. Stay home if you're sick, and avoid others who are sick. <https://www.publichealth.va.gov/n-coronavirus/index.asp>
3. Your best defense against coronavirus: keep doing what you're doing to stay healthy. That means avoiding the flu. <https://www.myhealth.va.gov/mhv-portal-web/ss20200211-coronavirus>

Photos:

If you need high resolution photographs, contact [VHA Digital Media](#):

