



Veterans Health  
Administration

# Patient Safety Notice

Issued by VHA National Center for Patient Safety

**N20-06 REVISED**

**April 3, 2020**

---

**ITEM:**

VHA Personal Protective Equipment (PPE) strategies in response to COVID-19

**AFFECTED PRODUCTS:**

Various PPE

- Eye protection (e.g., goggles, face shields)
- Gowns
- Facemasks
- N95 Respirators, Elastomeric Respirators, Powered Air-Purifying Respirators (PAPRs)
- Gloves

NOTE: Scrubs are not considered PPE and therefore are not addressed in this document.

**GENERAL INFORMATION:**

As cases of COVID-19 have increased in the United States, VA medical centers will care for more and more Veterans with the virus. It is vital for staff to keep themselves safe and to protect uninfected Veterans from becoming infected.

The VHA National Center for Patient Safety collaborated with the National Program Office for Sterile Processing (NPOSP); National Infectious Diseases Service (NIDS); Office of Nursing Services (ONS); High Reliability Systems and Consultation (HRSC); Innovation Ecosystem (IE); Occupational Safety, Health (OSH), and Green Environmental Management System (GEMS); Office of Public Health (OPH); Food and Drug Administration (FDA); and other VHA subject matter experts to investigate safe use of PPE and strategies to conserve PPE during the COVID-19 pandemic. VHA facilities may need to employ contingency and crisis strategies at different times based on asynchronous spread of the virus throughout the country.

The Centers for Disease Control and Prevention (CDC) is encouraging health care systems to implement strategies to conserve supplies. It is important that facilities prepare in advance to anticipate potential shortages. Facilities should assess the capacity status of their facility and anticipate the need for activating contingency and/or crisis capacity strategies which require conservation of PPE. It may be helpful to utilize the CDC PPE Burn Rate Calculator located at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>.

The CDC describes three levels of capacities:

- **Conventional Capacity:** Strategies that consist of providing patient care without any change in daily practices.
- **Contingency Capacity:** Strategies that may change daily standard practices but may not have any significant impact on the care delivered to the patient or the safety of health care personnel (HCP). These practices may be used temporarily during periods of **expected** shortages.
- **Crisis Capacity:** Strategies that are not commensurate with conventional U.S. standards of care. These measures, or a combination of these measures, may need to be considered during periods of **known** shortages.

N95 or equivalent respirators and all PPE are to be allocated and prioritized, according to local facility decision, based on capacity strategy status.

The following information highlights VHACO guidance for some common COVID-19-associated PPE concerns.

**1. What types of PPE are recommended to protect against COVID-19?**

VHA staff should adhere to the PPE recommendations outlined by the CDC and follow infection prevention and control procedures as outlined for Standard and Transmission-Based Precautions:

- Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007): <https://www.cdc.gov/infectioncontrol/pdf/guidelines/isolation-guidelines-H.pdf>
- 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>

In general, the CDC recommends:

- **Facemask, eye protection, gown, and gloves** when providing routine care to known or suspected COVID-19 patients
- **N95 or equivalent respirator, eye protection, gown, and gloves** when performing aerosol generating procedures (AGP) on known or suspected COVID-19 patients
- **N95 or equivalent (or facemask if a respirator is not available), eye protection, gloves, and a gown** when collecting diagnostic respiratory specimens/nasopharyngeal (NP) specimens. Specimen collection should be performed in a normal examination room with the door closed. If possible, NP collection outdoors is recommended.

Specific CDC guidance for when to use a facemask, based upon distance from a patient with suspected or known COVID-19, can be found at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/crisis-alternate-strategies.html>.

**2. What precautions should be taken when screening potential COVID-19 patients?**

VA health care facility entrance screening guidelines to prevent transmission of COVID-19, adapted from the CDC guidance, include the following recommendations:

- PPE should be designated according to the level of contact. If a staff member must be within 6 feet of the person being screened, optimal PPE may include a facemask, and/or eye protection and gloves, depending on the proximity and anticipated contact. A gown could be considered if extensive contact with the person being screened is anticipated.
- Physical separation should be maintained between the screener and person being screened. For example, a desk, podium, table, or glass or plastic partition/shield/window can be used.
- Visual cues should be used to mark a distance of 6 feet or more, and signage should remind of adherence to social distancing.
- If weather and facility layout permit, screen in outdoor settings to maximize air flow. Note that outdoor environments may affect the accuracy of infrared temporal thermometers.
- Screening staff should make interactions as brief as possible.
- If a temperature is measured as part of the screening process (rather than verbal report of temperature), minimize contact with the person being screened.

Additional recommendations to consider for screening:

- Utilize separate entrances for screening employees reporting for duty than for screening patients seeking entry into the facility.
- Post signage outside and within the facility for entry/exit and flow throughout the facility. Cordon off hallways with tape and/or movable signage to minimize traffic flow.
- Use portable handwashing stations (e.g., pump action) at entrances for persons to use for handwashing after screening and before entrance into the facility, if available.

The CDC provides specific guidance about staff involved in screening of potential COVID-19 cases for dialysis patients, which may also be appropriate for other patient and staff screenings:

<https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/dialysis/screening.html>.

The CDC also provides information related to screening at the following links:

- Steps Healthcare Facilities Can Take Now to Prepare for Coronavirus Disease 2019 (COVID-19) <https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/steps-to-prepare.html>

- Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease (COVID-19) <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>

### 3. *When should a staff member change PPE?*

Under normal circumstances, PPE should be changed frequently. However, shortages resulting from COVID-19 may require temporary changes in practice to incorporate extended use and limited reuse of PPE. Note the following definitions:

- **Extended use** is the process of wearing the same piece of PPE for multiple encounters with different patients without removing the product(s) between patients.
- **Limited reuse** is the process of using the same piece of PPE for multiple encounters with different patients but removing it after each encounter.

Extended use is preferred over limited reuse. **Extended use and limited reuse of PPE should only be applied when patients with similar diagnoses are cohorted together, and any PPE that is visibly soiled or damaged should be replaced after the patient encounter.** Many PPE items can be considered for extended use strategies.

Please refer to the following CDC links for guidance regarding optimizing PPE. Some of this information is also summarized in Tables 1 and 2 below.

- Frequently Asked Questions about Personal Protective Equipment: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirator-use-faq.html>
- Strategies for Optimizing the Supply of Facemasks: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html>
- Strategies for Optimizing the Supply of Eye Protection: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>
- Strategies for Optimizing the Supply of Gowns: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html>
- Strategies for Optimizing the Supply of N95 Respirators: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html>

VHACO does not recommend reuse of single use gowns or gloves due to the potential for cross contamination and their inability to be reprocessed.

Full reuse (with appropriate disinfection or reprocessing) may be reasonable for some types of PPE, if deemed necessary. Engineering and administrative controls, such as cohorting patients with a COVID-19 diagnosis in one care area, should be used to optimize the supply of PPE.

Potential PPE conservation strategies and when they should be considered for the COVID-19 pandemic, according to CDC and FDA recommendations, are summarized in Table 1 and can be found at <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html> and <https://www.fda.gov/medical-devices/letters-health-care-providers/medical-glove-conservation-strategies-letter-health-care-providers>.

**Table 1.** CDC and FDA recommendations for Conventional, Contingency, and Crisis PPE strategies

	<b>Extended Use*</b> <b>(for cohorted patients)</b>	<b>Limited Reuse*</b> <b>(for cohorted patients)</b>	<b>Disinfection &amp; Reprocessing</b>
<b>N95 Respirator</b>	Contingency	Crisis	Crisis**
<b>Facemask</b>	Contingency	Crisis	†
<b>Reusable Eye Protection</b>	Contingency	†	Conventional
<b>Disposable Eye Protection</b>	Contingency	†	Crisis
<b>Single-use gowns</b>	Crisis	†	†
<b>Reusable gowns</b>	Crisis	Crisis	Conventional
<b>Gloves</b>	Crisis***	†	†

\* **Extended use and limited reuse of PPE should only be applied when patients with similar diagnoses are cohorted together, and any PPE that is visibly soiled or damaged should be replaced after the patient encounter.**

\*\* Decontamination of N95 respirators for reuse using the Battelle CCDS Critical Care Decontamination System™ was granted an Emergency Use Authorization (EUA) from the FDA. CDC has additional recommendations on mask decontamination and reuse in a crisis setting here: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html>

\*\*\* CDC does not provide recommendations for extended use or reuse of gloves. This table shows FDA strategies for gloves.

† No CDC or FDA guidance identified at this time.

**4. In case of a PPE shortage, are there acceptable substitutes?**

There are several alternative PPE options available to provide transmission-based precautions. The information in Table 2 below was identified from CDC, FDA, and OSHA/NIOSH guidance documents.

**Table 2.** CDC, FDA, and OSHA/NIOSH recommendations for Conventional, Contingency, and Crisis PPE alternatives

PPE Device	Alternatives		
	Conventional	Contingency	Crisis
<p><b>N95 respirators</b>  <a href="https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html">https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html</a></p>	<ul style="list-style-type: none"> <li>Respirators with other filtration classes (P95, R95, N99, P99, R99, N100, P100, R100)</li> <li>Powered air purifying respirators (PAPR)</li> <li>Elastomeric respirators</li> </ul>	<ul style="list-style-type: none"> <li>Use of N95 respirators beyond the manufacturer-designated shelf life for training and fit testing</li> </ul>	<ul style="list-style-type: none"> <li>Use of respirators approved under standards used in other countries that are similar to NIOSH-approved N95 respirators</li> </ul>
<p><b>Gowns</b>  <a href="https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html">https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html</a></p>	<ul style="list-style-type: none"> <li>Isolation gown alternatives that offer equivalent or higher protection, such as surgical gowns</li> </ul>	<ul style="list-style-type: none"> <li>Cloth isolation gowns (with routine inspection and laundering)</li> <li>Coveralls</li> <li>Expired gowns</li> <li>Gowns or coveralls conforming to international standards</li> </ul>	<p><i>If there are no gowns left, can consider:</i></p> <ul style="list-style-type: none"> <li>Disposable aprons</li> <li>Patient gowns</li> <li>Laboratory coats</li> <li>Clothing combinations to cover skin</li> </ul>
<p><b>Eye protection</b>  <a href="https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html">https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html</a></p>	<ul style="list-style-type: none"> <li>Approved goggles</li> <li>Approved face shields</li> </ul>	<ul style="list-style-type: none"> <li>PAPR</li> <li>Full face elastomeric respirators</li> </ul>	<ul style="list-style-type: none"> <li>Use of eye wear beyond shelf life</li> <li>Safety glasses/trauma glasses with extensions to cover the side of the eyes</li> </ul>
<p><b>Gloves</b></p> <p><b>NOTE:</b> CDC does not recommend alternatives to gloves. FDA considerations are provided in this table.  <a href="https://www.fda.gov/medical-devices/letters-health-care-providers/medical-glove-conservation-strategies-letter-health-care-providers">https://www.fda.gov/medical-devices/letters-health-care-providers/medical-glove-conservation-strategies-letter-health-care-providers</a></p>	<ul style="list-style-type: none"> <li>Nonsterile disposable patient examination gloves</li> </ul>	<ul style="list-style-type: none"> <li>For training or demonstration in which broad barrier protection is not needed, use gloves that are beyond the manufacturer-designated shelf life, if available.</li> </ul>	<ul style="list-style-type: none"> <li>Use medical gloves beyond the manufacturer-designated shelf life in low risk settings</li> <li>Consider radiographic protective gloves or radiation attenuating surgeon’s gloves that are clean and offer fluid barrier protection.</li> <li>Consider using non-medical gloves such as those used for food service, embalming, cleaning, or other industrial-grade gloves that most closely align with the ASTM standards for medical gloves as outlined in the FDA’s Medical Glove Guidance Manual.</li> </ul>

**5. *Is it acceptable to use homemade, modified, counterfeit, brought-from-home, or 3D printed PPE?***

VHACO strongly discourages use of homemade, modified, or counterfeit PPE unless no other options are available. The effectiveness of homemade, modified, or counterfeit PPE cannot be determined, and some options may introduce additional hazards. There is currently no evidence to support the use of blue surgical wrap as a material for homemade masks. If a homemade, modified, or counterfeit mask is used, it should be used with caution and should be used in combination with a face shield that covers the entire front (that extends to the chin or below) and sides of the face. CDC guidance for homemade masks is located at the following link:

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

Personal protective equipment, such as respirators, brought from home may be preferable to use instead of a homemade mask. The Joint Commission has released guidance for HCP which states “No Joint Commission standards or other Joint Commission requirements prohibit staff from using PPE brought from home.” <https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/infection-prevention-and-hai/covid19/public-statement-on-masks-from-home.pdf>.

VHA is currently working with the FDA and the National Institutes of Health (NIH) to approve methods of rapidly manufacturing PPE (i.e., 3D printing). There are currently two designs for 3D printed faces shields that have been clinically cleared for production by VA and FDA, available on the NIH 3D print exchange website <https://3dprint.nih.gov/discover/face-shield>. All fabrication of PPE for VHA use should be coordinated through VHA Logistics. Fabrication should not be performed by individuals or outside companies without Logistics authorization.

**6. *Can N95 respirators be reprocessed?***

Use of existing inventory, including stockpiled and expired product, extended use, and all contingency options, should be considered prior to attempting to reprocess or disinfect N95 respirators for reuse. However, facilities should not wait until stock levels are exhausted to start considering reprocessing as a crisis strategy. If reprocessing and decontamination of N95 masks is considered, a plan should be in place for safe collection and storage of these masks.

The FDA granted an Emergency Use Authorization (EUA) from the FDA for use of the Battelle CCDS Critical Care Decontamination System™ to reprocess N95 respirators. The EUA allows for one respirator to be reprocessed up to 20 times. Additional information about Battelle is available here: <https://www.battelle.org/inb/battelle-critical-care-decontamination-system-for-covid19>.

CDC has issued additional crisis strategy recommendations regarding reprocessing of N95 respirators: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html>.

This is a rapidly changing environment with additional strategies and processes undergoing testing and approval processes. Facilities should check CDC and FDA sites regularly for updated information. For updates on current FDA EUAs, check the following link: <https://www.fda.gov/medical->

[devices/emergency-situations-medical-devices/emergency-use-authorizations](#). Additional information, approved methods, and EUAs may be available soon.

Please note that many methods of decontamination may affect the integrity and filtering performance of filtering facepiece respirators (FFR). Use of liquid germicides such as bleach and other cleaners may leave toxic particulates that pose a health risk to the wearer.

**7. *Is there an approved method for disinfecting/decontaminating other PPE for reuse?***

Information is available that supports disinfection/decontamination of some other types of PPE.

**Gowns:** Single use gowns should not be disinfected; however, reusable gowns can undergo laundering and sterilization according to AAMI ST65. Laundering alone is adequate for non-sterile, reusable gowns.

**Eye protection:** Reusable eye protection should be disinfected per the manufacturer's recommendations if available. CDC has recommendations for crisis strategy reprocessing with a neutral disinfectant, including guidance for when manufacturer instructions for use are not available: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>.

**Facemasks:** VHACO is not aware of any approved methods for disinfection of surgical masks, and some proposed methods may cause harm to providers. Implementation of crisis capacity strategies may be necessary.

**Gloves:** Gloves are not recommended for reuse.

**8. *Are there possible but unapproved methods for disinfecting/decontaminating PPE?***

There are several disinfection techniques that have been proposed and are not approved for use, such as use of UVC and dry heat. Some of these are included in the CDC discussion of crisis strategies for decontamination, which is available here: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html>.

The FDA granted an EUA for use of the Battelle CCDS Critical Care Decontamination System™ to reprocess N95 masks and is working on EUAs for other methods of decontamination.

Facilities should pursue all contingency strategies before considering use of crisis strategies such as N95 decontamination for reuse.

**9. *What regulations or barriers exist regarding PPE conservation strategies?***

Oversight organizations have eased regulatory barriers for the duration of the COVID-19 pandemic. For example, the FDA has issued numerous EUAs to facilitate use of non-NIOSH respirators, expired respirators, and to authorize reprocessing of N95 respirators through Battelle, and they are actively working on additional EUAs for reprocessing of N95 respirators. The FDA is also working closely with VHA and NIH to approve designs for 3D printed PPE. Additionally, OSHA has temporarily lifted the

annual fit testing requirement for N95 respirators. The Joint Commission issued a statement in support of allowing staff to bring their own masks or respirators to wear at work when their health care organizations are not able to provide adequate supply: [https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/infection-prevention-and-hai/covid19/public\\_statement\\_on\\_masks\\_from\\_home.pdf](https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/infection-prevention-and-hai/covid19/public_statement_on_masks_from_home.pdf).

#### RECOMMENDED ACTIONS:

1. By Close of Business (COB) April 6, 2020, the **Patient Safety Manager** should share this REVISED Patient Safety Notice with their facility leadership, and the **Patient Safety Officer** should share this with their VISN leadership.
2. By COB April 8, 2020, the **Associate Director, or equivalent**, should work with facility leadership and facility chiefs of service to develop a PPE utilization plan. The plan should incorporate strategies for daily status updates (Conventional, Contingency, and Crisis), review of PPE par levels, determination of PPE usage/burn rate, and review of current conservation strategies in place (e.g., extended use, limited reuse).
3. By COB April 15, 2020, 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:

1. Centers for Disease Control and Prevention. Strategies for Optimizing the Supply of PPE. April 2, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html>. Accessed April 3, 2020.
2. Centers for Disease Control and Prevention. Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings (2007) Last updated July 2019. Available at: <https://www.cdc.gov/infectioncontrol/pdf/guidelines/isolation-guidelines-H.pdf>. Accessed April 3, 2020.
3. Centers for Disease Control and Prevention. Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings. April 1, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>. Accessed April 3, 2020.
4. Centers for Disease Control and Prevention. Screening and Triage at Intake. March 25, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/dialysis/screening.html>. Accessed April 3, 2020.
5. Centers for Disease Control and Prevention. Steps Healthcare Facilities Can Take Now to Prepare for Coronavirus Disease 2019 (COVID-19). March 20, 2020. Available at:

<https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/steps-to-prepare.html>.

Accessed April 3, 2020.

6. Centers for Disease Control and Prevention. Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease (COVID-19). March 7, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>. Accessed April 3, 2020.
7. Centers for Disease Control and Prevention. Strategies for Optimizing the Supply of N95 Respirators: Crisis/Alternate Strategies. March 17, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/crisis-alternate-strategies.html>. Accessed April 3, 2020.
8. Centers for Disease Control and Prevention. Decontamination and Reuse of Filtering Facepiece Respirators using Contingency and Crisis Capacity Strategies. April 1, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html>. Accessed April 3, 2020.
9. Centers for Disease Control and Prevention. Frequently Asked Questions about Personal Protective Equipment. March 14, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirator-use-faq.html>. Accessed April 3, 2020.
10. Centers for Disease Control and Prevention. Strategies for Optimizing the Supply of Facemasks. March 17, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/face-masks.html>. Accessed April 3, 2020.
11. Centers for Disease Control and Prevention. Strategies for Optimizing the Supply of Eye Protection. March 17, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/eye-protection.html>. Accessed April 3, 2020.
12. Centers for Disease Control and Prevention. Strategies for Optimizing the Supply of Gowns. March 17, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/isolation-gowns.html>. Accessed April 3, 2020.
13. Centers for Disease Control and Prevention. Strategies for Optimizing the Supply of N95 Respirators. February 29, 2020. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html>. Accessed April 3, 2020.
14. Occupational Safety and Health Administration. Guidance on Preparing Workplaces for COVID-19. March 2020. Available at: <https://www.osha.gov/Publications/OSHA3990.pdf>. Accessed March 30, 2020.

15. The Joint Commission. Coronavirus (COVID-19). 2020. Available at: <https://www.jointcommission.org/en/covid-19/>. Accessed March 30, 2020.
16. The Joint Commission. Joint Commission Statement on Use of Face Masks Brought From Home. March 31, 2020. Available at: [https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/infection-prevention-and-hai/covid19/public\\_statement\\_on\\_masks\\_from\\_home.pdf](https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/infection-prevention-and-hai/covid19/public_statement_on_masks_from_home.pdf). Accessed April 1, 2020.
17. U.S. Food and Drug Administration. Medical Glove Conservation Strategies: Letter to Health Care Providers. March 20, 2020. Available at: [https://www.fda.gov/medical-devices/letters-health-care-providers/medical-glove-conservation-strategies-letter-health-care-providers?utm\\_campaign=2020-%2003-20%20LHCP%20Medical%20Glove%20Conservation&utm\\_medium=email&utm\\_source=Eloqua.%20Accessed%20March%2024,%202020](https://www.fda.gov/medical-devices/letters-health-care-providers/medical-glove-conservation-strategies-letter-health-care-providers?utm_campaign=2020-%2003-20%20LHCP%20Medical%20Glove%20Conservation&utm_medium=email&utm_source=Eloqua.%20Accessed%20March%2024,%202020). Accessed April 3, 2020.
18. Battelle. COVID-19: Deploying a Critical New PPE Decontamination System. CCDS™ Personal Protective Equipment (PPE) decontamination for reuse. March 28, 2020. Available at: <https://inside.battelle.org/blog-details/covid-19-deploying-a-critical-new-ppe-decontamination-system>. Accessed April 3, 2020.
19. U.S. Department Health and Human Services- National Institutes of Health. NIH 3D Print Exchange. Available at: <https://3dprint.nih.gov/discover/face-shield>. Accessed April 3, 2020.

**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 us of additional issues, or have solutions that might be useful for other VHA facilities, please contact [NCPS@va.gov](mailto:NCPS@va.gov) or 734-930-5890.