



DEPARTMENT OF VETERANS AFFAIRS  
**OFFICE OF INSPECTOR GENERAL**

*Office of Audits and Evaluations*

VETERANS HEALTH ADMINISTRATION

Use and Oversight of the  
Emergency Caches Were  
Limited during the First  
Wave of the COVID-19  
Pandemic

REVIEW

REPORT #20-03326-124

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## Executive Summary

The COVID-19 pandemic has had a major impact on VA's ability to carry out its missions of providing health care for veterans through the Veterans Health Administration (VHA), and for nonveterans from local communities when needed.<sup>1</sup> The pandemic has increased veterans' need for healthcare services while disrupting the national supply of personal protective equipment that healthcare workers require when treating veterans. To cope with the challenges, VA created and has followed a COVID-19 response plan, which includes drawing on emergency caches (stored reserves) at medical facilities nationwide to address shortages of drugs and medical supplies.<sup>2</sup>

VA established the emergency cache program in 2002 following the September 11, 2001, attacks. The program was designed to make drugs and medical supplies available for treating veterans, VA employees, and civilians in the immediate aftermath of a local mass casualty event or other public health emergency—including a pandemic. The 144 caches were valued at about \$34 million as of January 2021.<sup>3</sup> They house a standard supply of 29 drugs and 34 medical supplies, including some personal protective equipment.

The VA Office of Inspector General (OIG) conducted this review to determine how effectively VA managed its emergency caches during the first wave of the COVID-19 pandemic, which emerged in the United States in early 2020. Specifically, the team examined to what degree VA used cache contents and whether the caches were ready to activate. This is an area of particular concern given a 2018 OIG audit of VA's management of the emergency cache program that as part of its findings determined that not all caches were ready to activate if needed because expired or missing drugs hindered the mission readiness of the caches.<sup>4</sup>

### What This Review Found

Use and oversight of the emergency caches were limited during the first wave of the pandemic. Medical facility directors, who were usually authorized to mobilize their caches, were no longer

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<sup>1</sup> VHA, "Coronavirus Disease 2019 (COVID-19) Response Report," October 27, 2020. VA's fourth mission includes supporting the Department of Defense, the Public Health Service, and other entities such as state governments during times of national emergency.

<sup>2</sup> VHA, Office of Emergency Management, "COVID-19 Response Plan, Incident-specific Annex to the VHA High Consequence Infection (HCI) Base Plan," ver. 1.6, March 23, 2020.

<sup>3</sup> As of July 2020, there were 144 stocked caches: 94 large and 50 small caches. One medical facility in each Veterans Integrated Service Network also carries two drugs used to treat medical needs arising from a nuclear disaster. These drugs, and additional Tamiflu maintained by the cache program, had a value of about \$96 million as of January 2021.

<sup>4</sup> VA OIG, *Emergency Cache Program: Ineffective Management Impairs Mission Readiness*, Report No. 18-01496-301, October 31, 2018.

allowed to do so during this time.<sup>5</sup> Instead, requests to mobilize the caches needed to go through the Office of Emergency Management's (OEM) Emergency Management Coordination Cell. The executive in charge and director of the OEM gave this direction because of uncertainty regarding the speed and extent of the virus's spread, how long it would last, and how readily VHA could restock depleted caches. While this decision may have been appropriate for the pandemic, this change was not clearly communicated to medical facility directors. Medical facility directors are normally solely responsible for authorizing the activation of their caches.<sup>6</sup>

Oversight of the emergency cache program was also limited, as most of the caches contained at least one type of expired personal protective equipment. The negative impact on cache readiness was mitigated because the Centers for Disease Control and Prevention issued guidance that allowed VA medical facilities to use expired personal protective equipment, such as surgical facemasks, that were not degraded. However, in the absence of such extraordinary action, expired personal protective equipment poses a serious risk to the cache's mission readiness.

The OIG found that VHA needs to continue to revisit and clarify the intended uses of the caches and reevaluate their contents. Doing so would be useful as VHA is finalizing plans to develop four regional readiness centers to resupply VA medical facilities when they run low on supply items such as personal protective equipment. The readiness centers are intended to support local, regional, and national emergencies, including pandemic readiness. VHA's goal is to have these centers fully operational by 2023. In the meantime, as of January 2021, VHA is using interim warehouses to source personal protective equipment for VA medical facilities.

### **VHA Limited the Use of Caches to Respond to the Pandemic**

The executive in charge requested VA medical facilities make all cache activation requests for COVID-19 shortages through OEM's Emergency Management Coordination Cell, VHA's mechanism for coordinating national response and recovery actions. OEM's director told the OIG that based on this direction from VHA leadership, he notified the Veterans Integrated Service Networks and VA medical facilities that emergency caches should not be activated in response to shortages of personal protective equipment or hand sanitizer. The executive in charge made this decision because he did not want cache inventories of personal protective equipment to be depleted if these supplies could not be replenished. He requested that the caches be used as a last resort. The OIG determined that the Emergency Management Coordination Cell denied at least two cache activation requests. OEM officials told the OIG that they were able to address these facility shortages by moving supplies around from other VA medical facilities. However,

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<sup>5</sup> VHA Directive 1047, *All-Hazards Emergency Cache Program*, December 30, 2014, updated April 21, 2020. Both the current VHA Directive 1047 and the prior version were used as criteria for this review because the COVID-19 pandemic in the United States was in progress before and after April 21, 2020.

<sup>6</sup> VHA Directive 1047.

this fundamental change to procedures was neither documented nor communicated clearly to all medical facility personnel with cache oversight responsibilities.

## **Managers Thought Cache Quantities Were Insufficient in a Pandemic**

Medical facility directors and chiefs of pharmacy at facilities with caches were surveyed about cache utility. Facility officials reported on the OIG surveys that their caches were useful to have on hand for the COVID-19 pandemic, but the quantity of supply items might not be enough to meet the demand. National officials, including OEM's director and VHA's acting assistant secretary for health for support services, reported to the OIG a similar belief that the amount of personal protective equipment stored in the caches limited their use for the pandemic.

It is important to know the number of days a cache inventory could supply a facility for emergencies such as a pandemic. Medical facilities report data on their daily use of certain types of personal protective equipment. The OIG analyzed this "burn rate" data from July 2020 to estimate the number of days personal protective equipment from the caches could last at medical facilities. The OIG's analysis indicated that, on average, surgical face masks from a large cache would last about five days at an inpatient facility and about 15 days at an outpatient facility. Details of the review scope and methodology appear in appendix A.

## **Emergency Caches Were Activated Only 10 Times, Mostly for Mislabeled Items**

Emergency caches at nine of 144 facilities were activated at least once (one facility did so twice) to ease supply shortages between February and June 2020.<sup>7</sup> Seven of the 10 cache activations were for swabs that were mislabeled in the inventory system and could not be used for COVID-19 testing.

## **Some Personal Protective Equipment Items Were Expired or Missing**

VHA did not maintain accurate emergency cache inventories. As of July 2020, 143 of 144 caches had at least one expired item or were missing at least one type of personal protective equipment. The OIG's analysis also showed that not all items were reordered in time to arrive at the cache in accordance with Emergency Pharmacy Service's goal to replace items six months before the inventory was set to expire. For example, VHA did not order replacements for sterile gloves until a few days before they were set to expire on June 30, 2019.

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<sup>7</sup> As of January 31, 2020, emergency cache inventory data identified 145 stocked caches, which were included in the review team's analysis. As of July 2020, 144 caches were stocked and included in the review team's analysis.

## **VHA Did Not Have Complete Documentation of Activations**

Emergency cache activations require medical facility directors or their designees to immediately notify the VHA Watch Office, which provides 24-hour monitoring for VHA emergency operations. Directors must also notify Emergency Pharmacy Service for product replenishment.<sup>8</sup> Neither office, however, could provide the OIG with complete documentation regarding the 10 cache activations that occurred in response to the pandemic. For example, the Watch Office could not provide the OIG with activation records for two facilities that activated their caches.

## **Facility Logistics Officers May Want to Consider the Cache for Future Critical Supply Shortages**

Chief logistics officers responsible for overseeing medical facility supply needs were not always aware of the caches or the personal protective equipment they contain. It is important to note that VHA Directive 1047 does not assign facility logistics officers any responsibilities for emergency caches. Chief logistics officers from facilities that reported supply shortages reported being unaware of their facility's cache and that it would be helpful for them to have greater awareness about the caches and their contents. Some reported that they would have considered using their cache's supply of personal protective equipment to address their local needs. Awareness of cache contents among facility logistics officers may inform decisions to address critical supply shortages in the future.

## **What the OIG Recommended**

The OIG issued three recommendations to the under secretary for health. VHA should clarify the intended use of the emergency caches during national emergencies, develop communication and documentation requirements so that all relevant parties know about changes to standard activation protocols and about their responsibilities, establish minimum time frames for reordering processes to make certain the caches are stocked with unexpired inventory, and implement procedures to make sure that the Emergency Pharmacy Service and the Watch Office maintain accurate and complete activation records.

## **VHA Management Comments**

The acting under secretary for health concurred with recommendations 1 and 3 and concurred in principle with recommendation 2. The full text of the acting under secretary's comments appears in appendix B. The comments include steps VA has taken following the OIG's 2018 emergency cache report.

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<sup>8</sup> VHA Directive 1047.

## OIG Response

The acting under secretary's planned corrective actions are responsive to recommendations 1 and 3 and should address the issues identified in the report. The acting under secretary agreed in principle with recommendation 2 and provided a plan for developing an inventory management system. The OIG encourages VHA to consider historical data as it develops its new inventory management system. Emergency Pharmacy Service's timelines should be informed by data on the time it takes to reorder, receive, and restock caches before, during, and after the pandemic. The OIG acknowledges that in the aftermath of the COVID-19 pandemic suppliers may continue to experience shortages that may extend VHA's timeline to replenish cache inventories.

The OIG also recognizes that VHA's use of the Shelf Life Extension Program will result in caches continuing to contain some expired drugs, and that the COVID-19 pandemic caused delays in testing these drugs.<sup>9</sup> Much of the expired inventory identified during the review, however, expired months before the COVID-19 pandemic became widespread in the United States and diminished the readiness of caches to support medical facilities' pandemic and emergency preparedness. In addition, the expired inventory items identified during this review were supplies like personal protective equipment and gloves. Only some drugs stored in the caches are part of the Shelf Life Extension Program. The OIG will monitor VHA's progress and follow up on the implementation of the recommendations until all proposed actions are complete.



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<sup>9</sup> VHA Directive 1047. The Shelf Life Extension Program can be used to extend the expiration dates for certain drugs and supplies stored in federal stockpiles and is coordinated through multiple agencies. The Food and Drug Administration conducts periodic stability testing of certain drugs to extend the expiration date of such products to help defer replacement costs and ensure public health preparedness.

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## Abbreviations

EPS	Emergency Pharmacy Service
OEM	Office of Emergency Management
OIG	Office of Inspector General
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network



## Introduction

On January 31, 2020, the Secretary of the US Department of Health and Human Services declared a public health emergency for the United States for COVID-19. The declaration was significant for VA, whose fourth mission includes supporting the Department of Defense, Public Health Service, and other entities such as state governments during times of national emergency.<sup>10</sup> The COVID-19 pandemic has had a major impact on VA's ability to carry out its missions of providing health care for veterans through the Veterans Health Administration (VHA), and for nonveterans from local communities when needed.<sup>11</sup> By March 2020, VHA, which is the largest integrated healthcare system in the nation, determined that COVID-19-related demands for medical supplies, equipment, and procurements could result in shortages of personal protective equipment while increasing the need for healthcare services.<sup>12</sup> VHA's All-Hazards Emergency Cache Program (emergency cache program) is part of VA's COVID-19 response plan, which includes the deployment of cache drugs and medical supplies as needed. The response plan noted the possibility of critical shortages of healthcare resources, including personal protective equipment.<sup>13</sup> In addition, recent work by the VA Office of Inspector General (OIG) identified concerns about potential shortages of personal protective equipment that may reoccur or worsen as the COVID-19 pandemic continues to spread.<sup>14</sup>

The OIG conducted this review to determine how effectively VA managed its emergency caches, to what degree they were used, and whether they were ready to activate during the first wave of the pandemic that emerged in the United States in early 2020.<sup>15</sup> The OIG last audited VA's management of the emergency cache program in 2018 and found VA was not maintaining some drug supplies in a mission-ready status.<sup>16</sup> The OIG made seven recommendations to VHA at that

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<sup>10</sup> VHA, "Coronavirus Disease 2019 (COVID-19) Response Report," October 27, 2020. The Department of Health and Human Services requested VA support for the COVID-19 response on January 30, 2020. During the COVID-19 pandemic, assistance provided under VA's fourth mission grew to the greatest scale and scope in VA's history. This response required deployment of personnel and equipment to multiple locations simultaneously for sustained periods. The Federal Emergency Management Agency asked VA to assist with patients who were, or were at imminent risk of becoming, critically ill.

<sup>11</sup> VHA, "Coronavirus Disease 2019 (COVID-19) Response Report."

<sup>12</sup> VA OIG, *Reporting and Monitoring Personal Protective Equipment Inventory during the Pandemic*, Report No. 20-02959-62, February 24, 2021. VHA has approximately nine million enrolled veterans in its healthcare system.

<sup>13</sup> VHA, Office of Emergency Management, "COVID-19 Response Plan, Incident-specific Annex to the VHA High Consequence Infection (HCI) Base Plan," ver. 1.6, March 23, 2020.

<sup>14</sup> VA OIG, *Reporting and Monitoring Personal Protective Equipment Inventory during the Pandemic*.

<sup>15</sup> Lisa Lockerd Maragakis, MD, "First and Second Waves of Coronavirus," Johns Hopkins Medicine website, accessed October 26, 2020, <https://www.hopkinsmedicine.org/health>.

<sup>16</sup> VA OIG, *Emergency Cache Program: Ineffective Management Impairs Mission Readiness*, Report No. 18-01496-301, October 31, 2018.

time, including conducting an annual wall-to-wall cache inventory and updating the cache directive to better define oversight responsibilities, all of which were closed as implemented.

## National Emergency Response for Stockpiles

The US Departments of Homeland Security and Health and Human Services are responsible for identifying and publishing an annual list of high-priority chemical, biological, radiological, nuclear, and explosive weapons threats.<sup>17</sup> The Strategic National Stockpile of antibiotics, vaccines, chemical antidotes, antitoxins, and other critical medical supplies is compiled based on the threats on this list. Stockpiled drugs and medical supplies are intended to be delivered within 12 hours to states affected by emergency events. States, in turn, distribute drugs and supplies to designated hospitals or other facilities, including VA medical facilities. VHA Directive 1047, *All-Hazards Emergency Cache Program*, establishes that in a catastrophic public health emergency, most VA medical facilities need to be able to function with stock on hand and limited resupply for at least 24 to 48 hours. VHA Directive 1047 was issued on December 30, 2014, and updated on April 21, 2020. Both the current VHA Directive 1047 and the prior version were used as criteria for this review because the COVID-19 pandemic in the United States was in progress before and after April 21, 2020.

## VA's Emergency Response

VA's emergency response requirements are intended to prepare VA to address local needs immediately following an emergency. VA is expected to provide hospital and medical care to individuals involved in or responding to these events until other national resources arrive on-site. In response to the Department of Veterans Affairs Emergency Preparedness Act of 2002, VA developed short-term capabilities to support the continuous delivery of services to veterans in an emergency event.<sup>18</sup> The law established the requirement for emergency preparedness and readiness for VA medical facilities, as well as for tracking pharmaceutical and medical supplies. It also gave VA authority to provide health care to veteran and civilian victims of emergencies and to provide necessary support and protection to veterans and facility personnel.

### Emergency Management Coordination Cell

VHA is the VA component dedicated to delivering health care. VHA's Emergency Management Coordination Cell is a group serving within VHA's Office of Emergency Management (OEM). The coordination cell is the mechanism the VHA executive in charge relies on for coordinating response and recovery from significant events that require national direction or support, or for

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<sup>17</sup> The Public Health Emergency Medical Countermeasures Enterprise is a federal government interagency group led by the Department of Health and Human Services that publishes an annual list of high-priority threats.

<sup>18</sup> Department of Veterans Affairs Emergency Preparedness Act of 2002, Pub. L. No. 107-287 (2002).

responding to federal interagency requests for assistance.<sup>19</sup> For VHA's COVID-19 response, the Emergency Management Coordination Cell has coordinated emergency planning, communications, and logistics support in VA; across federal, state, and local agencies; with private-sector partners and stakeholders; and with nongovernmental organizations.<sup>20</sup> The Emergency Management Coordination Cell uses VA resources to help medical facilities have the supplies they need to meet patients' healthcare needs.

## Emergency Cache Program

VA established the emergency cache program in 2002 following the September 11, 2001, attacks. The caches were designed to bridge the 24- to 48-hour gap between a medical facility's supplies available for immediate use and limited resupply, and federal relief through the Strategic National Stockpile, run by the Department of Health and Human Services' Centers for Disease Control and Prevention. The caches would make drugs and medical supplies available for treating veterans, VA employees, and civilians in the immediate aftermath of a local mass casualty event, including a natural disaster and a pandemic.<sup>21</sup> Cache drugs and supplies should be used when all routine methods for obtaining necessary items have been exhausted and VA medical facilities are facing life-threatening situations.<sup>22</sup>

### Contents

As of July 2020, the emergency caches housed a standard supply of 29 drugs and 34 medical supplies at 144 VA medical facilities. These items were valued at about \$34 million as of January 2021. The caches are identical, except that quantities differ between large and small caches.<sup>23</sup> Large caches are stocked to serve 2,000 people, and small caches are stocked to serve 1,000 people in an emergency event. Cache supplies include some personal protective equipment that can be used in caring for COVID-19 patients, such as surgical face masks and gloves, as well as hand sanitizer that may be used to reduce the transmission of the virus. Personal

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<sup>19</sup> VHA Directive 0320.1, *Veterans Health Administration Comprehensive Emergency Management Program (CEMP) Procedures*, April 6, 2017.

<sup>20</sup> VHA, "COVID-19 Response Plan."

<sup>21</sup> Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Pub. L. No. 107-188 (2002); Department of Veterans Affairs Emergency Preparedness Act of 2002, Pub. L. No. 107-287 (2002).

<sup>22</sup> VHA Directive 1047, app. B memorandum, "Guidance on All Hazards Emergency Cache Activation for Product Shortages," May 31, 2017, updated April 25, 2020, and August 20, 2020.

<sup>23</sup> As of July 2020, there were 144 stocked caches: 94 large and 50 small caches. As of January 2020, Emergency Pharmacy Service data identified 145 stocked caches. However, in August 2020 Emergency Pharmacy Service officials confirmed that only 144 of the 145 caches were active at the time of the first wave of the pandemic. (See the discussion on What the OIG Did on page 8 for more on the OIG's look back on all 145 caches for this review.) Other items of note are that one medical facility in each Veterans Integrated Service Network also carries two drugs used to treat medical needs arising from a nuclear disaster. These drugs, and additional Tamiflu maintained by the emergency cache program, had a value of about \$96 million as of January 2021.

protective equipment is included in the cache as it minimizes exposure to hazards that can cause serious illnesses to personnel working directly with the veteran community and other patients.<sup>24</sup>

### *Activation*

In the event of an emergency, medical facility directors or their designees can authorize the release of up to 100 percent of an emergency cache inventory item, if needed, and 50 percent of an item can be released in response to locally determined product shortages.<sup>25</sup> Medical facility directors determine locally when product shortages will result in a cache activation. A factor facility directors should consider is whether drug or supply shortages could prevent replenishing the cache, leaving facilities unprepared to address other local emergencies.<sup>26</sup> For example, in June 2020, Congress expressed concern that VA’s readiness to respond to natural disasters such as hurricanes could be compromised if caches activated in response to the COVID-19 pandemic were not replenished in a timely manner.<sup>27</sup> When caches are activated, medical facility directors are responsible for notifying the VHA Watch Office immediately and the Emergency Pharmacy Service (EPS) within 24 hours of activating the cache. The Watch Office provides 24-hour monitoring for VHA emergency operations. In the context of the pandemic, the executive in charge requested medical facilities to route activation requests to the Emergency Management Coordination Cell, which was the entity empowered to authorize such activations.

### *Governance*

Oversight responsibilities for the emergency caches are split among several officials. Oversight for the emergency cache program involves officials from the Office of Population Health, OEM, and EPS, as well as the medical facility director, the medical facility chief of pharmacy, and the designated cache manager. The roles and responsibilities of these officials are detailed in VHA Directive 1047, *All-Hazards Emergency Cache Program*, and listed in figure 1.

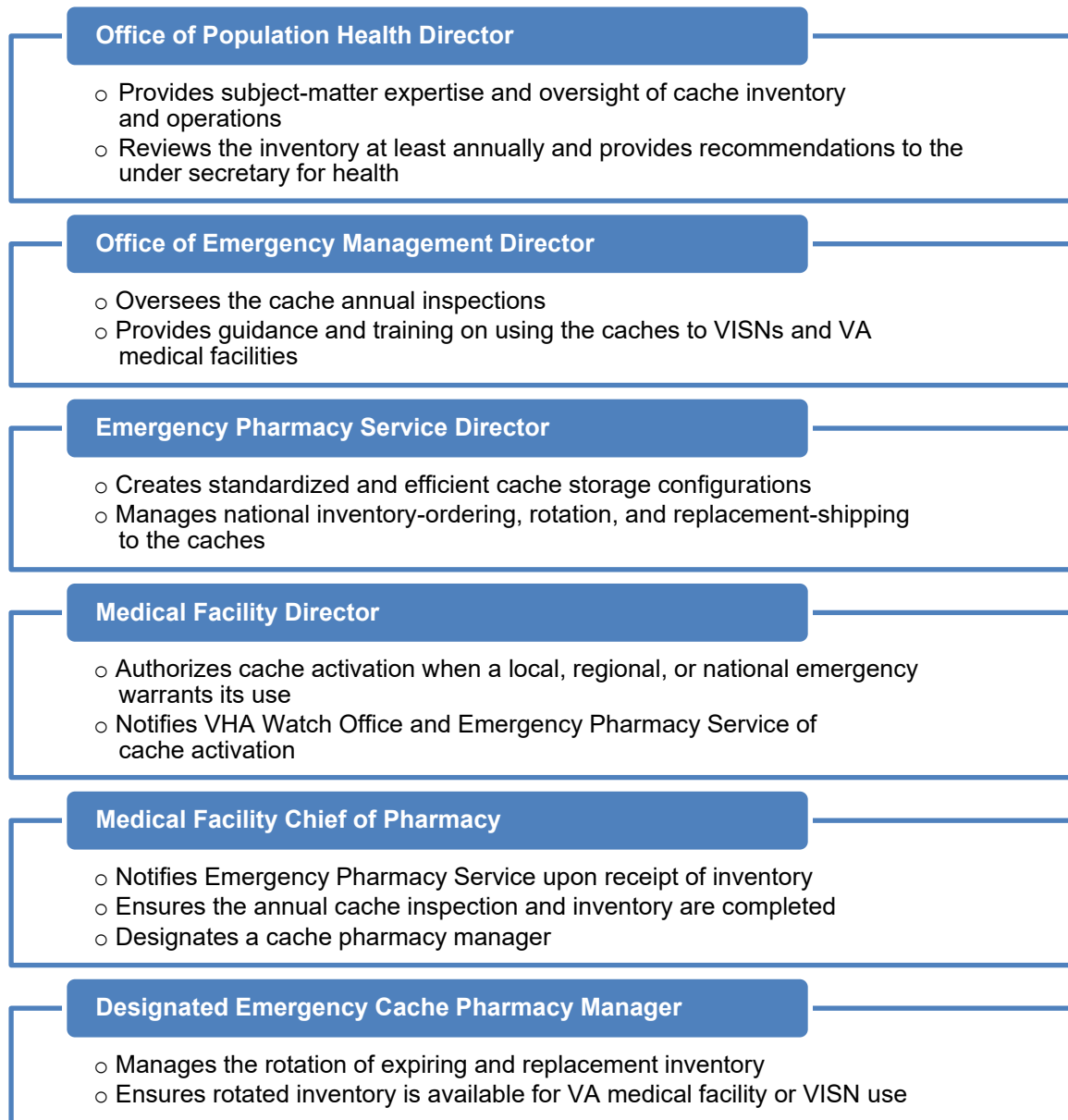
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<sup>24</sup> “Guidance for the Selection and Use of Personal Protective Equipment (PPE) in Healthcare Settings,” Centers for Disease Control and Prevention website, accessed March 3, 2021, <https://www.cdc.gov/hai/pdfs/ppe/ppeslides6-29-04.pdf>.

<sup>25</sup> VHA, Directive 1047, app. B memorandum. Prior to the revisions to appendix B of VHA Directive 1047 in August 2020, the guidance specified that if an event was not a “mass casualty event,” utilization of a specific cache product must not exceed 50 percent. However, VHA officials could not define the term “mass casualty” event for the OIG, and revised appendix B to remove this language. Officials told the OIG that 100 percent of a specific cache product may be used for local, regional, or national emergencies.

<sup>26</sup> VHA Directive 1047, app. B memorandum.

<sup>27</sup> *Virtual Hearing on Mission Readiness: VA’s Preparedness for Natural Disasters During a Pandemic, Before the Subcommittee on Health, House Committee on Veterans’ Affairs*, 116th Cong. (June 3, 2020).



**Figure 1.** VHA emergency cache program oversight responsibilities.

Source: VA OIG analysis of VHA Directive 1047 and app. B memorandum.

## **Noncache Regional and Local Supply Management**

VHA's Procurement and Logistics Office provides overall healthcare contracting support for VHA and is responsible for establishing and maintaining a supply chain to manage supplies, including personal protective equipment, for medical facilities. It is not, however, involved in managing or ordering drugs and other supplies for the caches. VHA's EPS is responsible for ordering and maintaining all cache inventories of drugs and supplies. VHA is also working to develop four regional readiness centers to resupply medical facilities as they run low on personal protective equipment and other items. VHA intends to have these centers fully operational by 2023. The centers are intended to support local, regional, and national emergencies, including pandemics. In the meantime, as of January 2021, VHA is using interim warehouses to source personal protective equipment for medical facilities.

## Results and Recommendations

### **Finding: Few Emergency Caches Were Used to Respond to COVID-19, and Ineffective Cache Management Persists**

Use of the emergency caches during the first few months of the pandemic was limited. The VHA executive in charge requested that VA medical facilities make all cache activation requests for COVID-19 shortages through the Emergency Management Coordination Cell.<sup>28</sup> OEM's director told the OIG that based on this direction from VHA leadership he notified Veterans Integrated Service Networks (VISNs) and VA medical facilities that emergency caches should not be activated in response to shortages of personal protective equipment or hand sanitizer.<sup>29</sup> Instead, medical facility directors were to route activation requests for these items through OEM's Emergency Management Coordination Cell. The executive in charge's then chief of staff reported this direction was given because leaders were unsure how long the virus would last or how far it would spread, and unsure of their ability to restock depleted caches. However, VHA did not fully document or clearly communicate to all relevant parties the executive in charge's decision that the Emergency Management Coordination Cell, rather than the medical facility directors, was responsible for authorizing the activation of caches during the first wave of the pandemic. Among reported reasons for not using the caches were that, although they include some personal protective equipment that could help safeguard healthcare providers, medical facility directors reported that they did not need the supplies, or that the supplies were not in a sufficient quantity to have on hand during a pandemic. To meet their needs during the first wave of the pandemic and during the period the team's review covered (cache activations between February and June 2020), only nine of 144 medical facilities activated their emergency caches for the pandemic.<sup>30</sup>

The OIG identified problems with cache maintenance and monitoring. Because most caches contained expired or missing personal protective equipment, their ability to support medical facilities' pandemic preparedness was diminished if VHA had decided to access them. Expired or incomplete cache inventories can also compromise facilities' ability to respond to other local emergencies such as hurricanes or wildfires. This is a recurring problem. In 2018, the OIG

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<sup>28</sup> At the time of this review, the now acting under secretary for health was the executive in charge, with the authority to conduct the duties of the under secretary for health.

<sup>29</sup> VHA's 18 VISNs are regional networks for healthcare delivery. These networks work together to meet local healthcare needs and provide care to veterans at medical facilities in the network.

<sup>30</sup> As of January 31, 2020, VHA's data on emergency caches showed that there were 145 stocked caches. However, in August 2020, Emergency Pharmacy Service officials confirmed that one cache was not active during the team's review period. As a result, when the team reported the use of caches during the period of review it used 144 rather than 145 caches as the denominator. Appendix A provides more details on the scope and methodology.



reported that expired, missing, and excess drugs affected cache readiness.<sup>31</sup> The lack of monitoring and management runs counter to VHA Directive 1047, which mandates annual cache inspections and wall-to-wall inventories to ensure that cache items are not expired, missing, or stored in excessive quantities. Furthermore, VHA had incomplete documentation on cache activations, requests for activations, and canceled activations, making it difficult to know which caches would need to be restocked. Finally, medical facility leaders were not always able to accurately report if their facility's cache was activated during the pandemic.

Given the limited use of the caches for the COVID-19 pandemic, their effectiveness was not fully tested. With efforts underway to establish regional readiness centers for medical supply backups, VA may want to reassess the purpose and contents of caches—that is, whether they should be maintained to support local medical facilities' pandemic-related needs.

## What the OIG Did

The review team analyzed data from the system VHA uses to track emergency cache inventory items to determine if caches were fully stocked, what items could be useful for COVID-19 purposes, and the expiration status of these items on January 31 and July 7, 2020. Data from this system was also used to identify the total number of caches that were operational. Initial data from January 31, 2020, identified 145 operational caches. Accordingly, all 145 cache locations identified at that time were included in the team's analysis and surveys. This was done so that no active caches would inadvertently be excluded. In August 2020, EPS officials confirmed that during the team's review period, there were 144 active caches, rather than 145. One cache was not operational because it was inactive.

Two electronic surveys were administered—one to medical facility directors and the other to pharmacy chiefs. The purpose of the surveys was to collect information on facility-level supply shortages and cache usage related to the COVID-19 pandemic. Both surveys received an 88 percent response rate with 128 of 145 facility directors and pharmacy chiefs responding to their respective surveys. When the team calculated response percentages to survey questions, it used the actual number of responses to each question as the denominator, thereby removing nonresponses from the calculations. This was appropriate because some survey questions were unanswered or were not applicable.

VA officials interviewed included those individuals responsible for overseeing the emergency caches and VHA's COVID-19 response, and a judgmental sample of medical facility chief logistics officers. The team analyzed VHA's data from July 2020 on average daily "burn rates"—that is, the daily use of certain types of personal protective equipment—to estimate how

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<sup>31</sup> VA OIG, *Emergency Cache Program: Ineffective Management Impairs Mission Readiness*.

long these items would last at medical facilities. Appendix A contains more information about the scope and methods used for this review.

## **Few Emergency Caches Were Used to Respond to the COVID-19 Pandemic**

Rather than authorizing the activation of their local caches themselves in accordance with VHA Directive 1047, medical facility directors were required during the pandemic to request approval from OEM's Emergency Management Coordination Cell before doing so, at the request of VHA's executive in charge. In addition, while the caches include personal protective equipment that could be used for COVID-19 purposes, medical facility directors reported in the OIG's survey that they did not seek permission because they did not think their caches had enough of the needed supplies on hand to address their pandemic-related needs. The review team concluded that only nine of 144 facilities activated their emergency caches between February and June 2020 to address supply shortages during the COVID-19 pandemic.<sup>32</sup> This was due in part to VHA limiting the use of the caches and because medical facility directors did not think their caches had supplies that would address pandemic-related needs.

### **VHA Limited the Use of Emergency Caches to Respond to the Pandemic**

The executive in charge requested that VA medical facilities make all cache activation requests for COVID-19 shortages through the Emergency Management Coordination Cell. OEM's director told the OIG that based on this direction from VHA leadership, he notified VISNs and VA medical facilities that emergency caches should not be activated in response to shortages of personal protective equipment or hand sanitizer. In making this decision, the executive in charge suspended facility directors' authority to approve the activation of the caches in response to the pandemic.<sup>33</sup> Instead, medical facility directors were to route activation requests for these items through OEM's Emergency Management Coordination Cell. According to an OEM official this direction was provided verbally by VHA's then chief of staff. The chief of staff and the executive in charge recalled having conversations about the use of the caches for the pandemic. Beyond this OEM official's recollection of the executive in charge's verbal direction, the review team was not able to identify any documentation that broadly communicated which components of VHA Directive 1047 the executive in charge suspended in response to the COVID-19 pandemic. The executive in charge later reported to the Inspector General that he recalled requesting that VA medical facilities request authority to activate their caches for the pandemic from the Emergency Management Coordination Cell. The executive in charge's then chief of

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<sup>32</sup> Nine medical facilities activated their emergency caches at least once, and one facility did so twice, for a total of 10 activations.

<sup>33</sup> Medical facility directors' authorities and responsibilities are detailed in VHA Directive 1047.

staff reported the reasoning was that VHA leaders did not want cache inventories of personal protective equipment to be depleted if there was a risk that VHA could not replenish those supplies.

The then chief of staff further explained there was also concern that caches would not be ready to mobilize to respond to other emergencies—such as natural disasters—if they were activated in response to COVID-19, because supplies that were removed could not be timely replenished. The then chief of staff reported that medical facility directors were not told caches “could not be used,” but that they should be used as a last resort if the facility was in danger of running out of supplies. VHA also had other ways to mobilize available resources to limit the use of the caches if facilities experienced shortages.

VHA’s chief of staff and OEM’s director told the OIG that the Emergency Management Coordination Cell could move supplies across medical facilities within VISNs to respond to facility shortages. The OIG believes that the executive in charge was authorized to perform the functions and duties of the under secretary for health, who in turn has the ultimate authority concerning the emergency caches. Suspending some components of VHA Directive 1047 was an exercise of judgment based on the unprecedented circumstances of the COVID-19 pandemic that would fall within the under secretary for health’s responsibilities.

VHA’s decision to route all activation requests through OEM’s Emergency Management Coordination Cell may have been appropriate given the national scope of the COVID-19 pandemic, the unprecedented impact on VA and private healthcare systems, and VHA’s use of other personal protective equipment sources. However, this fundamental change in procedure was not documented or communicated in a consistent manner to all medical facility personnel with cache oversight responsibilities—including medical facility directors, chiefs of pharmacy, and emergency cache managers—as government standards direct.<sup>34</sup> After the review team completed its fieldwork an EPS official provided the team with an email from March 2020 to pharmacy chiefs and VISN pharmacist executives notifying them that cache activation requests for COVID-19 were supposed to go through the Emergency Management Coordination Cell. However, medical facility directors were not included on this email dated March 16, 2020.<sup>35</sup> Four medical facility directors and two chiefs of pharmacy reported their concerns with local versus national authority over the caches in response to open-ended questions in the OIG surveys. One medical facility director reported this:

The cache has traditionally been viewed as a facility resource. However, early in the pandemic, national VA claimed total authority over the cache, including when

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<sup>34</sup> Government Accountability Office (GAO), *Standards for Internal Control in the Federal Government*, GAO-14-740G, September 2014.

<sup>35</sup> After reportedly requesting access to archived emails on March 8, 2021, the EPS official was able to provide the review team with this email (dated March 16, 2020) on March 18, 2021. This was several months after the team conducted its fieldwork and after several interim briefings with VHA officials.

to activate, where to send the supplies (i.e., other places outside the facility), etc. It is fortunate we did not actually need anything in it, as I would not wish to be put in a position to act contrary to orders by going into the cache on my own recognizance.

The executive in charge should clearly document and communicate to all relevant program, VISN, and medical facility personnel the authority structures for activating the caches during a national emergency such as a pandemic as well as the responsibilities they still maintain under VHA Directive 1047.

### **Quantities of Personal Protective Equipment Were Thought Insufficient in a Pandemic, but Some Items' Inventory Could Last Five Days or Longer**

The emergency caches included 34 medical supplies, including items that are personal protective equipment and useful for COVID-19 purposes, such as gloves, surgical face masks, N95 respirator masks, and hand sanitizer. Because the intent of the caches is to serve 1,000 to 2,000 veterans in need of care and hospital personnel for 24 to 48 hours until the Strategic National Stockpile or other reinforcements arrive, the amounts of these supplies are limited. Table 1 details the personal protective equipment and their quantities in small and large caches.

**Table 1. Standard Inventory Amounts of COVID-19-Related Supplies in Emergency Caches, June 2020**

<b>Supply item</b>	<b>In one small cache</b>	<b>In one large cache</b>	<b>Total in all 50 small caches</b>	<b>Total in all 94 large caches</b>	<b>Total in all 144 caches*</b>
Gloves, nonsterile, nonlatex, each (large)	2,000	4,000	100,000	376,000	476,000
Gloves, nonsterile, nonlatex, each (medium)	2,000	4,000	100,000	376,000	476,000
Gloves, nonsterile, nonlatex, each (small)	2,000	4,000	100,000	376,000	476,000
Gloves, sterile, nonlatex, pair (large)	1,600	3,000	80,000	282,000	362,000
Gloves, sterile, nonlatex, pair (medium)	1,000	2,000	50,000	188,000	238,000
Gloves, sterile, nonlatex, pair (small)	600	1,000	30,000	94,000	124,000
Goggles	100	200	5,000	18,800	23,800
Hand sanitizer	144	288	7,200	27,072	34,272
Respirator mask—Tecnol Fluidshield PFR95 (regular)	35	35	1,750	3,290	5,040

Supply item	In one small cache	In one large cache	Total in all 50 small caches	Total in all 94 large caches	Total in all 144 caches*
Respirator mask—Tecno Fluidshield PFR95 (small)	35	35	1,750	3,290	5,040
Respirator mask—particulate N95 fitted (regular)	120	240	6,000	22,560	28,560
Respirator mask—particulate N95 fitted (small)	60	120	3,000	11,280	14,280
Surgical face masks	900	1,800	45,000	169,200	214,200

Source: VA OIG analysis of emergency cache inventory information, EPS, June 2020.

\*EPS’s cache inventory data from January 2020 identified 145 stocked caches. However, EPS clarified after the review started that one cache was undergoing renovations and that only 144 of the 145 caches were active at the time of the first wave of the pandemic.

### Survey Responses

Most caches were not activated for COVID-19 purposes according to the OIG’s surveys of medical facility directors and pharmacy chiefs. In fact, 93 percent of facility directors (118 of 127) and 95 percent of pharmacy chiefs (121 of 128) reported that they did not activate their caches.<sup>36</sup> The main reason caches were not activated, according to 77 percent (85 of 111) of facility directors and 83 percent (95 of 114) of pharmacy chiefs, was because the supplies were not needed to respond to the pandemic. Survey respondents also reported finding the emergency caches useful to have on hand for the COVID-19 pandemic but indicated the quantity of supply items might not be enough to meet their pandemic-related needs. Eighty-three percent (105 of 126) of medical facility directors and 65 percent (83 of 128) of pharmacy chiefs reported strongly agreeing or agreeing that “the supply items in my facility’s cache are helpful to have on hand during a pandemic, such as COVID-19.”

However, 25 percent (31 of the 126) of medical facility directors and 27 percent (34 of 128) of pharmacy chiefs disagreed that “the supply items in my facility’s All-Hazards Emergency Cache are in a sufficient quantity to have on hand during a pandemic, such as Coronavirus.” In addition, survey respondents reported that they had experienced shortages of personal protective equipment. The term “shortage” was defined in the OIG surveys as a quantity of medical supplies that would last for 14 days or less under normal patient conditions. In developing the definition, the review team examined information provided by VHA officials on how VHA defined supply shortages. For example, during the pandemic, VHA applied a 14-day supply of personal protective equipment threshold to initiate efforts to provide relief to affected facilities by reallocating noncache personal protective equipment from facilities with lower COVID-19 rates to those with higher rates in the same VISN. Table 2 details respondents’ reports of supply shortages.

<sup>36</sup> One medical facility director who responded to the survey did not respond to this question.

**Table 2. Survey Respondents’ Reports of Pandemic Supply Shortages, July 2020**

Supply item shortage	Medical facility directors (of 51)*	Pharmacy chiefs (of 46)*
Hand sanitizer	31 (61%)	30 (65%)
Respirator masks—N95**	28 (55%)	26 (57%)
Surgical face masks	14 (27%)	23 (50%)
Gloves—sterile	12 (24%)	21 (46%)
Gloves—nonsterile	12 (24%)	21 (46%)
Goggles	12 (24%)	10 (22%)
Respirator masks—PFR95**	7 (14%)	8 (17%)

Source: Analysis of results from VA OIG national electronic surveys, July 2020.

\* In some cases, individual questions were not answered or were not applicable. The review team used the actual number of responses to each question as the denominator when calculating percentages.

\*\* Respirator masks cover the mouth and nose as surgical face masks do, but they also filter out airborne particles.

VHA’s then chief of staff, OEM’s director, and VHA’s acting assistant under secretary for health for support services told the review team that personal protective equipment stored in a cache would not be useful for the COVID-19 pandemic because the quantities of these items are limited. VHA’s acting assistant under secretary for health for support services added that the amount of personal protective equipment in the caches is so small that it would not provide much relief to medical facilities experiencing supply shortages.

### *VHA’s Daily Burn Rate of Selected Cache Supplies*

To independently estimate how many days select items in the caches could last if VA medical facilities activated their caches to address COVID-19 needs, the review team used the July 2020 COVID-19e report from VHA’s COVID-19 Power Business Intelligence (or Power BI) Dashboard.<sup>37</sup> This report provides a national picture of self-reported medical facility personal protective equipment usage, which the team used to determine how long select cache supplies could last. At that point, VHA was following guidance issued by the Centers for Disease Control and Prevention for the “contingency” use of personal protective equipment in response to the COVID-19 pandemic.<sup>38</sup> This guidance extended the use of some respirator masks, surgical face masks, and eye protection beyond single patient encounters. For example, according to this guidance, VHA personnel can use the same surgical face mask for seeing several patients.

<sup>37</sup> VA OIG, *Reporting and Monitoring Personal Protective Equipment Inventory during the Pandemic*. The Power BI Dashboard data is based on information that is self-reported by VA medical facilities, which is subject to limitations that could diminish the accuracy of the data it displays.

<sup>38</sup> VA memo, “Updated: Coronavirus (COVID-19) Facemask and N95 Respirator Use,” April 7, 2020.

In this analysis, the review team considered medical facilities’ complexity levels because the rate at which facilities use personal protective equipment depends on the types of procedures performed at a facility. A facility’s complexity level depends on its patient population, the clinical services offered, its educational and research missions, and administrative complexity. Facilities are classified into three levels with level 1 representing the most complex, level 2 moderately complex, and level 3 the least complex.<sup>39</sup>

The team found, for example, that the 430 respirator masks in a large cache would have lasted a level 1 facility about 2.3 days based on the daily burn rates reported in July 2020 by VHA facilities.<sup>40</sup> Table 3 details how long cache supplies would last at a facility based on VHA’s reported daily burn rate data. The results are organized by facility complexity level—1, 2, or 3—and large or small cache size.

**Table 3. Duration in Days of Selected Emergency Cache Items, July 2020**

Complexity level and size of cache (number of caches)	Gloves, nonsterile	Goggles	Respirator masks*	Surgical face masks	Hand sanitizer
<b>Large</b>					
Complexity 1: (84 caches)	0.6	8.7	2.3	4.7	1.2
Complexity 2: (5 caches)	2.2	17.3	17.9	12.5	3.1
Complexity 3: (6 caches)	2.5	107.3	15.6	15.4	5.1
<b>Small</b>					
Complexity 1: (16 caches)	0.3	4.4	1.4	2.4	0.6
Complexity 2: (16 caches)	1.1	8.6	10.4	6.3	1.5
Complexity 3: (18 caches)	1.2	53.7	9.1	7.7	2.5

Source: VA OIG analysis of emergency cache inventory information and COVID-19e Power BI Dashboard data from the weeks of July 10, 17, and 24, 2020.

Note: VHA’s burn rate analysis is based on the actual usage of supply items by VHA facilities for service providers and patients. The dashboard displays national burn rate data and includes a filter to break usage down by facility complexity level.

\* This analysis includes both N95 and PFR95 masks from the caches.

The estimated number of days these supplies could have lasted, on average, assuming the facility chose to use 100 percent of an item, varies from less than half a day to 107 days. However, using

<sup>39</sup> Level 1 is subdivided into categories 1a-1c.

<sup>40</sup> This analysis includes both the 360 N95 respirator masks and 70 PFR95 respirator masks from the caches.

VHA's daily burn rates from July 2020, 14 of the supplies could have lasted at least an estimated five days, eight could have lasted at least 10 days, and two could have lasted at least 20 days, if needed.

This analysis presents an aggregate view at one point in time, by complexity level, using the average burn rate across all VA medical facilities at each complexity level. The actual burn rate for any individual facility depends on the facility's complexity level, number of clinical and nonclinical staff, the type of care provided, and the number of positive COVID-19 patients being treated at the time. Facility-specific analyses like this could inform facility officials about the usefulness of activating their cache in situations like the COVID-19 pandemic when they face supply shortages. This analysis, however, does not consider VHA's ability to replace items that are removed from the caches.

### **Facilities Activated Emergency Caches Only 10 Times, Mostly for Swabs That Were Inappropriate for COVID-19 Testing**

Nine medical facilities activated their emergency caches at least once (one facility did so twice, for a total of 10 activations) to address supply shortages because of the COVID-19 pandemic. Two activations were for intravenous fluids, and one was for hand sanitizer. Facility directors from these two facilities (one activated twice) reported that these items were useful to address their local shortages. VHA's executive in charge also authorized facility directors to activate their caches for swabs for COVID-19 viral testing, according to the OEM director. Directors from seven facilities did so, at their VISN's request. In fact, about half of medical facility directors and pharmacy chiefs (25 of 51 and 21 of 46, respectively) responded to the OIG's survey that they experienced pandemic-related shortages of swab sets.

However, the swabs stored in the caches could not be used for COVID-19 viral testing. EPS staff accidentally labeled the swabs as "nasopharyngeal swabs" rather than "transport swabs" in the cache data system. Transport swabs cannot be used for COVID-19 viral testing. EPS and Office of Population Health officials explained that the size of the swab and the medium in which it was stored were not appropriate for COVID-19 testing. After EPS officials determined on April 9, 2020, that the cache swabs could not be used for COVID-19 testing, the Office of Population Health director posted information to the Emergency Management Coordination Cell SharePoint site that these swabs were not appropriate for COVID-19. EPS also stopped ordering transport swabs for the caches on April 14, 2020, and corrected the labeling of these swabs in the cache data system. VHA leaders also began assessing whether swabs should be part of the caches' standard inventory.

### **Emergency Caches Lacked Effective Oversight**

EPS did not effectively manage the stocking or document the use of emergency caches. As of July 2020, 143 of the 144 active caches identified in VHA's cache data system as fully stocked



and ready to use in an emergency had at least one type of expired or missing personal protective equipment. Additionally, VHA's EPS, Watch Office, and OEM's Emergency Management Coordination Cell did not have complete documentation of all COVID-19-related cache activations. Activations are required to be reported to EPS and the Watch Office, and activations for the COVID-19 pandemic were supposed to be routed through the Emergency Management Coordination Cell for approval. Although their authority to approve cache activations for personal protective equipment and hand sanitizer was suspended during the pandemic, medical facility directors were still required to notify the Watch Office and EPS when their caches were activated.<sup>41</sup> However, medical facility directors surveyed reported not always knowing whether their caches had been activated to address COVID-19 needs. For example, one director reported the cache was activated, but in fact it had only been inspected in preparation to activate. Another director reported the facility's cache was activated, but the activation was canceled. Four directors who responded to the survey that their caches were not activated did have activations for swabs. This lack of awareness is an indication that facility directors needed clearer information on the cache activation process during the pandemic and what responsibilities they maintained over their own caches.

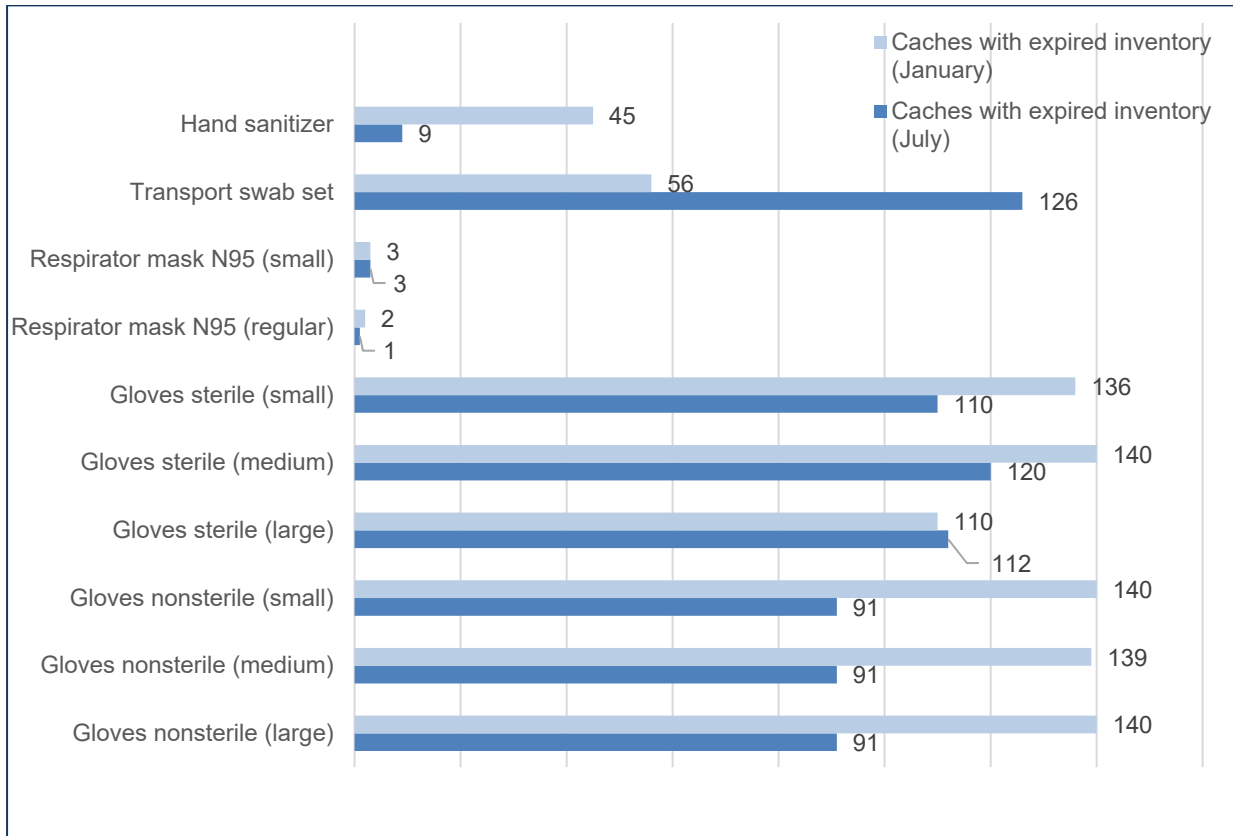
### **Nearly All Emergency Caches Contained Expired or Missing Personal Protective Equipment**

EPS did not effectively manage the restocking of emergency caches. Documentation provided by EPS to the review team showed most expired emergency cache personal protective items were expired as of January 31, 2020, about a month before COVID-19 was widespread in the United States. As of January 2020, all but four caches had at least one type of expired personal protective equipment that could be used by healthcare providers treating patients with COVID-19, and all but one cache had at least one expired item by July 7, 2020. The team determined that as of January 31, 2020, at least one size of nonsterile gloves was expired in 96 percent of the cases when a cache contained some expired inventory.

Had the Centers for Disease Control and Prevention not issued guidance extending the acceptable use of some personal protective equipment beyond the manufacturer-designated expiration dates for crisis situations, cache stocks of personal protective equipment would not have provided medical facilities any relief if they had not been able to replenish their supplies from other sources, extend their use, or follow the Centers for Disease Control and Prevention's guidance regarding the use of expired items during the pandemic. Figure 2 provides additional details.

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<sup>41</sup> VHA Directive 1047.



**Figure 2.** Expired emergency cache inventory items, January and July 2020.

Source: OIG analysis of EPS cache inventory data.

Note: As of January 2020, VHA’s data indicated that 145 caches were fully stocked. For the January 2020 analysis, the team included all 145 caches. In August 2020, it was confirmed that one of the 145 caches was not active. The July 2020 data reflect this, and the team’s analysis includes inventory from 144 caches. This analysis includes caches for which all or some quantity of an item was expired (e.g., 100 of 150 gloves).

EPS officials told the review team that they try to review inventory needs and place orders each month, focusing on items set to expire in three to six months. EPS’s goal is to have each cache receive replacement inventory twice a year. Officials also explained that this process was relatively new and had only been in place since March 2020, when the current inventory manager took over the replacement process. Previously, EPS officials told the team that they ordered inventory each quarter and tried to replace items six months before they expired. The OIG’s 2018 audit of drugs stored in the emergency caches found that EPS’s replenishment processes were not timely, because the OIG identified a large amount of expired drugs in the caches.<sup>42</sup> For the personal protective equipment stored in the caches as of January 31, 2020, the

<sup>42</sup> VA OIG, *Emergency Cache Program: Ineffective Management Impairs Mission Readiness*. Based on this finding, the OIG recommended that VHA remove and rectify cases of other expired, missing, or excess drugs in the caches. To address this recommendation, VHA implemented an annual wall-to-wall inventory for caches. This recommendation did not directly address when VHA should order replacement inventory for cache supplies.

OIG’s analysis shows that replacement inventory was generally not ordered in a timely manner (as shown in table 4). Hand sanitizer was the only item for which the process to order replenishment stock was started more than three months before the on-hand inventory expired. The order was not fulfilled, however, before the expiration date. An order for hand sanitizer had to be canceled because it could not be fulfilled before the end of the fiscal year. According to EPS officials, some replacement orders could not be completed because vendors could not obtain the requested quantities, and EPS could not identify alternative sources.

**Table 4. Expiration and Replacement Information on Select Emergency Cache COVID-19-Related Equipment (Expired before January 31, 2020)**

Supply item	Expiration date	Number of months item was expired as of January 31, 2020	Timing of VA’s replacement actions	Number of months item was expired as of July 7, 2020*
Respirator masks—N95	June 21, 2018	19	<ul style="list-style-type: none"> <li>• July 27, 2020: replacement order request placed</li> <li>• August 6, 2020: purchase order finalized</li> <li>• September 2020: order not yet filled</li> </ul>	25
Sterile gloves	June 30, 2019	7	<ul style="list-style-type: none"> <li>• June 26, 2019: replacement order request placed</li> <li>• October 3, 2019: purchase order finalized</li> <li>• September 2020: order not yet fully filled; EPS cannot find other source for quantity needed</li> </ul>	12
Nonsterile gloves	August 31, 2019	5	<ul style="list-style-type: none"> <li>• June 26, 2019: replacement order request placed</li> <li>• September 2019: Order canceled because it could not be fulfilled by end of fiscal year</li> <li>• March 19, 2020: replacement order request placed</li> <li>• April 2020: Order placed in March order received by EPS</li> <li>• September 2020; caches are being updated based on COVID-19 rates</li> </ul>	10

Supply item	Expiration date	Number of months item was expired as of January 31, 2020	Timing of VA's replacement actions	Number of months item was expired as of July 7, 2020*
Swabs	September 18, 2019	4	<ul style="list-style-type: none"> <li>• June 26, 2019: replacement order request placed</li> <li>• Order canceled because it could not be fulfilled by end of fiscal year</li> <li>• November 27, 2019: updated replacement order request placed</li> <li>• April 2020: reordering on hold pending decision on which, if any, swabs will remain in caches</li> </ul>	10
Hand sanitizer	November 21, 2019	2	<ul style="list-style-type: none"> <li>• April 12, 2019: replacement order request placed</li> <li>• June 26, 2019: updated replacement order request placed</li> <li>• Order canceled because it could not be fulfilled by end of fiscal year</li> <li>• March 25, 2020: updated replacement order request placed</li> <li>• July 2020: order received by EPS</li> <li>• September 2020; caches are being updated based on COVID-19 rates</li> </ul>	8

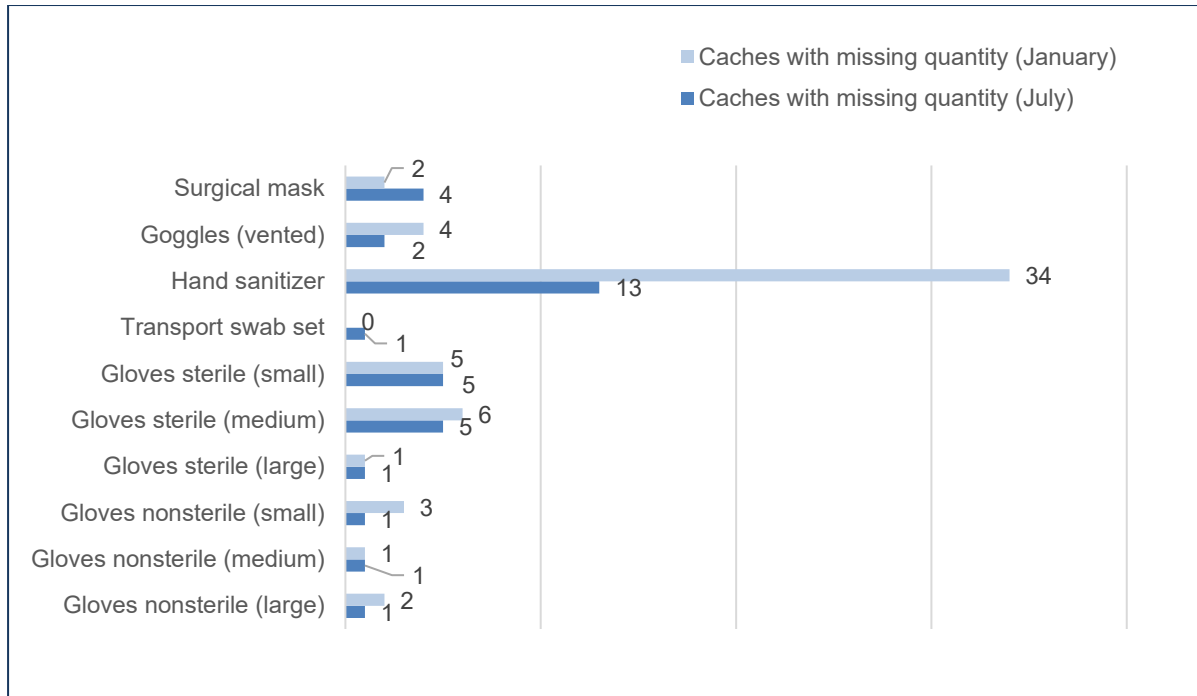
Source: VA OIG analysis of emergency cache order and inventory replacement request documentation provided by EPS, and interviews with EPS officials.

\* The review team analyzed cache inventory data from the end of January 2020, right before the pandemic became prevalent in the United States, and from July 7, 2020, the most recently available data at the time of the review, to compare the amount of expired cache inventory before and during the pandemic. The number of months that items were expired was rounded up to the closest whole month.

EPS officials could not explain the time lags in ordering replacement inventory for the N95 masks and the sterile and nonsterile gloves. The largest time lag was for expired N95 respirator masks: the replacement order for the three caches with expired N95 respirator masks was not placed until July 2020, two years after the items expired. Like the supply chain disruption for hand sanitizer, EPS officials also said gloves were on back order prior to the COVID-19 pandemic, and the pandemic made it more difficult to replace expired cache inventory.

In addition to expired items, some caches were missing quantities of some supplies as of January and July 2020, detailed in figure 3. Using the cache configuration outlining the quantity of each

item that should be in a small or large cache, the team identified missing quantities ranging from 24 four-ounce bottles of hand sanitizer to 4,000 nonsterile gloves.



**Figure 3.** Caches with missing emergency cache inventory items, January and July 2020.

Source: VA OIG analysis of EPS cache inventory data and the cache standardized inventory for small and large caches to determine if what was in each cache included everything that should be there.

Note: As of January 2020, VHA’s data indicated that 145 caches were fully stocked. For the January 2020 analysis, the team included all 145 caches. In August 2020, it was confirmed that one of the 145 caches was not active. The July 2020 data reflect this, and the team’s analysis includes inventory from 144 caches. Some of the missing hand sanitizer was because of an increase in the number of bottles of hand sanitizer to be placed in large caches from 264 to 288 bottles in 2019, for which EPS was still shipping inventory to the caches in 2020.

Survey respondents expressed concern about expired or missing cache supplies. For example, one medical facility director noted there needed to be greater awareness of supply expiration dates. Another facility director reported finding expired supplies in the facility’s cache in February 2020 during the annual wall-to-wall inventory. In addition, 10 percent (13 of 128) of pharmacy chiefs reported in the OIG survey that they were aware of deficiencies with their cache inventory items at that time. These 13 pharmacy chiefs reported the following deficiencies:

- Expired items (10 respondents)
- Missing items (one respondent)
- Excess items (one respondent)
- Damaged items (one respondent)

The team also reviewed the results of completed annual wall-to-wall inspections of 133 caches as of September 1, 2020, for findings related to expired or missing inventory. According to VA's annual cache inspection reports, 17 caches had expired items or were missing items. For example, all gloves at one cache were expired as of December 2019. VHA Directive 1047 requires that emergency cache inventories not have expired items and be maintained in a mission-ready status.

### **VHA Did Not Have Complete Information on Cache Activations**

Three offices—OEM's Emergency Management Coordination Cell, the Watch Office, and EPS—were supposed to be notified about and capture information on caches that were activated for COVID-19 reasons. While requesting authorization to activate their caches for the pandemic through the Emergency Management Coordination Cell was a new requirement for medical facility directors, their responsibility to notify the Watch Office and EPS when their caches were activated was a long-standing requirement detailed in VHA Directive 1047.<sup>43</sup> However, not all responsible offices were notified about the 10 cache activations that occurred early in the COVID-19 pandemic. The review team found that not all medical facilities notified the Watch Office or EPS when they received authorization from OEM's Emergency Management Coordination Cell to activate their caches. For example, two facilities in VISN 22 that activated their caches for the pandemic did not report their activations to EPS until August 2020—four months following the activations, after receiving the OIG survey, and after the OIG spoke with the VISN 22 pharmacist executive. EPS should have been notified in a timely manner so that efforts could be made to replace the cache inventory that was used during these activations.

Incomplete information on cache activations hampers VA's ability to restock affected caches. Without being notified of a cache activation and the items that were removed, EPS has no way of taking action to replenish those caches to ensure their future mission readiness. Medical facilities do not have the capability to maintain a perpetual inventory of their cache contents. As a result, it is critical that medical facilities timely notify EPS when they activate their caches and provide information on the type and quantity of items removed from their cache. This notification allows EPS to take steps to replenish the facility's cache inventory as it is depleted.

The review team also found that the Watch Office or EPS did not keep complete and accurate records of activations. For example, OEM's Emergency Management Coordination Cell did not have documentation of approved activation requests for five medical facility directors who activated their caches for the pandemic. In addition, the Watch Office could not provide the review team with records for two facilities that activated their caches with approval. The team confirmed these facilities did report activating through documentation provided to the other program offices and through follow-up with EPS and the Watch Office.

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<sup>43</sup> These notifications were required under the prior version of VHA Directive 1047 as well.

Table 5 provides additional details on the pandemic-related activations for which EPS, the Watch Office, or OEM’s Emergency Management Coordination Cell could provide documentation. It also details whether medical directors and pharmacy chiefs reported in the OIG surveys that these caches were activated. Each activation should have check marks across all five sources if medical facilities accurately reported their activations in the OIG survey, if facilities notified all responsible offices, and if those offices kept accurate and complete records of the activations. The last column of the table identifies the kind of item for which the cache was activated.

**Table 5. Documented Emergency Cache Activations for COVID-19 Shortages, February through June 2020, by Reporting Source**

Facility	EPS	Watch Office	OEM’S Emergency Management Coordination Cell	Director response to OIG survey	Pharmacy chief response to OIG survey	Item(s) activated
VISN 22, facility 1	✓	✓	✓	Reported not activating*	✓	Swabs
VISN 22, facility 2	✓	✓		Reported not activating*	✓	Swabs
VISN 22, facility 3	✓	✓	✓	Reported not activating*	✓	Swabs
VISN 22, facility 4	✓ **			✓	Did not complete	Swabs
VISN 22, facility 5	✓	✓	✓	✓	✓	Swabs
VISN 22, facility 6	✓	✓	✓	✓	✓	Swabs
VISN 22, facility 7	✓ **	✓		Reported not activating*	Did not complete	Swabs
VISN 9, facility 1	✓			✓	✓	IV fluid
VISN 9, facility 1	✓	✓		✓	✓	Hand sanitizer
VISN 10, facility 1	✓	✓	✓	✓	✓	IV fluid

Source: VA OIG analysis of information from EPS, OEM, Watch Office, and from results of the OIG’s national survey of medical facility directors and pharmacy chiefs.

\* Follow-up with director confirmed cache was activated for swabs. Because this was done at the request of the VISN, directors may have been confused about activations or if they needed to follow routine reporting procedures to the Watch Office and EPS.

\*\* Documentation of activation provided to EPS in August 2020 after the OIG survey of the facility and a call with the VISN 22 pharmacist executive.

Documentation on pandemic-related cache activations was also inaccurate. For example, the Watch Office and OEM provided the review team with documentation of a medical facility activating for swabs that was later canceled because the swabs were not appropriate for COVID-19 testing. However, the cancelation was not captured on the documentation the Watch Office and OEM provided the team. In addition, the Watch Office provided the team with a record of a facility activating its cache in March 2020 for Tamiflu, but the facility and EPS both notified the team that no activation occurred. The team confirmed with the Watch Office that the facility had not actually activated its cache, and that the Watch Office information was incorrect.

OEM's Emergency Management Coordination Cell also did not maintain complete records detailing when it denied medical facilities' requests to activate their caches for COVID-19-related shortages. OEM officials told the review team that representatives of some facilities asked to use items from the caches but were denied. The officials reported to the team that this was because the executive in charge wanted to preserve cache personal protective equipment as a last resort for facilities experiencing extreme supply shortages. Instead, OEM coordinated with the VISNs and VHA's Procurement and Logistics Office to respond to requests for personal protective equipment by moving items between facilities within VISNs as needed. OEM provided the team with written requests from only two facilities, one to use hand sanitizer and one to use surgical masks, that were denied. Officials told the team that other medical facilities made their requests verbally, and those requests were not tracked. Without documenting denials, VA cannot be sure if these facilities' needs were met through other ways such as facility-to-facility stock transfers.

VA should maintain accurate and complete documentation when caches are activated. Federal internal control standards focus on documentation to retain organizational knowledge, mitigate the risk of information being limited to a few people, and strengthen communication to meet program objectives.<sup>44</sup> By not maintaining complete documentation of all activations and communicating this information across program offices, VA did not maintain appropriate internal controls or ensure consistent knowledge of the use of the caches for the COVID-19 pandemic. Maintaining accurate and timely documentation can help inform VA decision makers locally and nationally about the extent to which, for example, cache resources are available to be pooled for medical facilities in need of personal protective equipment as the COVID-19 pandemic continues. Accurate and timely documentation also better positions EPS to resupply the caches.

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<sup>44</sup> GAO, *Standards for Internal Control in the Federal Government*.



## **Facility Logistics Officers May Want to Consider the Cache to Address Future Critical Supply Shortages**

Medical facilities can activate their caches to address critical shortages.<sup>45</sup> Chief logistics officers responsible for overseeing facility supply needs, however, were not always aware of the caches or the personal protective equipment they contain. It is important to note that VHA Directive 1047 does not assign facility logistics officers any responsibilities for emergency caches. The review team interviewed six chief logistics officers from facilities whose directors reported experiencing supply shortages, involving the logistics officer in decisions on how to address the shortages, but not activating their caches. The team also interviewed two other chief logistics officers when pretesting the surveys. Of these eight chief logistics officers, two were not aware of the cache or its contents before talking to the OIG. Four were unaware of the contents of the caches, but said if they had known, they would have considered using cache contents to address COVID-19 needs. Four were not aware the caches include personal protective equipment that could be used during the COVID-19 pandemic. One logistics officer told the review team about a visit from a peer from another medical facility who drove over 90 miles round trip to obtain hand sanitizer. The peer's facility was experiencing a shortage, and no one in logistics knew it was available on-site from the facility's emergency cache.

The logistics officers also made suggestions for increasing awareness of emergency caches. Six of the officers reported to the review team that more information about the caches and their contents should be shared within the facility. The review team concluded that, while the executive in charge took action to limit the use of personal protective equipment supplies from the caches in March 2020, awareness of cache contents among facility logistics officers could inform decisions to address critical supply shortages in the future. Importantly, broadened awareness of cache contents among facility logistics officers could better position facilities to comply with requirements to incorporate expiring cache inventories into routine medical facility operations before the supplies expire to reduce waste.<sup>46</sup>

## **VHA Continues to Clarify the Role of the Emergency Caches as It Develops Regional Readiness Centers**

VHA is developing four regional readiness centers. According to VHA's acting assistant under secretary for health for support services, the centers will maintain supplies to replenish VA medical facilities as needed. The readiness centers are intended to support local, regional, and national emergencies, including pandemic readiness. The Office of Population Health's director told the review team that once the contents of the readiness centers are determined, officials

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<sup>45</sup> VHA Directive 1047, app. B memorandum. Caches may be activated for shortages when patients are in life-threatening situations.

<sup>46</sup> Emergency Pharmacy Service, *All-Hazards Emergency Caches Replenishment Procedures*, March 6, 2019.

anticipate VHA will reevaluate the contents of the caches to avoid duplication.<sup>47</sup> The OIG believes that revisiting the role of the emergency caches is important given their limited use during the first wave of the COVID-19 pandemic and their purpose to facilitate VA's emergency and pandemic response. In addition, the director said VHA officials plan to start having broader discussions about the caches. They would like to assess whether having 140 small and large caches is still the best model to meet the population's needs in an emergency, or whether some consolidation might be in order. The Office of Population Health's director said no timeline had been set for these discussions to be completed.

Caches were rarely used for the COVID-19 pandemic because their supplies were not needed or supply needs were filled through another mechanism, managers doubted the adequacy of cache quantities, or requests to use cache items were denied. While VHA Directive 1047 specifies the use of the caches for pandemics, the All-Hazards Emergency Cache Leadership Team should clarify when changes to emergency cache activation procedures may be appropriate and make sure local officials are aware of these changes.<sup>48</sup>

## Conclusion

VA limited the use of the caches during the COVID-19 pandemic, requesting that activation requests go through OEM's Emergency Management Coordination Cell for approval due to uncertainties about how long the pandemic would last and the difficulties VA might experience restocking the caches. Instead, leaders moved supplies across facilities as needed to address shortages. Nevertheless, VA provided insufficient oversight and documentation to ensure the caches would be ready to activate, if needed, and risked not having the items to meet COVID-19 needs because its caches contained expired and missing personal protective equipment. Given the limited use of the caches for the COVID-19 pandemic and the ability of medical facilities to otherwise address shortages without the caches, continuing to assess and clarify the intent of the caches for national emergencies as VA works to develop regional readiness centers for backup supplies is appropriate.

## Recommendations 1–3

The OIG recommended that the under secretary for health conduct the following actions:

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<sup>47</sup> The revised VHA Directive 1047 requires the cache contents to be reviewed at least yearly. The prior directive did not specify how frequently review should occur, but caches underwent a content review in 2018, resulting in a revision to the cache contents in 2019.

<sup>48</sup> The All-Hazards Emergency Cache Leadership Team is composed of representatives from the Offices of Emergency Management and Population Health, and from Pharmacy Benefits Management Services and Emergency Pharmacy Service, and is responsible for evaluating cache activations and assessing findings from audits of the caches.

1. Initiate efforts to revise or amend VHA Directive 1047 to clarify when changes to emergency cache activation procedures are appropriate, and develop the communication and documentation requirements for these situations to ensure all relevant parties—including medical facility directors and pharmacy chiefs—are aware of and comply with any changes to routine activation protocols as well as the responsibilities they maintain.
2. Establish minimum time frames, for example by assessing Emergency Pharmacy Service’s data on the typical length of time it takes to replenish emergency cache inventory items, by which the Emergency Pharmacy Service initiates resupply orders to make sure caches are fully stocked with unexpired inventory.
3. Make sure that the Emergency Pharmacy Service and the Watch Office are maintaining accurate and complete records of emergency cache activations.

## VHA Management Comments

The acting under secretary for health concurred with recommendations 1 and 3 and concurred in principle with recommendation 2. To address recommendation 1, VHA Patient Care Services—under which EPS falls—will revise VHA Directive 1047 “to clarify when changes to normal emergency cache activation procedures are appropriate, and develop communication and documentation requirements to ensure all relevant parties, including medical facility directors and pharmacy chiefs, are aware of and comply with any changes to normal activation protocols and the responsibilities they maintain.” In addition, a new training session will be created to provide general and activation information about the cache. In response to recommendation 3, VHA noted it had updated the standard operating procedure used by its Watch Office for cache activation notifications in April 2021. The procedure includes guidance on notification of the OEM and EPS. The All-Hazards Emergency Cache Leadership Team will also compare cache activations reported to the Watch Office and EPS and investigate any discrepancies.

In response to recommendation 2, EPS noted that manufacturer delays or back orders, as well as VA’s participation in the Shelf Life Extension Program, which relies on other agencies’ providing timely testing results, are external challenges that affect whether caches are fully stocked with unexpired inventory.<sup>49</sup> In response to this OIG recommendation, EPS reports that it has requested the development of a new inventory management system that can oversee the inventory of the caches and automatically calculate and report how long it takes to replenish each cache item, from when EPS initiates a resupply order through when a site receives the order. This report will enable EPS to determine resupply order time frames, and the metric would be displayed in relation to the number of caches that are fully stocked with unexpired inventory for

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<sup>49</sup> VHA Directive 1047. The Shelf Life Extension Program can be used to extend the expiration dates for certain drugs and supplies stored in federal stockpiles and is coordinated through multiple agencies. The Food and Drug Administration conducts periodic stability testing of certain drugs to extend the expiration date of such products to help defer replacement costs and ensure public health preparedness.

each product. In addition, EPS will report inventory deficiencies quarterly to notify cache leaders of procurement issues and updates on pending Shelf Life Extension Program projects. The full text of the acting under secretary's comments appears in appendix B.

## **OIG Response**

The acting under secretary's planned corrective actions are responsive to recommendations 1 and 3 and should address the issues identified in the report. The acting under secretary agreed in principle with recommendation 2 and provided a plan for developing an inventory management system. The OIG encourages VHA to consider historical data as it develops its new inventory management system. EPS's timelines should be informed by data on the time it takes to reorder, receive, and restock caches before, during, and after the pandemic. The OIG acknowledges that in the aftermath of the COVID-19 pandemic, suppliers may continue to experience shortages that may extend VHA's timeline to replenish cache inventories.

The OIG also recognizes that VHA's use of the Shelf Life Extension Program will result in caches continuing to contain some expired drugs, and that the COVID-19 pandemic caused delays in testing these drugs. Much of the expired inventory identified during the review, however, expired months before the COVID-19 pandemic became widespread in the United States and diminished the readiness of caches to support medical facilities' pandemic and emergency preparedness. In addition, the expired inventory items identified during this review were supplies like personal protective equipment and gloves. Only some drugs stored in the caches are part of the Shelf Life Extension Program. The OIG will monitor VHA's progress and follow up on the implementation of the recommendations until all proposed actions are complete.

## Appendix A: Scope and Methodology

### Scope

The review team performed its work between June 2020 and March 2021. The scope of the review focused on determining how effectively VHA managed its All-Hazards Emergency Caches (emergency caches) during the first wave of the COVID-19 pandemic. The review period covered cache activations between February and June 2020. The team examined whether the emergency caches were fully stocked with unexpired items and were ready to be activated for the COVID-19 pandemic, if needed. It also reviewed VHA's strategies for using the caches to respond to pandemic demands.

### Methodology

The review team interviewed officials and staff in VHA's Emergency Pharmacy Service (EPS), Office of Emergency Management (OEM), and Office of Population Health, as well as chief logistics officers in a judgmentally selected sample of eight VA medical facilities that had reported experiencing supply shortages but had not activated their emergency caches. The team reviewed the cache contents and guidance on cache activation and reporting procedures, in addition to VHA's COVID-19 response plan. The team also reviewed prior work on VHA's COVID-19 response regarding personal protective equipment by the OIG Office of Audits and Evaluations.<sup>50</sup> For safety reasons, the team did not conduct in-person site visits during the pandemic.

### Dynamed Data Analysis

The review team analyzed data from Dynamed, the external system used to track emergency cache inventory items, from January 31 and July 7, 2020, to determine if caches were fully stocked with unexpired inventory, based on the current cache footprint, which outlines what should be in a large and small cache. As of January 2020, VHA's cache inventory data identified 145 stocked caches. Because of this, all 145 stocked caches were included in the team's analysis from the Dynamed system from January 31, 2020. However, VHA's cache inventory data identified 144 stocked caches as of July 7, 2020. In August 2020, EPS officials confirmed that one cache was inactive during the team's review period.

Without in-person site visits, the review team could not verify and physically count items to independently determine the accuracy of the reported cache data. Instead, the team compared what was reported in Dynamed to VA's requirements for standardized inventories for a small

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<sup>50</sup> VA OIG, *Reporting and Monitoring Personal Protective Equipment Inventory during the Pandemic*.

and a large cache. The team found Dynamed data reliable for tracking cache inventory at the local cache in a 2018 review of the emergency cache program.<sup>51</sup>

## **Analysis of Emergency Cache Activations**

For emergency caches that had been activated since February 1, 2020, the review team collected information from EPS, the Watch Office, and OEM's Emergency Management Coordination Cell on items and quantities removed from caches, notifications provided when activations occurred, reason(s) for activations, and replenishment.

## **COVID-19e Power BI Dashboard Analysis**

The review team analyzed data obtained from VHA's Power BI COVID-19e report to calculate how long emergency cache personal protective equipment would last at VA medical facilities with different complexity levels. This analysis was based on self-reported facility burn-rate data from July 2020. According to a VHA official, the COVID-19e report tracks all usage by employees and patients of key personal protective equipment—specifically gloves, goggles, respirator masks, surgical masks, and hand sanitizer—at each facility, based on daily reporting by the facility. These same five items are also contained in the emergency caches. Therefore, the review team was able to obtain facilities' self-reported usage rates for these five items from the COVID-19e report and quantify how long the emergency cache quantities would last if activated in July 2020.

Given that the usage data contained in the COVID-19e report are national data, they include personal protective equipment burn rates from medical facilities treating a high volume of COVID-19 patients, as well as from facilities treating a minimal number of infected patients. Therefore, the OIG's estimate of the number of days that cache personal protective equipment could last at facilities will fluctuate based on the number of patients diagnosed with COVID-19 that a facility is treating at a certain point in time.

The OIG attempted to quantify this variation. An OIG statistician and the review team considered performing their analysis at the medical facility level to account for the variation in the volume of patients diagnosed with COVID-19 being treated by a facility to estimate the number of days personal protective equipment stored in a facility's cache could last. However, the team identified missing and irregular data patterns at the facility level, which would undermine the value of a facility-based analysis. When examining the usage data in the COVID-19e report at the facility level, the review team identified missing data, as well as significant variation when comparing the usage of personal protective equipment from week to week at the same facility.

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<sup>51</sup> VA OIG, *Emergency Cache Program: Ineffective Management Impairs Mission Readiness*.

The OIG could not further determine the reliability or accuracy of VHA-reported inventory data contained in the COVID-19e report without conducting in-person site visits to verify and physically count supplies on hand at facilities and compare those counts to reported information.

## **National Electronic Surveys**

The review team conducted two national electronic surveys of medical facilities that had emergency caches active as of January 31, 2020, one of medical facility directors and one of pharmacy chiefs. The team surveyed a total of 145 facilities—both facility directors and chiefs of pharmacy.<sup>52</sup> Both surveys received an 88 percent response rate with 128 of 145 facility directors and pharmacy chiefs responding to their respective surveys. In some cases, survey respondents did not, or did not need to, answer every question. The review team used the number of responses to each question rather than the total number of surveys returned as the denominator when calculating question response percentages. Doing so removes nonresponses from the calculations. The numerator and denominator used to calculate question response percentages are detailed either in the report or in a footnote.

These surveys collected information about whether facilities experienced medical supply shortages due to the COVID-19 pandemic, if caches were activated in response to shortages, and if the items were replenished. The review team pretested survey questions with medical facility directors, pharmacy chiefs, and chiefs of logistics and used feedback from these pretests to clarify and revise questions as appropriate. The survey results rely on self-reported data, which the team could not verify without conducting site visits to inspect the caches. However, the team took steps to protect survey data, which included limiting respondents from submitting survey responses more than one time (they could not update or “correct” their answers without contacting the review team to assist them in doing so), limiting respondents to a list of programmed email addresses with site numbers, and following up to verify survey responses when appropriate or when there were differences between self-reported activation information from the facility directors and pharmacy chiefs. In addition, the survey was electronic and could not be completed in hard copy or shared.

## **Scope Limitations**

The review team was not able to fully assess the accuracy of EPS’s data on emergency cache inventory items and facilities’ self-reported daily use data on personal protective equipment.

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<sup>52</sup> VHA’s initial information on active cache locations—those that were fully stocked and ready for use in an emergency—indicated that there were 145 active caches. This information was as of January 31, 2020. Based on this information, the team sent electronic surveys to facility directors and pharmacy chiefs responsible for these 145 caches. However, in August 2020—well after the OIG closed its electronic survey of facility directors and pharmacy chiefs—Pharmacy Benefits Management Services officials confirmed to the team that 144, rather than 145, caches were in operation during the team’s review period.

## Internal Controls

The review team determined that internal controls relevant to the “Control Environment,” “Control Activities,” and “Information and Communication” were relevant to this review. Based on the work performed, the team identified significant deficiencies related to (1) documentation of decisions made about emergency cache activations for the COVID-19 pandemic, (2) the use of available information to ensure the caches did not contain expired or missing inventory items, and (3) communication across the program offices with oversight responsibilities for the emergency cache program decisions about using the caches for the COVID-19 pandemic.

## Fraud Assessment

The review team assessed the risk that fraud and noncompliance with provisions of laws, regulations, contracts, and grant agreements, significant within the context of the review objectives, could occur during this review. The team exercised due diligence in staying alert to any fraud indicators by

- coordinating with the OIG’s Office of Investigations to determine if they had any active investigations that would affect the team’s review,
- remaining aware of anomalies that could indicate fraud while conducting the data analysis and review of survey responses, and
- asking about fraud during interviews with agency officials.

The OIG did not identify any instances of fraud or potential fraud during this review.

## Data Reliability

The review team used emergency cache inventory data from Dynamed to determine whether the caches were ready to activate—that is, fully stocked with unexpired items. Unable to independently determine the accuracy of the data on cache inventory items without conducting in-person site visits to physically count items, the team conducted interviews to understand what was known about the data, including a basic understanding of the risks and vulnerabilities that could affect data reliability. In addition, the team reconciled a sample of purchase orders for cache personal protective equipment to the cache inventory data from January and July 2020 to test that the items purchased for the caches were present. The OIG determined the data were sufficiently reliable for the analysis conducted and the purposes of this report.

For the Power BI data, the team coordinated with another OIG team using the same data source and variables for a similar time frame and contacted the officials in charge to ask additional questions about the data pertaining to this review. The OIG determined the data were sufficiently reliable for the analysis conducted and the purposes of this report.



## **Government Standards**

The OIG conducted this review in accordance with the Council of the Inspectors General on Integrity and Efficiency's *Quality Standards for Inspection and Evaluation*.

## Appendix B: Management Comments

Date: April 26, 2021

From: Acting Under Secretary for Health (10)

Subj: OIG Draft Report, Review of the Use and Oversight of the Emergency Caches During the first Wave of the COVID-19 Pandemic (2020-03326-R1-0004) (VIEWS 4963832)

To: Assistant Inspector General for Audits and Evaluations (52)

1. Thank you for the opportunity to review and comment on the Office of Inspector General (OIG) draft report, Review of the Use and Oversight of the Emergency Caches During the first Wave of the COVID-19 Pandemic. OIG assigned three recommendations to the Acting Under Secretary for Health. Veterans Health Administration (VHA) concurs with recommendations one and three, and concurs in principal with recommendation two. VHA provides an action plan in the attachment.

2. The VA All-Hazard Emergency Cache (AHEC) Program is designed to assist VA in response to chemical, biological, radiation, nuclear, and explosive events. An OIG review of the program in 2018 resulted in a series of recommendations to improve policy, the inspection process, the shelf-life extension program and expired or soon to be expired medications.

3. By April 2020, policy and guidance for the field was consolidated into one new Directive (Directive 1047: All-Hazards Emergency Cache Program); Office of Emergency Management, Police, and Pharmacy staff received education and training on the new policy; tracking systems for cache contents and inspections were improved; and oversight and responsibilities were clarified.

4. Early during the COVID-19 pandemic, several VHA facilities reviewed the potential use of the AHEC due to global supply chain shortages and outages for items necessary to 1) collect clinical samples for COVID-19 testing and 2) for personal protective equipment to protect staff from COVID-19 infected individuals. VHA identified the sample collection swabs in the AHEC could not be used for the type of COVID-19 testing recommended at the time. To date, there have been no other items in the AHEC needed in response to the COVID-19 pandemic.

*The OIG removed point of contact information prior to publication.*

(original signed by)

Richard A. Stone, M.D.

Attachment

## VETERANS HEALTH ADMINISTRATION (VHA)

### Action Plan

#### Review of the Use and Oversight of the Emergency Caches During the first Wave of the COVID-19 Pandemic (2020-03326-R1-0004)

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##### Actions

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**Recommendation 1. The OIG recommends that the Under Secretary for Health initiate efforts to revise or amend VHA Directive 1047 to clarify when changes to normal emergency cache activation procedures are appropriate, and develop the communication and documentation requirements for these situations to ensure all relevant parties—including medical facility directors and pharmacy chiefs—are aware of and comply with any changes to normal activation protocols as well as the responsibilities they maintain.**

VHA Comments: Concur

VHA Patient Care Services will revise VHA Directive 1047 to clarify when changes to normal emergency cache activation procedures are appropriate, and develop communication and documentation requirements for these situations to ensure all relevant parties, including medical facility directors and pharmacy chiefs, are aware of and comply with, any changes to normal activation protocols and responsibilities they maintain. A new training session will be created to provide general information about the cache, including cache activation.

Status: In Progress      **Target Completion Date:** December 2021

**Recommendation 2. The OIG recommends that the Under Secretary for Health establish minimum timeframes, for example by assessing Emergency Pharmacy Services' data on the typical length of time it takes to replenish emergency cache inventory items, by which Emergency Pharmacy Service initiates resupply orders to make sure caches are fully stocked with nonexpired inventory.**

VHA Comments: Concur in Principle

Emergency Pharmacy Service (EPS) concurs in principle with this recommendation because manufacturer/vendor delays or backorders are an external challenge that prevent EPS from ensuring that caches are fully stocked with nonexpired inventory. In addition, while All Hazards Emergency Cache (AHEC) product testing has been given priority designation of 'mission critical', the continued use of the Food and Drug Administration (FDA)/Department of Defense (DoD) Shelf Life Extension Program (SLEP) will inevitably result in caches being stocked with expired inventory while EPS awaits testing results with the FDA/DoD's current state of operations. Post COVID-19, the FDA SLEP testing program has experienced significant interruptions with less than 50% of all approved projects completing testing in 2020.

EPS has requested the development of a new inventory management system (IMS) to manage the AHEC inventory. EPS has requested the development of an IMS report to auto-calculate the length of time to replenish each AHEC item. This report will provide EPS the ability to determine resupply order timeframes, such as the time EPS initiates a resupply order to the date of reception confirmation by the site. This metric would be displayed in relation to the amount of caches that are fully stocked with nonexpired inventory for each product.

EPS will report inventory deficiencies on a quarterly basis to notify AHEC Leadership Committee of current procurement issues and provide a status update on pending SLEP projects.

Status: In Progress      **Target Completion Date:** April 2022

**Recommendation 3. The OIG recommends that the Under Secretary for Health make sure that Emergency Pharmacy Service and the Watch Office are maintaining accurate and complete records of emergency cache activations.**

VHA Comments: Concur

The standard operating procedure for cache activation notifications used by VHA's Watch Office was updated on April 9, 2021, to provide procedural guidance on appropriate notification to the Office of Emergency Management and Emergency Pharmacy Service of a cache activation.

The Emergency Cache Leadership Team, as outlined in VHA Directive 1047 will compare the reports of cache activations reported to the Watch Office and the Emergency Pharmacy Service. Any discrepancy will be investigated with the appropriate parties receiving education on the cache activation reporting process.

Status: In Progress      **Target Completion Date:** October 2021

*For accessibility, the original format of this appendix has been modified to comply with Section 508 of the Rehabilitation Act of 1973, as amended.*

## OIG Contact and Staff Acknowledgments

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<b>Contact</b>	For more information about this report, please contact the Office of Inspector General at (202) 461-4720.
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